



North Lake Yacht Club Race Officer Manual



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1. Introduction

Thanks for volunteering to participate as a member of the race management team. Your involvement is vital to our sailing program and is greatly appreciated.

A good race management team is:

- Prepared for the race
- Knowledgeable about sailing and local conditions
- Decisive on running the race
- Utterly fair to all participants
- Concerned about safety
- Able to make racing fun for all participants

Preparation and time are key ingredients to a successful race. Make all possible preparations in advance of the race and take sufficient time to set up a good race course.

This manual is a simplified guideline for regular club racing on North Lake. All races are governed by the rules as defined in the current The Racing Rules of Sailing (RRS).

2. The Race Management Team

Each member of the race management team has an important role to play in conducting the race. On our lake, each team member often performs several duties.

The first person listed on the schedule is the Principal Race Officer. Duties for other members should be agreed to in advance so that everyone knows their roles.

The primary duties are:

- **Principal Race Officer:** Leads the race management team and makes major decisions.
- **Wind Reader:** Observes wind direction and speed at regular intervals.
- **Mark Setter:** Positions, sets and relocates marks on the course.
- **Timer:** Calls the time sequence aloud at the start.
- **Line Sighter:** Sights the starting line to identify boats over early and track boats returning to start. Also, sights the finish line to determine order of finish.
- **Sounder:** Makes all sound signals at the appropriate time.
- **Signaler:** Makes all flag signals at the appropriate time.
- **Spotter:** Identifies and records boats starting and finishing, protest flags and unusual events.
- **Boat Operator:** Runs the race committee boat, checks for gas and organizes equipment.

3. Equipment Preparation

You should have the following equipment on board:

- Flags

- Class flags:   
- Preparatory "I" flag 
- Starting Line 
- Finish Line 
- General Recall 
- Individual Recall 
- Postponement 
- Abandonment 
- Life Jacket Required 
- Race Committee 
- Change of Course 

- Buoy Marks, Line and Anchors
- Offset Mark, Line and Anchor
- Hailer
- Course Board and Markers
- Wind Stick
- Stop Watch(s)
- Score Sheets and Pen/Pencils

4. Watching the Wind

- Prior to leaving the house
 - Check the weather forecast and know what to expect.
 - The Weather Channel
 - WeatherBug.com
 - wunderground.com
 - Observe the local weather - clouds, wind direction, wind strength and gusts.
 - Call other race committee members to make arrangements.
 - Call chief judge or fleet captains if there is a question on the weather.
- Depart from the dock at least one hour before race time to allow enough time to observe local wind conditions.
- Raise the race committee flag as you leave the dock.



- Make the first wind check from the middle of the course while drifting. Use the wind stick rather than one of the flags to get the most accurate wind reading.
- Look for tendencies in the wind speed and direction, and compare to the weather forecast.
- Note persistent wind shifts. You may want to favor the windward leg toward these shifts.

5. Lack of Wind

- As a rule of thumb, there should be wind of the same general intensity across the entire sailing area.
- The wind should be fairly constant, not off and on.
- A minimum wind velocity of 4 MPH is necessary to start a race.
- Do not hesitate to postpone the start of the race and wait for better conditions if the wind becomes spotty and inconsistent.
- After the start, if winds become light, continue the race until the time limit expires or until a competitor finishes.
 - The time limit is 90 minutes for each class
 - The time limit is measured from the start to the finish of the first boat in each class.
 - Do not shorten the course to complete a race within the time limit.
 - Abandon the race if no boat finishes within the time limit.

6. Too Much Wind

- SAFETY should be uppermost in your mind!
- The safety of sailing in heavy wind is influenced by:
 - Air temperature
 - Water temperature
 - Waves
 - Experience of sailors
 - Presence of spectator boats who could help
- No race should start with a steady wind over 20 mph or if gusts exceed 23 mph for MCs, Xs and Lasers. The limits are 25 and 28 mph for Cs.
- If the wind builds to be consistently over the limits, or if more boats are in trouble than you or the spectator boats can handle, abandon the race.
- Check with the chief judge or fleet captains for advice in extreme conditions.
- Do not hesitate to require life jackets in heavy winds. To require the use of life jackets raise the life jacket flag before or with the warning signal with one sound blast.



