

DSA Race Committee Information¹

By Kai Thompson.

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Thanks for volunteering to serve on the DSA Race Committee. Here is some information that will help you better understand your job.

If you have further questions, please email [Jay Leidal](#), the DSA Race Committee Chair.

Race Committee Roles (a RC member can serve in multiple roles)

- A. PRO (Primary Race Officer) –Planner, organizer, decision-maker, leader; recruits and trains the RC team; directs setting the course; directs starts; supervises all on-the-water activities during racing. Should have completed a US Sailing Race Management Seminar and may be US Sailing Certified as a club or regional race officer.
- B. Mark Setter – with assistant, positions, sets, and relocates (if necessary) the marks of the course, as directed by the PRO; maintains station at the windward mark and relays wind velocity and direction changes to the other members of the RC.
- C. Rescue Boat Operator – with assistant, remains on station adjacent to the race course, ready to rescue crew of capsized boats; assists in setting marks; assists in identifying boats that are past the starting line before the start signal (OCS – On the Course Side).
- D. Signaler – uses various flags to send information to competitors. Flag signals are the official indicators; sound signals (see below) are secondary, unofficial indicators. In case of mismatch, the flag signal rules. Important flag signals include²:
 - Warning – a race is going to start in 5 minutes – Class flag up
 - Preparatory – a race is going to start in 4 minutes, and racing rules for competitors are now in effect – “P” flag up
 - One Minute – a race is going to start in one minute – “P” flag down
 - Start – a race has started – Class flag downand many, many more.
- E. Sounder – sounds horn as appropriate; used in conjunction with flag signals. We use manual air horns, with a whistle backup when the air horns run out of air.
- F. Spotter/Recorder – identifies and records all boats starting and finishing, including those that do not finish. Keeps track of how many legs of the course each class has traversed. This can get complicated. See Figure 2, the DSA RC Sheet, on page 8 for the recording form and instructions.
- G. Line Sighter – watches the start line during starts and calls out the sail numbers of OCS (over-early) boats; also watches the finish line during finishes and calls out the sail numbers of boats as they cross. A portable tape recorder is a useful device for the Line Sighter to use.

1. Reference the US Sailing publication, *Join the Race Committee Team*, for details.

2. This example is for the "five-minute" sequence (Rule 26). An alternative is a "three-minute" sequence.

DSA Race Committee Information¹

- H. Timer – calls out all time signals so that other RC members are prepared to do their things at the correct time. The timer's work becomes the heartbeat of the race.
- I. Scorer – tabulates scores, based on order of finish by class. Usually with a laptop computer and a scoring system.
- J. Wind Reader – observes wind speed and direction and records it at regular intervals during the day.

II. Race Committee Boats

- A. Line Boat (main RC boat) – stationed at one end of the start line, usually houses the Signaler, Sounder, Timer, Line Sighter, Spotter/Recorder, Scorer, Timer and PRO. We usually use a Mako Runabout for this boat, with the PRO and up to two helpers on board. Operators should be DSA trained and certified and should have taken and passed a watercraft safety training course and test.
For Spring, Summer, Thawout, and Frostbites Series races, that's the only boat we use. For regattas we will also use one or more of the following:
- B. Mark Boat – its crew sets the marks; helps with wind readings, and sends much information to the Line Boat during the day.
- C. Rescue Boat 1 – its crew assists in setting the marks and sends much information to the Line Boat during the day. Often this boat is stationed at the end of the line during starts and helps the spotter/recorder identify OCS boats. The primary purpose of this boat however is to rescue crew who are in the water after their boat has capsized (note it is **not** to rescue the capsized boat!).
- D. Rescue Boat 2 – its crew assists in sending much information to the Line Boat during the day. The primary purpose of this boat is to rescue crew who are in the water after their boat has capsized (note it is **not** to rescue the capsized boat!).

