



PHRF PERSPECTIVE
March 2002

PHRF Racing: Get a Better Rating!

Top placing boats, almost always, are better prepared to race and optimized for performance. Performance and practice makes doing well easier by getting your boat's speed potential equal to the handicap rating. The premise of PHRF rating criteria is that a well crewed, well equipped and well raced boat has an equal chance to place in the money. And preparation of your boat plays a major part in your success and enjoyment.

As you prepare for this season of racing, it's a good idea to keep in mind upgrading your boat as you maintain her. Many of the following suggestions were set forth by, former PHRF Board member, Bruce Cooper.

RIG: Mast tune determines how your sails perform. Check that your rig is straight at the dock and again while sailing. Ask your sailmaker or rigger to check if your mast is tuned, i.e., if your rig has enough pre-bend and rake, if it is centered, and if it has proper tension. A tuned rig will help your upwind speed and pointing considerably!

Put your rig on a diet and focus on removing weight aloft. This greatly helps your boat's righting and pitching moment; it means less heeling and more speed! Use Vectran or Technora halyards. You can eliminate bloodstains on your sails and foredeck because there will be no meat hooks! New Vectran line with a polypropylene cover is light, strong and doesn't absorb moisture. If you have older "double channel" sheaves intended for use with wire, you can lighten your load without replacing the sheaves. Splice on a foot & a half of wire and swedge the shackle on! Here are a few more ideas:

- Newer ropes are strong enough to lift your boat! Don't try this without a safety net. Now, high load capable, nearly zero stretch rope permit downsizing many of your lines.
- Have your sailmaker supply two feet of luff tape with cringles for halyard & downhaul to clean headfoil grooves for faster hoists. Spray with McLube or Boshield.
- For fast and consistent trimming of the Genoa, put 1" tape on the spreaders at 3", 6" and 12" to give your trimmers an easy-to-use reference.
- Mark your halyards for maximum hoist to add consistency to trimming your sails. Halyard tension is a big part of sail shape and speed.
- Make sure your sails, shrouds and backstay have ribbon or yarn telltales and your masthead Windex is aligned.
- Your spinnaker pole and spinnaker pole track should be in good working condition. If not, you'll be losing valuable time at every jibe and mark rounding.
- Keep your spinnaker pole rigged low on the mast (with the topping-lift pulled aft) so it's pre-set for the mark rounding. Saves time rounding the weather mark!
- Remove the roller furling drum for racing and have a racing Genoa cut full length.

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SAILS: The newer cloths are light, stronger and more durable than. Consider Carbon and blends. Prices are more reasonable and carbon has advantages over Kevlar and other UV sensitive materials that make it worth seriously considering. Ask your sail maker for his opinion on what is best for your use. Make sure the sails you use most are more recent than the rest of your sails. And remember, new sails equal speed. Period.

For small repairs, use Tedlar, an adhesive backed Mylar that sticks well on dry Mylar surfaces. It comes in various width tapes and sheets. Order some from your sailmaker.

BOTTOM: Put the bottom at the top of your list this year. A fast bottom will have less drag, which equals greater speed, acceleration and pointing!

The bottom paint rule for serious racers: pay for it to be done right the first time so you are not paying someone else to fix it. Prepare the bottom correctly so the paint sticks the first time. Stick to the basics: You want a faired and smooth bottom with a proper epoxy barrier coat and a very smooth paint job. Shortcuts equals slow.

Ask winning skippers what yard they use for their bottom and who does the work. You can't argue with success. Unless you have a race-prepared bottom that just needs paint, start by taking off the old bottom paint and barrier coat down to the original gelcoat. New boats from the factory generally do not have race-prepared bottoms.

The barrier coat is sprayed in several coats and long-board sanded to insure any hull or foil imperfections are faired and corrected. Sanding "orange peel" texture away is especially important. If left on, your race bottom paint will go on an uneven surface and lead to a rough, slow bottom. A barrier coat is the key to a successful bottom. It seals the hull from moisture that can lead to blisters or worse.

The fastest bottom paints have a harder finish similar to Micron or Baltoplate. Proline 1088 is an acceptable fast alternative. Check with the fastest racers to find what they use. Wet-sanding the bottom before it goes in the water polishes the bottom and knocks off any small particles. Have your rudder and keel painted light colors or white to help see kelp or garbage bags.

If your boat does not have flush thru-hulls, switch to them for a much smoother bottom. Consider installing kelp windows. The kelp window allows the crew (inside the boat) to see kelp, etc. While the boat is in its cradle and you can see the prop, mark the prop shaft inside the boat when the prop is properly folded or feathered. This makes alignment an easy task when heading for the start line!

More ideas: If you are racing with a fixed prop, GET RID OF IT and be sure to immediately notify PHRF to update your certificate! A feathering or folding prop is worth major savings in drag and gives your boat instant speed.

- Use paint-friendly floss line for removal of kelp, garbage bags, tuna, etc. A polypropylene line knotted every foot or so is cheap and effective.
- Get the bottom cleaned before each race. It has to be clean to be fast.
- Hire a bottom diver who knows how to service a race bottom and uses light duty cleaning methods. Good divers know how to preserve a race bottom. Listen to them.

With your sails, rig and bottom in the best shape possible, you're almost ready to go racing. But first, you should get the crew out to practice. Practicing WILL make you faster. Practice your roundings. This is a good time to break in a new foredeck person. Practice starts and speed test with a sistership or a similar boat with a similar rating. Also, review and learn the racing rules. Then practice some more.

With your boat a little lighter aloft and faster on the bottom along with a practiced and cohesive crew, you will find that the rating you have been dragging around is not as tough to sail to as it was.

Please remember to report any reportable changes you make to your boat as specified in the PHRF rules. Ask any PHRF club rep/handicapper if in any doubt about what is a reportable change.

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