



Introduction

Racing for the club in 2013 will be a bit different than in the past, due to the club not having on site a launch ramp but having to use the public ramp at New Hope. That will take racers longer to both launch and retrieve their boats. Plus the committee boat will not be at a dock but on a mooring, so it will take extra effort and time to get the boat ready to use and to the race area. So additional time and planning will be required for both those holding the races and the sailors racing. Read the following as help in getting the job done this season.

When to show up

The club schedules enough people to ensure safety and quality of racing for DSC members. In colder temperatures we schedule at least four attendants. In warmer weather months, we will schedule three participants. If less than the scheduled number of race committee show up, it's up to the Race Chairman to determine if races will be held. If safety and quality of racing can not be guaranteed, then racing is cancelled, and all club members that showed up to race will be awarded one (1) first place position for that day. Those scheduled for race committee need to **show for RC duty at 9 am**. It's important to get the course setup on time so that racing can start on time at 11 am.

Required number of racers

At least two boats are required for a race to be run. If three or more boats are identical one-design they should be scored in fleet category as well as club. In the event that one or more races are cancelled for any reason, all skippers present intending to race shall be given credit for one race, all scored with a 1st place finishing position.

Preparing to leave

The Fuel - Both the rescue boat and the committee boat have four-cycle engines, which use ONLY non ethanol gas. Gas cans in the shed have a strip of silver duct tape on them to indicate they have the correct gas for the boats. Do not use any other gas or containers. The Rear Commodore will ensure the containers are kept full for club use, do not go and get them filled if they are low! Contact the Rear Commodore and tell him of the need!

Starting a cold motor - The fast idle lever can only be raised, if the motor is in Neutral. The fast idle lever is also the choke. As you raise the lever when it reaches the upper limit of travel, you will notice a soft resistance. This resistance is the choke position. The motor will have to be choked to start. As the motor starts, let the lever down just enough to keep the motor running for 15-30 seconds. Then the motor will be warm enough to run on a low idle.

If the motor doesn't start immediately, crank the motor for 5-second intervals. If the motor hasn't started after 6 tries, check everything you did and try again.

Sometimes the hose will be air-blocked. The bulb will pump up to resistance, just as if the hose were full of fuel. You can check this by unfastening the hose and carefully pushing on one of the round brass ball in the connector to release the air.

Within a minute, the idle lever should be pushed fully down to the off position, so the motor will idle normally. Allow the motor to idle for 5-10 minutes before leaving the dock. Thus, the motor will be properly warmed up, and any fuel delivery problems will occur at the dock, and not out in the lake.



2013 Dixie Sailing Club Race Committee Handbook

The idle lever must be fully depressed, before shifting the motor into gear. If the shift lever is jammed into gear with the idle lever raised, the idle lever will be broken to the tune of \$100.

Starting a hot motor - The major difference in starting a hot motor is handling the fuel mixture. A hot motor does not need to be choked. Usually, this motor will start by simply turning the key. However, if the motor doesn't start after two tries, pull the fast idle lever all the way up, but not into the choke range. This makes the starting mixture as lean as possible. When the motor starts quickly lower the idle lever.

Cooling water stream - Each outboard displays a stream of water that indicates cooling water is circulating in the motor. As soon as the motor is started, always look for this stream of water down from the starboard side of the motor. If you don't see this water shut the motor down immediately, or serious damage may occur. Frequently, the problem is simply a mud-dauber nest in the little black tube. Clear the tube, and try again. If there is no stream of water, do not operate the motor. Then, advise the Committee Chairman.

Motor Tilt - This motor has a tilt trim feature that is operated by a thumb button on the shift handle. This feature just came with the motor and is meant for other types of boats, not our RC Committee Boat. The motor is trimmed just right when the motor is all the way down. Please leave it there.

Preparing the Rescue Boat to Get Underway

Retrieve the Fuel Tank - The fuel tanks and hoses are stored in the shed. If only partially full tanks are available, combine them using the funnel, so that you have a full tank and remember to contact the Rear Commodore about buying more fuel.

Ignition Key - The boat ignition key is also in the brown shed. Make sure you are picking the key marked "Rescue Boat." Carry the tank hose and full tank to the Rescue Boat.

Transom Drain Plugs - Leaving the gas tank on the dock, step on board the Rescue Boat, and immediately go aft to set the two transom plugs in place. If you do not immediately set these plugs, water will continue to enter the boat. However, the weight of one person is adequate to flood the deck so it is uncomfortably wet. The plugs should not be tightened; the friction fit is fine and will not leak.

Motor Battery - Connect the battery observing the correct polarity (red-Positive, black-Negative).

Connect the Fuel Tank - Bring the tank aboard, stow it on the port side and connect the hose. Make sure the arrow on the primer bulb is pointing from the tank to the motor. Pump the bulb until you feel resistance, which should be 4-6 times. This resistance indicates fuel is probably up to the carburetor float needle. Note carefully if there are any leaks from the connections at the motor and tank. If there is a leak the o-ring may be damaged, so trade hoses with another tank in the shack.

