

Conducting a Race

Sandpoint Sailing Association in conjunction with the City of Sandpoint, 2010

Sailors go to and participate in sailing races with the expectation of having a fun time racing sailboats. Part of that expectation is the feeling that they will compete in a fair race with equal opportunity to win. Nothing destroys that feeling like a poorly handled race on the part of the race committee. Running a proper race is not difficult, but it does require some amount of organization. Here are some guidelines to follow for setting up a course that will give everyone a fair chance.

Pre-race organizing

Notice of race: Done by the Rear Commodore in advance of a coming race or regatta, it needs the following information:

- The title, place, date and time of the race and the name of the organizing authority,
- Notice that the race will be governed by the rules as defined in The Racing Rules of Sailing,
- Fees, launching, moorage, and storage information.

Event permit: Any race or regatta needs to have an event permit issued through the Bonner County Sheriff's Office. These are done by the Rear Commodore of the Sailing Association en masse for the whole summer.

Sailing Instructions: Done by Rear Commodore, available to all competitors at skippers meeting. They are written directions that describe how the race will be conducted.

Registration: The notice of race should give a time, date, and place for registration. The Registration area should have some protection from the elements. There should a table for filling out entry forms that is staffed with a committee person with a cash drawer. There should be plenty of forms, pens and sailing instructions.

Skippers' Meeting: This is the last chance to get sailing instructions. This is everyone's opportunity to clarify sailing instructions.

Vessel Preparation

Committee Boat: The main committee boat should be large enough to accommodate enough people to successfully run the regatta in addition to providing them with an area to hoist flags, record information and provide shelter and amenities for an extended stay on the water. It should have the following equipment aboard:

- Required safety equipment (lifejackets, fire extinguisher, anchor, etc)
- Race flags and flagpole
- Horn and back-up canisters
- Stopwatch
- Notepads and pens
- VHS radio or cell phone
- Hand bearing compass if possible

- Megaphone
- Boathook
- First aid kit
- Head

Chase Boat (optional): The chase boat should be *smaller and more maneuverable*. It should have low enough sides to pull someone aboard from the water. Ideally, it should give access to the water from all points on the boat. It is used for rescues, moving marks, and shuttling information and/or persons between the committee boat and shore. It should have the following equipment aboard:

- Required safety equipment (lifejackets, fire extinguisher, anchor, etc)
- VHS radio or cell phone
- Boathook
- First aid kit

Course setting

Here at the north end of the lake there are 3 different wind patterns:

North Wind

- Generally comes up during the night and dies by noon,
- Shifts to the east when it starts to die,
- Somewhat gusty,
- Windward mark should be towards Whiskeyjack to Kootenai Point,
- Leeward mark should be towards the north end of the railroad bridge.



Southwest Wind

- Will shift to the west when it starts to die,
- Blows all day,
- Quite gusty,
- Windward mark should be towards the north end of the railroad bridge,
- Leeward mark should be towards Whiskeyjack.



East Wind

- Generally begins about noon, dies about 4 pm,
- Steady, gentle breeze,
- Windward mark should be towards Trestle Creek,
- Leeward mark should be towards the Seasons at Sandpoint.



When setting a course, check to see which type of wind pattern you currently have, evaluate likelihood of that pattern holding, and evaluate wind strength. Then, start with the pin end of the line. Set it a reasonable distance off the jetty so that you can set a course for any of the three previously mentioned wind patterns.

Setting the Marks: Set the marks somewhere along the line between the two points on the above maps. *The distance between the marks will be dictated by wind strength.*

First, set the windward mark; head straight into the wind to the desired location. The windward mark should be enough distance from the start line to spread the fleet out a little. If it is too close, it will tend to create an overcrowded mark rounding. Boats should have to make at least three tacks on the way to the mark.

Next, set the downwind mark; go straight downwind to about the same distance from the start pin as the windward mark. As with the windward mark, there should be some distance between the downwind mark and the finish line in order to give room for some upwind tactics on the last beat. *These two marks and the pin should be reasonably close to a straight line, lining up with the wind direction.*