- X sailors are always required to wear life jackets from shore to shore.
- Any boat not complying with the life jacket rule should be noted on the score sheet and will be disqualified.

7. Choosing the Course

- The preferred race course is the Windward/Leeward. This course is best on our lake when the general wind direction is from the North or South.
- Windward/Leeward courses are designated by the number of windward legs (ups) to be sailed. "W" is used for courses that finish upwind, and an "L" for courses that finish downwind to facilitate back to back races. The "A" suffix indicates a windward offset mark. For example:
 - WA2 = Windward/leeward lap
plus a windward leg to finish (2 ups)
 - WA3 = Windward/leeward lap
followed by another windward/leeward lap
plus a windward leg to finish (3 ups)
 - WA4 = 3 Windward/leeward laps
plus a windward leg to finish (4 ups)
 - LA2 = Windward/leeward lap
followed by another windward/leeward lap
with the finish downwind (2 ups)
- Second choice is the Triangle/Windward (TW) course. This course is best on our lake when the general wind direction is from the East or West. Note that the TW designations allow for only one Triangle lap to spread out multiple fleets at the beginning of the race.
- Because an East/West windward leg is relatively short you will need to have more windwards to achieve a longer course to meet the desired time for sailing the course.

- Triangle courses are designated by the number of windward legs (ups) to be sailed. "TW" is used for courses that finish upwind, and "TL" for courses that finish downwind. For example:
 - TW3 = triangle lap followed by a windward/leeward lap plus a windward leg to finish (3 ups)
 - TW4 = triangle lap followed by a windward/leeward lap followed by another windward/leeward lap plus a windward leg to finish (4 ups)
 - TL2 = triangle lap followed by a windward/leeward lap with the finish downwind (2 ups)
- To finish a race in about 60 minutes the following courses work well for our lake:

	General Wind Direction	
Wind Speed	North or South	East or West
4 to 6 mph	C: WA4 MC: WA3 X: WA3	C: TW6 MC: TW5 X: TW4
7 to 13 mph	C: WA5 MC: WA4 X: WA3	C: TW7 MC: TW6 X: TW5
14+ mph	C: WA6 MC: WA5 X: WA4	C: TW8 MC: TW7 X: TW6

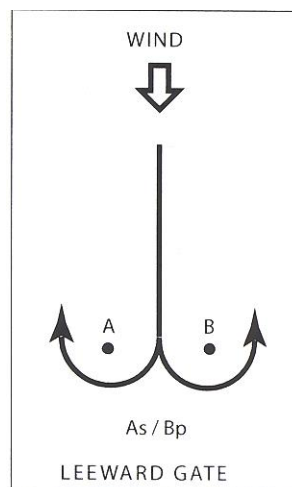
- You can ask Fleet Captains for input if desired.
- It is important to count the number of windward legs (ups) completed by each fleet to be prepared to set the finish line at the appropriate point in the race. Be mindful of where the fleets are on the course when repositioning the judges boat.

8. Setting the Course

- In general, make the windward leg as long as possible for the wind conditions.
- However, keep the marks sufficiently far from shore to avoid artificial wind shifts. Ripples on the water will show where the wind changes.
- Work systematically to set up the course. One method is:
 - Go to the center of the course and take wind readings for 15 minutes or so while drifting.
 - Identify the general location for the starting area and windward mark.
 - Go to the windward mark area, stopping once or twice en route to reconfirm wind direction, and set the windward mark. Set the offset buoy next to the windward mark.
 - Set a triangular mark if you decided on a TW course.
 - Return to the approximate center of the course and reconfirm wind direction.
 - Proceed to the starting area, reconfirm the wind direction, and drop the leeward mark.
 - Set the starting line.
- Post the race course on the marker board before the warning flag where it can be seen clearly by all sailors.
- If the wind shifts and the course goes bad in the last few minutes before the start, postpone the race and re-set the course.