III Preparing the RC boat before leaving the dock

- A. Review the Race Committee Guide (<http://www.denversailing.org/wp-content/uploads/2012/01/RaceCommitteeGuide.pdf>) and other documents found on the Race Management page (<http://www.denversailing.org/racing/race-management/>) of the DSA website. In particular, ensure you have the flags needed for the races, including class flags for each class that will be racing, as well as the usual RC flags -- P; X; L; A/P; First Substitute; S; I; black;, etc. See Figure 3, Flags and Sound Signals, pages 10 - 14.
- B. Leave the dock at least 45 minutes before the scheduled first warning, to ensure you have time to set the course.

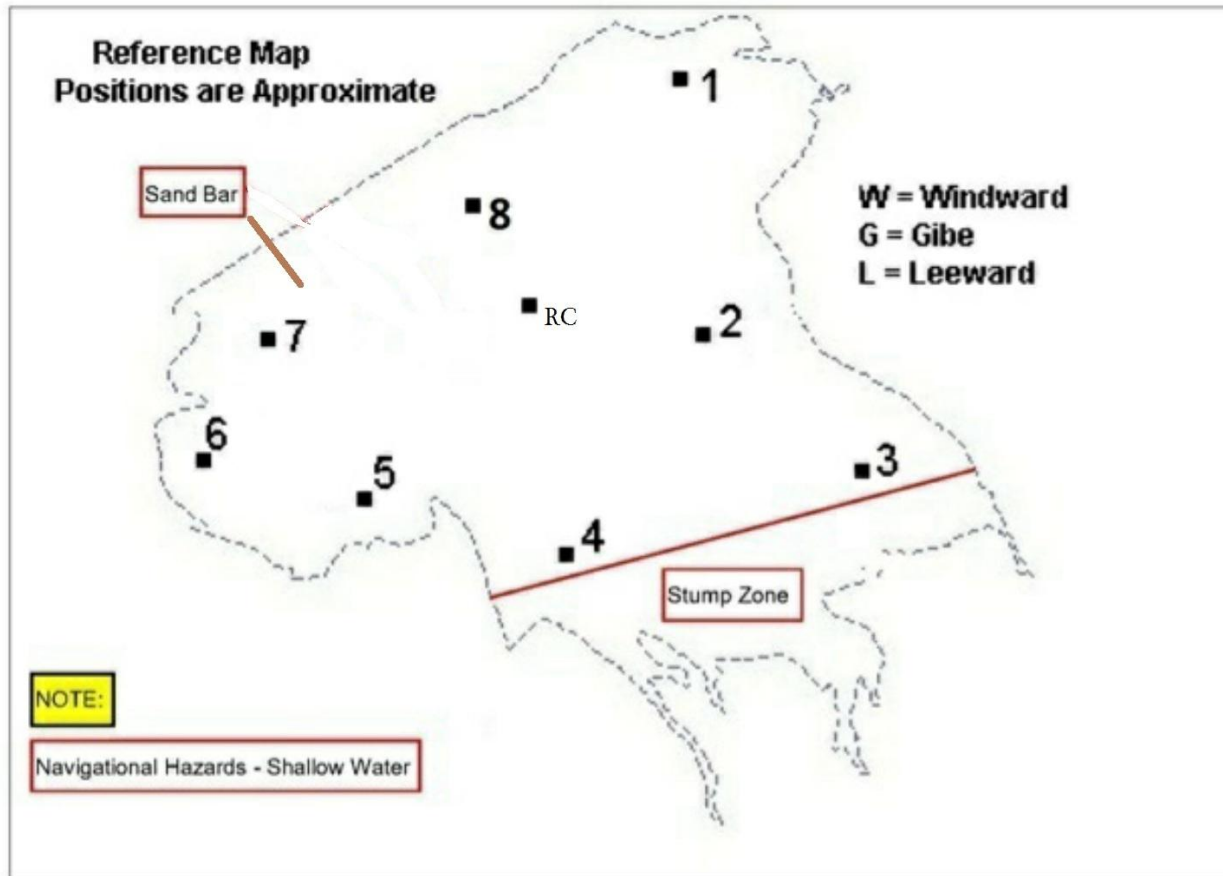
IV Setting up the Race Course

- A. Location – The PRO will set the course determined by the wind direction and will use the existing permanent numbered buoys, as marks of the course, if feasible. See Figure 1, the chart of the lake, on page 3. Sometimes additional floating marks will need to be set. For regattas, large inflatable buoys are generally used, rather than the numbered buoys.