Visual Inspection - While the motor is warming up, check the boat. Note the gear that is aboard and more importantly, any gear that is not aboard and needs to be retrieved from the shed. The important items include the life jackets and fire extinguisher. In addition, you will need to load the race marks, mark anchors and the tool bucket with line for the buoys. Don't forget to open the seat and ensure that the blankets and Flying Scot retrieval-towing bridle are on board.



Preparing the Committee Boat to Get Underway

Fuel Tanks - Before starting the motor, open the hatch and check the fuel quantity and pump the fuel line bulb. Immediately after starting the motor open the center hatch and observe the coolant water stream from the motor. If there is no water stream stop the engine immediately and check the orifice for a mud dauber nest. If the orifice is clear and there is no water stream, do not use the boat, as the motor may be seriously damaged.

Mooring the Rescue Boat alongside the Committee Boat - During the Starting sequence the Rescue Boat should be moored alongside on the side opposite the starting line.

Signal and Race Flags The committee boat has tubes on the rails for inserting the flags used in the starting sequence. The flags used for races are stored on the committee boat.

Race Frame - After the Committee Chairman has determined the number of laps for the race that number will be placed in the horizontal rack on the starboard side. The finish will normally be to leeward, using the start/finish line set between the flag and committee boat.

How to set a course

The course will be a windward-leeward course. This consists of one "windward" mark and one "leeward" mark. The flag for the start finish line may also serve as the leeward mark. The course to set up this year will be determined by the Race Chair after arriving at the open area. There are NO set locations for marks as in previous years. One windward flag will be set. One start line flag will be set, and it may be used as both the start/finish line flag and the leeward mark flag, if the race chair does not put out a separate leeward flag.

How to set the starting line

The perfect line is one which a boat can cross on either tack and be in equally favorable position with every other boat along the line. When setting a starting line there are two things need to be accomplished. The first is that the line is square to the wind, and the second is that the line is long enough for the boats present. All races should be Port Rounding, so the starting line flag should be on the port side of the committee boat.

Setting the starting line

The proper length of the starting line depends on several factors: the number and length of boats, velocity of wind, type of boats and experience of the competitors. As a rule of thumb in moderate air, set the line length at 1.25 times the aggregate length of the longest class of boats expected to start. For example, 16 boats, each 30 feet long, require about 600 feet; the same line will accommodate 32 boats, 15 feet long. In heavy air extend to as much as 1.5 times the aggregate length of the competing boats. In very light air, reduce it.

After line is set

1. Raise the on station flag. This is blue flag with the letters "RC" on it.
2. Sound the horn

Preparing for the race

1. Record race committee attendants
2. Write down all entrants' boat type, number and skipper info on the race results sheet.
3. Record the wind speed and direction
4. Get both stop watches ready.



Starting the race

A five minute starting sequence is used to start all races

1. Warning - Five (5) minutes before the start, start both stop watches, raise the warning marker (red race buoy or class flag) and sound the horn.
 2. Preparatory - Four (4) minutes before the start, raise the preparatory flag (blue race buoy or blue flag) and sound the horn
 3. One (1) minute before the start, lower the preparatory flag (blue race buoy or blue flag) and sound the horn
 4. Start - Zero (0), lower warning marker (red race buoy or class flag) and sound the horn
- If any boat is over the line early, they must return behind the start line and start again.

What to do during a race

Observe boats – Keep the rescue boat on the course following the racers. Keep an eye on the competitors. If someone is in distress, get to them in a hurry.

Check wind – During the race, try to check the wind direction and speed a couple of times. There is a portable wind meter in the RC Briefcase. Normally this is done, at the beginning, middle and end. You can record this on the worksheet. These numbers will be used to come up with an average wind speed for the race. Also, if the wind has changed direction, you will be ready to reset the starting line once all the competitors have finished.

Watch Time – If wind has died down and the race is going much slower than anticipated, it is acceptable to shorten the course. The committee chairman can shorten course to a mark/finish line before the leading boat has rounded the mark preceding the “new” mark/finish line. You can only remove a leg if no other boat is on it. When shortening, have the rescue boat notify the competitors.

What to do when finishing a race

Record Time - Record the finishing time of each boat as it crosses the start/finish line. As each boat crosses the line, sound the horn so that they know they have finished. The average race should take between 30 – 45 minutes from the start to when the first boat finishes. If it is much shorter consider adding an additional lap or two to the next race. If it is much longer, then consider removing a lap.

Cancel Race – A race should be cancelled if the leading boat has not crossed the finish line within one and half hours. All other races have to finish within two hours. Racers finishing after two hours will be scored as a DNF.

If you have any slow boats that are holding up the starting of the next race, you can score them in their current position on the course, and use the rescue boat to bring them back to the starting area.