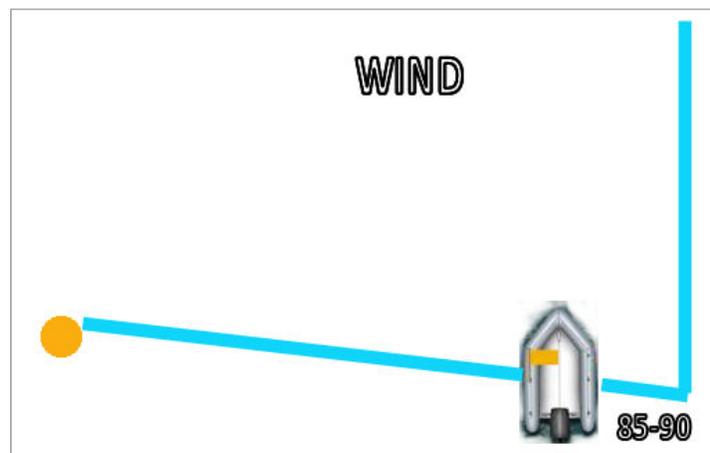
If doing a triangle course with a gybe mark, set it last. It should be at about the same distance off the wind as the start line and skewed to the left of the start line (when facing the wind) so as to make a triangle shape, with a counter clockwise direction of travel.

Course Size: Considering distance, try to shoot for a course that will give a race *45 minutes to an hour* in length. If setting with a sailboat under power, motor 7 to 8 minutes to windward, then 14 to 16 minutes downwind. If using the club committee boat, make it 5 to 6 minutes and 10 to 12 minutes. If using a power boat, go at a low planing speed for 1.5 to 2 minutes and 3 to 4 minutes. *This is a general estimate; you may want to stretch it or shrink it depending on factors such as wind strength, number of races, number of boats, or time constraints.*

Start Line: This is the tricky part; first, consider the start line length that you need by adding the approximate lengths of the boats in the largest fleet for the minimum starting line length. Ideal is 25% more, 50% more for high wind. For example, if your largest fleet is ten J24's, the start line should be 240'-360' depending on wind.

The committee boat should be that far from the pin on the *starboard* side. The reason for putting the committee boat

on the starboard end is that most boats go through the start line on starboard tack due to right-of-way rules. The buoy is 3' wide and has a steep scope on its anchor, making a 3' obstacle. The



committee boat with a shallow scope on its anchor creates a 50' obstacle. The smaller obstacle (pin) needs to be on the side that boats are heading towards, hence the port end.

If the start line is exactly perpendicular to the wind, boats at each end of the line will sail exactly the same distance to the windward mark, making a fair start. If either end is closer to the wind, boats on that end at the start will sail a lesser distance to the windward mark. That tends to create a logjam on that end and, consequently, an unsafe situation. The more the line is skewed, the more unsafe it becomes. With an even line, more boats will be on the starboard end, due to the boat on the right being able to control when to tack. The boat on the left has to wait for the boat on the right to tack before he can. This gives a tactical advantage to the boat on the right, even though they sail the same distance. To balance this, try to set the buoy end just slightly to windward of the committee boat (see above image). This gives the starboard end boats a slight tactical advantage and the port end boats a slight distance advantage. As a gauge, try to make the angle between the wind, flag on committee boat, and buoy end of the line between 85 to 90 degrees. Knowing the general starting habits of the fleet and which side of the course may have more favorable winds will affect how much you favor that side.

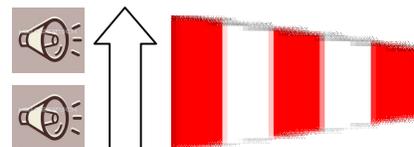
When anchoring the committee boat, consider that you will have about 100' of anchor line out. Go the distance you need for start line length, and then about 80' to windward of the buoy, Set your anchor and drift back to position. Try to leave about 20' of line in reserve to make final adjustments to get that 85 to 90 degree angle on the start line.

To double check your start line, you need to gauge its length and the squareness to the wind. Length can be checked by the "Sheckler rule of thumb". Stretch out your hand to arms length with thumb up. With a boat like a J24 (9' beam) is by the buoy and facing toward or away from you, sight the boat. If your thumb barely covers the width of the boat, the line is about 220', good for a nine boat start. Someone with large hands has a thumb about 1" wide. Someone with small hands would have a thumb about $\frac{3}{4}$ ". The thumb barely covering a J24's beam would then indicate a line of about 300'. To double check how square the line is, you can use a wind indicator, taking a right angle off of it. The buoy should be even or just slightly to windward of your sighting. Or, you can use a hand bearing compass. Take a sighting directly into the wind, and another at the buoy. The sightings should have a difference of 85 to 90 degrees.