DSA Race Committee Information¹

- B. Alignment --A racecourse is aligned with the wind direction, with marks set at a distance sufficient to make races last about 45 minutes for the middle boat in each class. Nominally boats will be sent on two loops around the course for each race, but this can be varied, depending on the strength and direction of the wind.

Figure 1: DSA Sailing Course – Cherry Creek Reservoir



- C. Marks – typically the line boat first ties up to the RC Buoy and checks the wind direction. If two permanent numbered buoys align with the wind direction and the RC buoy, the course can be identified; otherwise, additional floating marks need to be set, and the following procedure is followed: 1) the mark boat is sent directly upwind, approximately $\frac{1}{2}$ mile, and drops the windward mark (an orange inflatable buoy, with anchor) into its preliminary position. 2) Subsequently the mark boat comes back and drops a leeward mark directly downwind of the windward mark, about $\frac{1}{2}$ mile downwind from the line boat. On confirmation from the line boat that the marks are aligned with the wind direction, 3) optionally a third mark can be placed to the left of the leeward-windward line, to make a course in the shape of an equilateral triangle. This mark is the reach mark.
- D. Start and finish lines – The first rescue boat places a starting pin (a small spherical buoy) left of, and in a direction perpendicular to the leeward-windward line at a distance from the line boat of $1.25 \times$ the length of the longest boat \times the maximum number of boats expected. For example, if 6 Lightnings are expected and this class is the largest class competing, then the line distance should be

DSA Race Committee Information¹

1.25 X 19 X 6 = 143 feet. In higher winds, the line should be a bit longer; in lighter winds it can be a little shorter.

The finish line at DSA is generally the same as the start line, but if there are many classes racing, it will be helpful to have a separate finish line that is a direct extension of the start line, on the opposite side of the line boat. In that case the finish line can be shorter than the start line.

Alternatives can include setting the start line at the leeward mark and the finish line at the windward mark. But usually at DSA the start line is in the middle of the course.

Once a course is set, the course identification is posted on the Course Board. This is a metal board onto which are affixed numbers with magnetic backings. If for example, the designated course includes permanent marks numbered 5 and 1, with winds coming from the southwest, so that Mark 5 is a windward mark and Mark 1 is a leeward mark, then the course board would read 5 - 1, indicating one loop around the course, from the start line to mark 5 to mark 1 to the finish line. A designation of 5-1-5-1 would indicate two loops around the course, etc.

- E. Course changes – don't expect the wind to maintain the same strength and direction over the course of the day! When they do change, the PRO will call for changes to the position of the leeward mark and the location and orientation of the start and finish lines, usually between races, but possibly during a race. If during a race, use of a "C" flag to indicate change of direction, and/or an "S" flag to indicate course shortening, is required. The PRO will know and must communicate the proper use of these flags.

IV Prior to the first race

- A. For Spring and Summer Series, the first warning is at 6:20 PM. Hopefully the marks and pins will all be set and adjusted before then, giving RC members time to prepare for the first starting sequence. If so, assignments can be reviewed, equipment working conditions verified, flags set out, and recording devices readied. Competitors will be sailing past the line boat to "check in" with the race committee, and read the course board to see the designated course and to learn the class starting sequence, and the recorder will be recording their sail numbers and skipper names.
- B. If not all is ready by 6:20 PM, RC will hoist the "postponement" flag, accompanied by two sounds of the horn. Once the course and RC are ready, the postponement flag will be dropped, accompanied by one sound of the horn. Exactly one minute later the first warning will be given.