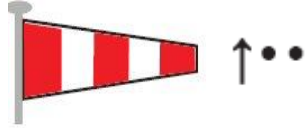
9. Leeward Gates

- Leeward gates can be used in place of a leeward mark.
- Boats must pass through the gate and then round either of the gate marks.
- Leeward gates should be set after the start but before any boats have rounded the windward mark.
- Gates should be set square to the wind and be at least six sailboat lengths apart (about 120 feet).
- Use gates to:
 - Reduce congestion at the leeward mark.
 - Offer competitors additional tactical options.
 - Provide competitors a safer rounding in higher winds.
- Gates can be left in the water at the finish provided that a separate finish line is set to leeward of the gates. Gates should not be used as a finish line.

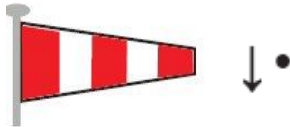


10. Postponement

- If for any reason you are not ready for the warning signal, then a postponement flag should be raised at the original warning signal time with two sound blasts.



- If the wind is light or inconsistent, postpone the start of the race until the wind fills in.
- The maximum postponement is 60 minutes. If the wind is still light or inconsistent, abandon the race.
- When ready to start, lower the postponement flag with one sound blast.



- Give the warning signal one minute later.
- Complete the starting sequence.

11. Setting the Starting Line

- The goal is to set the starting line square to the wind.
- Place the race committee boat to the right of the leeward mark when facing the wind.
- Set the length of the starting line so that all boats have room to maneuver on the starting line. This means 1.5 times the length of the boats time the number of boats expected to start for the largest class. For our lake, this typically means 150 to 200 feet.
- Head upwind as far as necessary to drop anchor. If in doubt, head further upwind as it is easier to add scope and drop back once the anchor is set.
- In heavy air, you may need more than one anchor.
- Let the line out until the starting line is perpendicular to the wind.
- When satisfied the line is correct, raise the Starting line flag.



- The starting line is the imaginary line between the course side of the leeward mark and the Starting line flag on the race committee boat.
- If you need to move the line, lower the Starting line flag.
- You must be anchored and set the Starting line before making the Warning signal and raising the Class flag.

12. The Starting Sequence

- Be ready to start on time.
- Record the sail number of all boats in the starting area. Sailors are responsible for notifying the RC if they are using a different sail number.
- Remember, visual signals govern all commands made from the race committee boat. Therefore, the raising and lowering of flags should be done accurately and crisply. The flag should be fully raised as the appropriate time is reached on the watch.
- Preferably use two stopwatches: one as primary, one as backup. After the timers are started, do not touch the buttons again, just let the timers run.
- Proceed through the starting sequence which is shown in Appendix 2.
- No boat should be under tow, be paddling or make any personnel or equipment changes after it's fleet preparatory signal is made. Record any violations on the scoring sheet.
- The 1 minute rule is always in effect. This means that any boat over the starting line within one minute before the start of the race must sail around either end of the line and restart.
- You may hail boats that are over the line before the start, but are not required to do so.
- Record the sail number of any boats present who did not start the race.
- Record the starting time for each fleet.
- No boats shall start later than 10 minutes after her starting signal. If this occurs, make a note on the score sheet.

13. Individual Recalls

- Use the individual recall when one or more boats are over the line before the start. The starting line is the imaginary line between the course side of the leeward mark and the Starting line flag on the race committee boat.
- When invoking the individual recall, be absolutely certain that named boats were over the line early. If in doubt, let them go.
- Identify premature starters clearly in your mind and immediately after the start raise the individual recall flag accompanied by one sound blast.



- If possible, call the numbers of the premature starters using the hailer. Notification is not required, however.
- Lower the individual recall flag when premature starters have restarted or after four minutes have elapsed.



- For our lake the 1 minute rule is always in effect. This means that boats over the line 1 minute before the start must round one end of the starting line before starting.
- Note any boats not complying with the individual recall and the 1 minute rule on the score sheet.