The Race Start

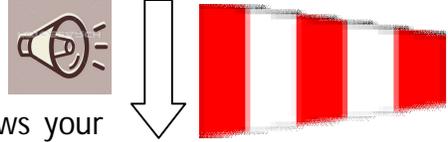
Before Countdown: Once the committee boat is in place, you are ready to organize the race flags. The AP flag should be raised to the top of the mast with a double horn blast. It is called the Postponement Flag. The message it sends is "For whatever reason the race is not ready to start." Reasons could be:

- Race committee is waiting for wind,
- Race committee is waiting for boats to arrive,
- Race committee is waiting for someone to move or set a mark,
- Race committee is waiting for a preset time, or



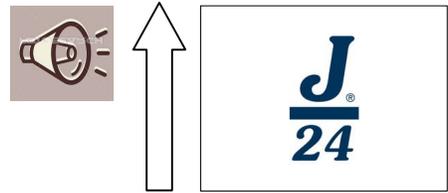
- Race committee is still setting up equipment.

Begin Countdown: When *everything is ready*, the AP flag should be lowered with an accompanying courtesy horn. This signifies “One minute until the countdown begins”. The horn is **only a courtesy; the flag is official**. The horn draws your attention to the visual signal.



T-Five Minutes: One minute later, three things happen simultaneously.

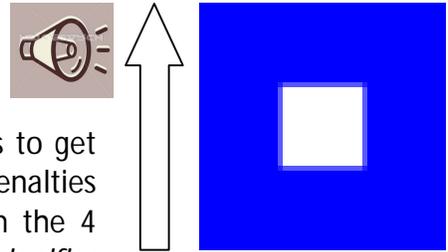
- The official clock starts (this is when countdown begins),
- The class flag for the first fleet is raised to the top,
- Courtesy horn blast.



This is the warning signal for the first fleet. It is 5 minutes to start. Their class flag will be flying until their start at zero time.

T-Four Minutes: At 4 minutes to start, two things happen.

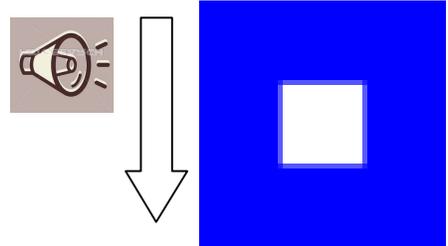
- A Preparatory flag is raised to a spot below class flag,
- Courtesy horn blast.



The Preparatory flag, gives more opportunity for the racers to get their own timers in sync. It also, gives notice of early start penalties (to be explained later). The Preparatory flag will fly from the 4 minute mark to the 1 minute mark. *The Preparatory flag signifies that the first fleet is now officially racing; they haven't started yet, but they are now bound by racing rules which will continue until they have finished and cleared the finish area.*

T-One Minute: At one minute to start, two things happen.

- The Preparatory flag is lowered (early start penalties, if any, are now in effect),
- Courtesy horn blast.



Start: At start (zero time), two things happen.

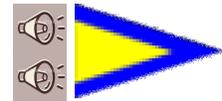
- Class flag is lowered (if there is more than one fleet, class flag is simultaneously replaced with the next class flag, signifying five minutes until the next class's start and everything is repeated for the next class – see *Multiple Fleets* below),
- Courtesy horn blast.



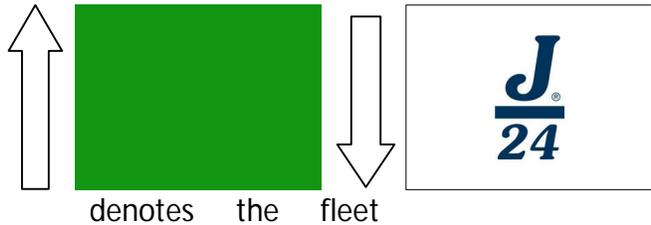
Recalls: All boats (*any part of the hull, crew or equipment*) must be on the downwind side of the start line when the class flag is lowered and can cross immediately afterward. The start line is defined by *the windward edge of the start buoy and the pole for the orange flag of the committee boat*. If any part of a boat is across the line before the start, it will suffer consequences as denoted by the Preparatory flag. The offending boat or boats is notified by hand raising the "X" flag with one courtesy horn; this means "individual recall". The "X" flag is displayed until all offending boats have exonerated themselves, or 4 minutes, whichever is greater.



If there are too many early starters to identify, then the first substitute flag (general recall) may be raised with two courtesy horn blasts, signifying a general recall. The entire fleet goes through the start sequence again. It should be noted that the "X" and first substitute flags are *hand held and do not alter the class flags, prep flags, or timing sequence*.