V Starting the first race

- A. At 6:19:50, (or 50 seconds after the postponement flag has been dropped) . The sounder will sound 5 short horn blasts. Ten seconds later the sounder will sound a single blast signifying the warning for the first race. Simultaneously the signaler will raise the class flag for the first class to race. In the steps below, the "five-minute" sequence is being used.
- B. The timer should let others on the line boat know when things are happening, for example: "starting timer"; "ten seconds to wake-up blast"; "...5-4-3-2-1" (horn);

DSA Race Committee Information¹

ten seconds to first warning"; "...5-4-3-2-1 class flag up, with sound" (horn). The signaler raises the class flag on the command "class flag up." At this point the first starting sequence has started.

- C. 30 seconds later, the timer should announce "30 seconds to prep flag up." Timer should subsequently say, "...5-4-3-2-1-prep-flag-up, with sound." (horn) and signaler should raise the prep flag on the "prep flag up" command.
- D. The next horn signal will be at 1 minute prior to the start. The timer should announce "30 seconds to prep flag down," and the subsequent countdown announcements. On the command, "prep flag down, with long sound" the prep flag comes down and the horn sounds a long blast.
- E. The next horn signal is for the actual start. Timer continues announcing; signaler drops the class flag on the command and the horn sounds. Several things can happen immediate after that. If there are a small number of boats in each class and all are well-behaved so that no boats are likely to be OCS from the first class, RC can elect to use **rolling starts**, which means that the second class's warning is at the same time as the first class's start signal. If that occurs, signaler needs to raise the second class's class and course flag simultaneously with the drop of the first class's class flag. The signaler and sounder will continue the 4-minute; 1-minute; and start flags and soundings, and this can be repeated until the last class starts. If we don't do rolling starts, competitors will listen for additional signals, normally another sequence for the next class to start, with the warning a few seconds after the previous class has cleared the start area.
- F. **If boats are OCS** – this is where it gets interesting. Boats that are OCS are On the Course Side, or over the line before the start signal. If Spotter can identify the sail numbers of all the OCS boats, she announces "**Individual Recall!**" to RC; Sounder makes one long manual blast of the horn; and Signaler raises the "X" flag. Spotter calls out the sail numbers of the OCS boats to the recorder, who records them, and watches to see that the OCS boats return to a position below the line before continuing to race, and announces it when they do, which recorder records. If they do, they are OK; if they don't; they are marked OCS in the scoring. The X flag is dropped as soon as all the OCS boats have cleared, or in 4 minutes, whichever occurs first. It is customary, but not required (and sometimes prohibited by the sailing instructions) to call out the numbers of the OCS boats loud enough for the offending boats to hear. In any case it is the responsibility of the skipper to turn back and re-cross the start line, whether or not they heard their number called.
- G. If the sail numbers of the OCS boats can't all be determined, Spotter announces "**General Recall!**" Sounder makes two long blasts of the horn; and Signaler raises the First Substitute flag. What happens after that depends on whether or not we used rolling starts. If we did, either we abort the start sequence for the second class and re-do the start sequence for the first class; or we send the first class to the back of the line, meaning they will need to wait until all the scheduled classes have started. This approach, if adopted, must be discussed at the skippers meeting before racing.

DSA Race Committee Information¹

- H. **Avoid General Recall if at all possible!** If in doubt about ability to identify all the OCS boats, but it seems possible, the go with the individual recall. If, within the next few seconds, we determine that the boats can't all be identified, sound two blasts of the horn, drop the X flag and raise the First Substitute flag.

VI Sailing the first race

- A. With 6 classes sailing it will take at least half an hour to get all the starts done – more time if there are General Recalls, and more time if we don't use rolling starts. So by the time the last class is started, the first boats of the first class will have rounded the first weather mark and probably the first reach and first leeward mark as well. While we are starting the classes our attention is focused on the flags, the sounds, OCS boats, recording events, etc. However, we must not forget about the classes that are racing!
- B. Spotter and Recorder need to keep track of boats on the course, and may want to log the times of the events of first boat of each class rounding the leeward mark each time. When the first boat of each class has rounded the leeward mark for the last time, Spotter and Recorder must get ready to record finishes on the DSA RC Sheet, shown on page 8.
- C. Spotter and recorder also need to be on the lookout for capsized boats and to send rescue boats to their aid as needed. If more than 2 boats are capsized at the same time the PRO must consider abandoning the race for reasons of safety.