14. General Recalls

- Use the general recall only when the starting conditions are fair but there are too many premature starters to identify.
- Make the general recall immediately after the start. Raise the general recall flag accompanied by two sound blasts.



- As soon as possible, lower the general recall flag with one sound blast.



- The warning signal should be given one minute after the general recall flag is lowered.
- Complete the starting sequence.
- When there are multiple fleets, the recalled fleet goes to the end of the starting order and the next fleet starts as usual.

15. During the Race

- Monitor the wind and change the course as necessary.
- Observe and record mark roundings as circumstances permit.
- Look for protests and acknowledgements (flags or penalty turns). Record them on the score sheet and note when and where they were first seen.
- Observe that all boats sail the proper course. Record any deviations on the score sheet.
- Remember that it is the sailor's responsibility to follow the rules and sail the proper course. It is not your responsibility to police or notify sailors of possible rule infractions. When in doubt, make a note on the score sheet.
- If flagrant violations of the rules occur, such as physical contact or injury, record these incidents on the score sheet.
- Do not leave the course unless it is imperative to do so.
- Watch for boats in trouble and provide assistance as necessary. Use discretion in deciding when safety outweighs race management needs.
- Watch for changing weather conditions and abandon the race if there is a significant threat.
- Note any unusual happenings on the score sheet.

16. Changing the Course

- A course change may be justified if there has been a permanent wind shift of more than 15 degrees.
- A course change must be signaled before the leading boat has begun the next leg, even though the new mark may not yet be in position.
- The new mark should be laid, and the original mark removed as soon as possible.
- Raise the change of course flag with a sound blast.



- Hail the direction of the new mark to boats as they round the mark. Periodically continue to inform the remaining fleet.
- Alternatively, display the green triangular board for a change to starboard or a red square board for a change to port.
- Lower the change of course flag after directing all boats.
- You can ask a spectator boat to help change the new mark.
- Do not shorten the course.

17. Abandonment

- You may abandon the race because of:
 - An error in the starting procedure.
 - Foul weather that threatens the safety of competitors.
 - Insufficient wind making it unlikely that any boat will finish within the race time limit.
 - Any other reason directly affecting the safety or fairness of the race.
- If you see lightning or hear thunder, abandon the race immediately.
- Abandon the race by raising the abandonment flag with three sound blasts.



- You can also abandon and restart a race that has gone wrong, such as losing the time during the start sequence.
- You must abandon the race if the time limit expires and no boats have crossed the finish line.
- If the wind is consistently over the limits or if more boats are in trouble than you can handle, abandon the race.
- Ask spectator boats to help you get boats off the lake in the event of severe weather.
- Err on the side of SAFETY!








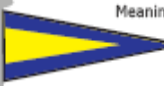








18. The Finish Line

- Bring in the offset mark if it is no longer needed by another fleet.
- Place the race committee boat on the right side of the windward mark when facing into the wind.
- A finish line of 100 feet is usually plenty on our lake.
- Pull the race committee boat ahead of the windward mark and throw out the anchor.
- Let the anchor line out so the finish line is perpendicular to the wind.
- Raise the Finish line flag.















- If you need to move the finish line, lower the line flag.
- The finish line is the imaginary line between the course side of the windward mark and the line flag.
- A boat finishes when its bow crosses the finish line.
- Give the winner a congratulatory sound blast.
- Record the number of each boat in the order it crosses the finish line. A boat's finishing position should be noted each time she crosses the finish line after a foul has been committed. It may take a hearing to determine the actual finishing position.
- Note any protest and acceptance flags on the score sheet.
- You should not change finishing positions due to any protests or rule infractions. This is the job of the rules committee.
- Account for all boats that started the race.
- If a boat did not start the race she should be scored DNS.
- If a boat did not finish the race she should be scored DNF.
- Complete the score sheet and deliver it to the recorder.