How to score a race

DSC uses the Portsmouth Handicap scoring method. Each boat has a handicap that is applied to its time to determine an adjusted time. These adjusted times are used to determine the final finishing order for the competitors. Each boat has a different handicap number depending on the wind speed.

1. Make sure you recorded the time for the race. Remember to subtract 5 minutes if you from the time because you didn't stop/start the watches after the start.



2013 Dixie Sailing Club Race Committee Handbook

2. Determine the average wind speed from the race, and then determine the Beaufort Number.

Beaufort Number (BN)	Wind Velocity (MPH)	Seamans Term
0	0 – 1.7	Calm
1	1.8 – 4.0	Light Air
2	4.1 – 7.4	Light Breeze
3	7.5 – 12.0	Gentle Breeze
4	12.1 – 18.9	Moderate Breeze
5	19.0 – 24.7	Fresh Breeze
6	24.8 – 31.6	Strong Breeze
7	31.7 – 38.5	Moderate Gale
8	38.6 – 46.6	Fresh Gale
9	46.7 – 53.9	Strong Gale

3. Record this number on the scoring sheet.
4. Using the Beaufort Number, find the corresponding handicap number for each boat. All handicaps can be found in the Race Committee Notebook. Below are the most frequently used handicaps.

Boat Type	BN 0-1	BN 2-3	BN 4	BN 5-9
	HDCP	HDCP	HDCP	HDCP
Catalina 22 SK/WK no spi	98.4	96.3	95.2	93.9
Flying Scot	92.2	90.5	89.1	87.5
Sunfish	107	105.6	100.7	98.7
MC Scow	89.6	87.5	87.2	86.5

5. Record the handicap number on the scoring sheet for each boat.
6. Calculate the adjusted time.
 - a. Subtract 5 minutes from elapsed time to account for Stop watch difference (if needed)
 - b. Convert Elapsed Time of Finish to Time in Seconds.
 - c. Convert Time in Seconds to Total Seconds.
 - d. Calculate Adjusted Time (Total Seconds / HDCP Factor) X 100

Field on Race Form	Sample Data
Elapsed Time of Finish	1 HR, 30 MIN, 30 SEC
Time in Seconds	3600 SEC, 1800 SEC, 30 SEC
Total Seconds	5430 SEC
BN	2 -3
HDCP (MC Scow)	87.5
Adjusted Time	6205.71

- e. Compare the adjusted times to determine the HdcP finishing order. Record the order in the HDCP column of the FINISH PLACE portion of the sheet. If three or



2013 Dixie Sailing Club Race Committee Handbook

more boats are identical one-design participate, then they should be scored in fleet category as well.

7. Record each race result on the Summary Sheet as well.
8. Repeat for each race.

Protests and Penalties

While all penalty and remedies are discussed in detail in the USSA Rules of Racing, we will go over the few you are most likely to see at DSC.

1. Over Early
 - a. Remedy - restart
 - b. How to score if not remedy – OCS – number racing plus 1
2. Hitting a Mark
 - a. Remedy – penalty turn
 - b. How to score if not remedy – DSQ –number racing plus 1
3. Right of Way
 - a. Remedy – penalty turns
 - b. How to score if not remedy – DSQ – number racing plus 1

When you get back

With assistance from the rescue boat, put the committee boat on the mooring. Clean up it and bring the race committee briefcase back to the shed. **Anchor Blocks** - Make sure the anchor blocks are on the wood planks, and not on the carpet. **Winch Handle** - The anchor winch handle should be on the deck inside the railings.

1. Put the rescue boat at the dock and clean it up.
2. Return gas tank, keys, and briefcase to the shed.
3. Lock the shed.
4. Give or send the race record form to the Rear Commodore (if present) or mail to Rear Commodore using self addressed stamped envelope found in the RC briefcase.

Report Problems - Report any damaged or missing gear on the Race Result Report form. If the matter should definitely be resolved before the next weekend, please advise the Rear Commodore directly.

Securing the Rescue Boat

Dock Lines - Tie the boat so that it will lie about a foot off the dock, never less. Deploy two fenders.

Race Marks – Return the race flags to the shed.

Storing Gear - Return the fuel tank, hose, marks, and ignition key to the shed.

Loose gear and trash - Stow any loose gear in the bench seat, or under the foredeck. Life jackets go in the seat. If anything is wet, it needs to be hung in the shed to dry.

Pull the Transom Plugs - The last thing to do is to pull the transom plugs. During the week when the boat is not being used, the transom drain holes are just high enough to drain rainwater from the boat. If the plugs are left in the boat, the hull will fill until the water reaches the transom cutout. When the water rises over the battery, it will be trashed. If the water continues



2013 Dixie Sailing Club Race Committee Handbook

to rise, the boat could become unstable. If someone attempts to board the boat in this unstable condition, they could be injured. **Please pull the plugs.**

Report Problems - Report any damaged or missing gear on the Race Result Report form. If the matter should definitely be resolved before the next weekend, please advise the Rear Commodore directly.