VII Finishing the first race

- A. When each boat crosses the finish line, Spotter calls out the sail number; Recorder records the event on the DSA RC sheet along with the time each boat finishes; and Sounder sounds a single blast of the horn. Note separate order-of-finish sheets are **not** needed per class – just one for each race. Entries are made in sequence by order of finish.
- B. Competitors should clear the finish line once they have finished.
- C. Recorder should record the sail number of boats that did not finish.

VIII Starting the next race

- A. As soon as all boats of a class finish, that class can be started for the next race. We may want to wait until all classes have finished before starting the next race, and we may need to adjust the course alignment and length before the next race as well.
- B. But whenever we are ready, we will repeat the above steps to get the next race going and finished.

IX Running the last race

- A. We'll keep racing until we have had enough racing for one day. Typically that's two races, but if the weather is good and there is time we will run a third race.
- B. But stay in tune with who has left for the day, so that they can be recorded as DNS (Did Not Start).

DSA Race Committee Information¹

X After the last race

- A. We stay on station to record finishes for the last boats of each class. Once all finishers are recorded we can pull up anchor and head for home. The Mark and Rescue boats can begin pulling marks and pins after they are no longer needed; once racing is finished and all marks and pins retrieved, we look out for sailboats unable to get back to the dock due to diminishing winds, and offer tows. We also keep an eye out for any boats that capsize on the way home, and we stay prepared to rescue them.
- B. If we have a laptop on board we can begin scoring. With luck we'll have preliminary scores ready to post when we reach the dock.
- C. However, scores cannot be posted until at least one hour after reaching the dock, which is the time limit for requesting redress for protests. RC members may be asked to serve as witnesses at protest hearings, but in the meantime we will have boats to clean up and put away.

XI For more Information

- A. To learn more about working on DSA Race Committees, see <http://www.denversailing.org/racing/race-management/>. Also look at the US Sailing *Race Management Handbook* for very thorough discussions of all aspects of running sailboat races.

DSA Race Committee Information¹

Figure 2 - DSA RC Sheet

Date:		Event:		Pro sail #		Boat Class		Asst. sail #		Boat Class	
Start of race		wind readings: m/s ()		Knots ()				Class		Sail #	
Middle of race		wind readings: m/s ()		Knots ()				1			
End of race		wind readings: m/s ()		Knots ()				2			
Starting Time, Boat Class and Course								3			
Start#	Hr	Min	Sec	Groups in Start, Boat Class		Course		4			
1								5			
2								6			
3								7			
4								8			
5								9			
6								10			
(For safety record all boats before start of race; v mark them as they finish!)								11			
	Class	Sail #	v		Class	Sail #	v	12			
1				21				13			
2				22				14			
3				23				15			
4				24				16			
5				25				17			
6				26				18			
7				27				19			
8				28				20			
9				29				21			
10				30				22			
11				31				23			
12				32				24			
13				33				25			
14				34				26			
15				35				27			
16				36				28			
17				37				29			
18				38				30			
19				39				31			
20				40				32			
Protests :								33			
Penalty Turns : (All boats that made penalty turns)								34			
Comments:								35			
								36			
								37			
								38			
								39			
RC boat arrived at dock (time):								40			
Pro signature											

DSA RC Sheet Instructions

Use one score sheet per race. Along the top enter the name, sail number, and boat class of the PRO and of the assistant.

DSA Race Committee Information¹

In the **Starting Time** section record the clock time of each class start, the identity of the class, and the course to be sailed.

In the **Safety Record** section enter the sail number and class of each boat that started, and, when each boat finishes, enter a check mark indicating that the boat finished.




