



PHRF PERSPECTIVE
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Get a Better Rating through Boat Preparation (Part 2)

An earlier Perspective column focused on preparation of Rig and Sails. Now let's look at the deck and interior. You can get your boat's performance potential equal to the rating through optimization and preparation. That rating will then be easier to sail to with a lighter boat and a deck layout that makes boat handling easier and faster. The premise of PHRF rating criteria is a well crewed, well equipped and well raced boat has an equal chance to place in the money. This is the second part on boat preparation originally written by Bruce Cooper and then updated. The easiest area to optimize is your deck gear layout and interior.

ON DECK: The goal is to improve speed and performance by lessening weight in the ends of the boat. Weight increases the pitching moment and causes your boat to "hobby horse" diminishing speed and acceleration.

To start your boat on a significant diet, begin at the bow of your boat and, working aft to the stern, make a check list of items that can be changed, (re)moved or modified to improve your performance.

Two items at the top of your list should be removing any roller furling gear. This may take more time to convert back to cruising mode, but the weight will make a difference. Many boats have an anchor locker. Don't use it! Remove all ground tackle from the bow and stow it below deck in the center of the boat directly over the keel or as near to it as possible. Check for any cruising gear on deck. If it does not help racing performance remove it. This includes dodger gear, boom cover and cockpit cushions! If your boat has an outboard motor, take it and the bracket off the stern and put it below. Serious racers wouldn't even think of racing with the outboard hanging out the back!

Every boat is guilty of storing "stuff" in the cockpit lockers or below. Put all items of substantial weight in the dock box, or if they mean too much to you, put them in a box below decks next to the anchor gear. Don't be a pack rat; get the ends ultra-light.

Next, evaluate your deck gear and determine if you are getting top performance from your winches and sail control systems. The more wind you sail in, the better your deck gear needs to be. The crew needs the gear working for them, not against them! On 30' or longer boats upgrade the primary winches to three-speed for faster grinding and less wear and tear on the crew. Most production boats come with undersized winches so upgrade to a more appropriate size.

Another must do performance upgrade is to install adjustable genoa leads and a windward sheeting traveler. When sails need adjusting for optimum trim and speed, the genoa leads and main traveler need to work easily and smoothly. Also installing a spring-loaded boomvang with ample purchase of at least 16:1 to 24:1 will give you an advantage in light air to keep the boom from "hooking" the mainsail leech and eliminate the need for a boom topping lift: Less weight and windage!

Lead all halyards and control lines to the cockpit. This will allow sail changes to run more smoothly and makes for easier adjustments with halyard winches and rope/halyard clutches led aft in an organized manner. Usually this type of deck layout reduces the number of winches needed, which means less weight! Proper labeling of halyards and control lines will be more user-friendly. Double-led adjustment lines (vang, cunningham, etc.) can allow adjustment by crew without getting off the rail!

INSTRUMENTS: One other way to optimize the "deck layout" is mast-mounted instruments or repeaters for the instruments mounted at the mast for "heads-up" sailing for the skipper and crew. If possible, for larger boats your instrument package should have an option for integrating jumbo repeaters for the mast which will make trim adjustments evident to the whole crew--not just the person sitting next to the instrument. Repeater along with a digital compass will add instant feedback to you and the crew to keep the boat going as fast as possible all the time and in the right direction! For smaller boats, mount your compass and speedo on the mast. And make sure your instruments are calibrated properly otherwise B.S. in is B.S. out.

BELOW: Now, optimize the interior. The first rule to remember is you CANNOT remove weight or items that are FACTORY SPECIFIED or INSTALLED. This means you must leave doors, the stove, cushions, the table and the like in the boat because that is the way it came from the factory. The boat was rated with that equipment. Everything else needs to go. If you DO remove any "permanent" or factory items, your PHRF certificate instantly becomes invalid (that means you cannot race until a new certificate--acknowledging the modifications--is issued). You must report any modifications to PHRF. We strongly suggest you talk it over with your PHRF Representative before you get out the Sawzall.

Put the interior on a race diet! Read the sailing instructions for each race and add only the necessary safety equipment on board. My crew carried off all the cassettes except for two Grateful Dead tapes. Even they have their limits! As on deck; remove all the weight from the ends. A little weight in the bow will not counteract weight in the stern; it just causes more "hobby horsing." The ideal spot for weight below is centered and down low, usually over the keel. This encourages better acceleration and more speed.

Keep the sail inventory on the floorboards and in an organized manner. If the crew knows where each sail is kept, the next sail change can save you time and speed. Know the tankage of your fuel and water. If you are buoy racing, empty the water tank and drink personal-size bottled water. Leave a few gallons of fuel in the tank. For offshore or overnight races, plan the fuel and water consumption accordingly.

Surprisingly, the removing and shifting of gear on deck and below can add up to (if you are a pack rat) perhaps a hundred pounds of weight savings or more. This will translate into instant speed in all wind conditions and on all legs of each race. Here are a few more tips to make your sailing easier and add up to extra non-rated speed:

- Convert your spinnaker pole foreguy to be "double ended." Lead it down each side of the boat to be cleated and controlled while sailing on either gibe.
- Place a code flag decal in the cockpit (most underrated piece of equipment on any boat). Don't waste time at the start looking for the code flag book and wondering what bearing, course or mark is being posted.
- Rig adjustable "tweakers" for your spinnaker sheets amidships on the rail. These will help overall spinnaker control and shaping. It is a good way to keep the guy from bending a lifeline stanchion while on a reach and may eliminate the need for a reaching strut (more gear off the boat and on the dock)
- Use ratchet blocks for your spinnaker sheets on the rails near the stern and try not to use the winches as often. This will give the trimmer better feel and free up a winch for the next mark rounding.
- Install rollers on forward stanchions & top lifelines for fast and easy skirting of the genoa foot when tacking.
- Put a spinnaker bag in the front hatch for launching and dousing. This will free up the cockpit from having the spinnaker interfere with trimming the genoa during the rounding. And it keeps it out of the crew's faces at every leeward mark rounding. Hoist and douse into the forward hatch. It saves time from having to "pack" the spinnaker again. This is a MUST when bouy racing! But you must pratice this at first!

Most of these optimizing tips can help you get better performance and non-rated speed from your boat. And don't forget to practice. Practice is a non-rated item by PHRF. Your boat's rating is based on being prepared according to the above tips. Combined with a little practice, you can be one of the faster boats in your fleet!

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