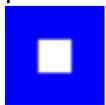


Multiple Fleets: In multiple fleets, *the class flag switch is instantaneous, so that each start is exactly five minutes apart*. This means that there will always be a class flag flying once the sequence has begun, until all fleets have started. The flying class flag getting ready to start. A five minute interval between starts makes it easy for race committee and racers to keep track of exactly where they are time wise.

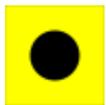


denotes the fleet

Preparatory Flags: The Preparatory flags that may be flown just signify different early start penalties.



"P" flag (early starters must return completely to the prestart side of the line, and then start properly). This is the most commonly used Preparatory flag.



"I" flag invokes Rule 30.1 (early starters must go around an end of the start line before restarting).



"Z" flag invokes Rule 30.2 (early starters will have 20% added to their time).



Black flag invokes Rule 30.3 (early starters are disqualified).

The progression of flags from "P" to "I" to "Z" to Black gives increasing penalties for early starting. In important races where some fleets are overly aggressive on the start line, the race committee, then, can adjust the penalty (and flag!) accordingly, in an effort to calm the fleet down.

Class Flags: The class flags our club uses are a solid color. They may be red, green, yellow, or may contain a class logo, as in “J24”. The type of boats in each class, the class’s corresponding flag, and start order is information *given out at the skippers’ meeting*.

After the Start

Course Monitoring: Race committee should record the official start time for each fleet as well as a list of legal starters for each fleet. Then it is a matter of monitoring the fleets progress around the course.

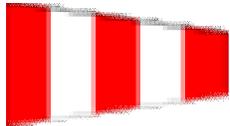
- Make certain that marks are in place as the fleets progress.
- Watch for boats that are in trouble or needing assistance.
- Watch for weather that could cause potential problems.

Finish: As boats are preparing to come into the finish, a finish line sighter will identify the boat and call to the timer a “3, 2, 1, mark!” so that the timer can record a proper finish time.

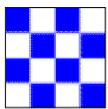
Cleanup: Once all boats have either finished or otherwise been accounted for, all equipment can be properly stowed; the race marks picked up, deflated and stowed.

A well organized and thoughtfully run race will be as fun for the committee as it will be for the competitors. Thank you for your help!

Flag Reference



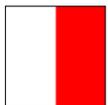
AP Flag – Postponement or race is not ready to start. Most frequently used before the race has begun to signify the race has not yet ready to begin.



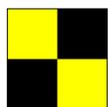
N – All races are abandoned (accompanied by three horn blasts). If, for any reason, the race committee deems that the race cannot in all fairness continue, the race may be abandoned.



A – No more racing today. Used to signal the end of a race day.



H – Further signals ashore. Frequently used to signify a break for lunch, but continue to watch for other flags or in a waiting for wind situation.



L – If ashore: A notice to competitors has been posted.
If afloat: Come within hailing distance or follow this boat.



M – The object displaying this flag replaces a missing mark. If a mark comes up missing, race committee may take the chase boat and use it as a temporary mark while displaying this flag.



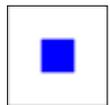
Y – Wear personal buoyancy. The race committee has the option to require all personnel to wear lifejackets due to potentially hazardous sailing conditions.



X – Individual recall (accompanied by one horn blast). Used when one or a few boats are early starters (hand flag).

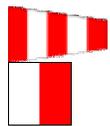
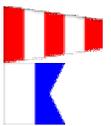
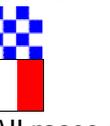


1st Substitute – General recall (accompanied by two horn blasts). Used when there are too many early starters to identify (hand flag).

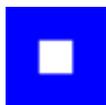


S – Short course. In situations in dying wind or needing to hurry a race along (due to storm or approaching darkness), the race committee may shorten the race.

Combination flags:

<p>AP over H</p>  <p>Race is not started or postponed; further signals ashore.</p>	<p>AP over A</p>  <p>Race is not started or postponed; no more racing today.</p>	<p>N over A</p>  <p>All races abandoned, no more racing today.</p>	<p>N over H</p>  <p>All races abandoned, further signals ashore.</p>
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Preparatory flags (only one of these flags will be flown):

<p>P</p>  <p>Early starters must restart.</p>	<p>I</p>  <p>Early starters must go around an end and restart.</p>	<p>Z</p>  <p>Early starters have 20% added to their time.</p>	<p>Black Flag</p>  <p>Early starters are disqualified.</p>
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