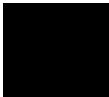

In the **Finishing** section record the Sail number, Class, and Time, in the order of finish, for each boat that finished.

In the **Lower Left Corner** enter comments, protests, penalty turns, etc. as appropriate, the time the RC boat returned to the dock, and sign the form.

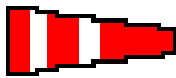
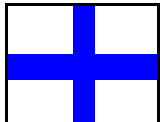


Leave the completed form in the clubhouse in the plastic frame labeled *Completed Scoresheets*.

DSA Race Committee Information¹

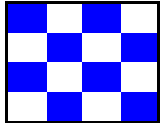
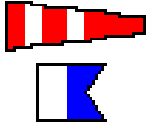
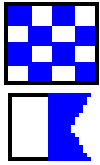
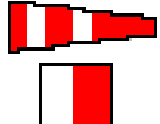
Figure 3: Flags and Sound Signals

Flag	Meaning When Raised	Sound	Meaning When Lowered	Sound
 Class Flag (Lightning)	Warning: Five Minutes to the start of the next Lightning Class race	One horn	The Class has started	One Horn
 "P" flag	Prepare: Four Minutes to the start of the next race for the class being started. Boats are considered to be racing at this point	One horn	One minute to the start of the next race for the class being started.	One long horn
 "I" Flag	Same as P flag, but in addition, rule 30.1 is in effect (boats OCS in the one minute period before the start must go around the end of the line to cure the OCS condition)	One horn	Same as P flag (but with rule 30.1 in effect)	One long horn
 Black Flag	Same as P flag, but in addition, rule 30.3 is in effect (boats OCS are disqualified!)	One horn	Same as P flag (but with rule 30.3 in effect)	One long horn
 "Y" Flag	It is mandatory for all competitors to wear PFDs	None	It is no longer mandatory for all competitors to wear PFDs	none

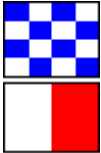
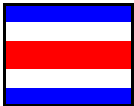


DSA Race Committee Information¹

Flag	Meaning When Raised	Sound	Meaning When Lowered	Sound
 Answering Pennant (AP)	Postponement	Two horns	Racing will resume in one minute	One horn
 "X" flag	One or more competitors is OCS	One horn	All OCS competitors have cleared, or 4 minutes have elapsed since raising, whichever occurred first.	None
 First Substitute	General Recall	Two horns	Racing will begin again in one minute for the recalled class (unless they are to go to the end of the line)	One horn
 "L" flag	On the water: Come within hail; Ashore: a notice to competitors has been posted on the official notice board.	One horn		

DSA Race Committee Information¹















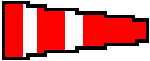

Flag	Meaning When Raised	Sound	Meaning When Lowered	Sound
 "N" flag	All races are abandoned. Return to the starting area	Three horns	The Warning or other signal will be made in one minute.	One horn
 AP over A	All races not started are postponed. No more racing today	Two horns		
 N over A	All races are abandoned. No more racing today.	Three Horns		
 AP over H	All races not started are postponed. Further signals will be made ashore.	Two horns		

DSA Race Committee Information¹

Flag	Meaning When Raised	Sound	Meaning When Lowered	Sound
 <p>N over H</p>	All races are abandoned. Further signals will be made ashore.	Three horns		
 <p>"C" flag</p>	(Displayed near a mark) The position of the next mark has been changed. With a green triangle, the next mark has been moved to the right; with a red square, to the left.	Horn or whistle - repetitive		
 <p>"S" flag</p>	(Displayed near a mark) Finish between the nearby mark and the staff displaying this flag	Two horns		
 <p>"M" Flag</p>	The object displaying this flag replaces a missing mark.	Horn or whistle - repetitive		

DSA Race Committee Information¹

The (nearly complete) set of flags

 A	 B	 C	 F
 I	 L	 M	 N
 P	 S	 U	 X
 Y	 Z	 AP	 !st Substitute