Appendix 1 - Signal Flags

 <p>Meaning: "C" Fleet Flag Flag Letter: n/a Signal: ↑ •</p>	 <p>Meaning: Wear Personal Bouyancy Rule Flag Letter: "Y" Signal: ↑ •</p>	 <p>Meaning: Notice to Competitors Come to Notice Flag Letter: "L" Signal: ↑ •</p>
 <p>Meaning: "MC" Fleet Flag Flag Letter: n/a Signal: ↑ •</p>	 <p>Meaning: Individual Recall Flag Letter: "X" Signal: ↑ •</p>	 <p>Meaning: Position of the Next Mark has Changed Flag Letter: "C" Signal: Repeated long horn sound as needed</p>
 <p>Meaning: "X" Fleet Flag Flag Letter: n/a Signal: ↑ •</p>	 <p>Meaning: General Recall Flag Letter: "1st Substitute" Signal: ↑ • • ↓ •</p>	 <p>Meaning: The Object Displaying this Replaces Missing Mark Flag Letter: "M" Signal: Repeated long horn sound as needed</p>
 <p>Meaning: Laser Fleet Flag Flag Letter: n/a Signal: ↑ •</p>	 <p>Meaning: Postponement Flag Letter: "AP" Signal: ↑ • • ↓ •</p>	<div style="border: 1px solid black; padding: 5px; display: inline-block;">  <p>Finish Line Flag None</p> </div>
 <p>Meaning: 1-minute Around-An-End Rule Flag Letter: "I" Signal: ↑ • ↓ —</p>	 <p>Meaning: Abandonment Flag Letter: "N" Signal: ↑ • • • ↓ •</p>	
 <p>Meaning: Starting Line Flag Flag Letter: None Signal: None</p>	 <p>Meaning: Race Committee Boat Flag Flag Letter: "Blue Flag" Signal: no sound</p>	<p style="text-align: center;">Legend</p> <ul style="list-style-type: none"> ↑ Raise Flag Up ↓ Lower Flag Down • One Short Horn Blast — One Long Horn Blast

Appendix 2 - Starting Sequence for Up to 3 Fleets

- 15 minutes: Class Flag for 1st Fleet UP with SOUND**
 This is your first Fleet's 5 minute Warning Signal
 >> "Example Shown C Fleet"  ↑•
- 14 minutes: Preparatory for Fleet 1 UP with SOUND**
 This is your first Fleet's Preparatory Signal.  ↑•
- 11 minutes: Prep. for Fleet 1 DOWN with a LONG SOUND**
 "1-minute Around-an-End Rule" is in effect. First Fleet will start in one minute. >> Drop "I" flag with one long horn or whistle sound signal.  ↓—
- 10 minutes: Class Flag for 1st Fleet DOWN and Class Flag for 2nd Fleet UP with SOUND**
 Start for First Fleet, 5 minute Warning Signal for the Second Fleet >> Example: Flip blue flag up as red comes down >> Start "C" and warn "MC"  ↓  ↑•
-
- 9 minutes: Preparatory for Fleet 2 UP with SOUND**
 This is your second Fleet's Preparatory Signal.  ↑•
- 6 minutes: Prep. for Fleet 2 DOWN with LONG SOUND**
 "1-minute Around-an-End Rule" is in effect. Second Fleet will start in one minute. >> Drop "I" flag with one long horn or whistle sound signal.  ↓—
- 5 minutes: Class Flag for 2nd Fleet DOWN Class Flag for 3rd Fleet UP with SOUND**
 Start for Second Fleet, 5 minute Warning Signal for the Third Fleet >> Example: Flip white flag up as blue comes down >> Start "MC" and warn "X".  ↓  ↑•
- 4 minutes: Preparatory for Fleet 3 UP with SOUND**
 This is your third Fleet's Preparatory Signal.  ↑•
- 1 minutes: Prep. for Fleet 3 DOWN with LONG SOUND**
 "1-minute Around-an-End Rule" is in effect. Third Fleet will start in one minute. >> Drop "I" flag with one long horn or whistle sound signal.  ↓—
- 0 minutes: Class Flag for 3rd Fleet DOWN with SOUND**
 Start for Third Fleet >> Example: Flip white flag down >> Start "X".  ↓•