



JOHN BRECKENRIDGE'S HARBOR 20 SAILING IN 20+ Smith Mountain Lake, Virginia

June 6, 2010

Thank you for your Newsletter tips on sailing in 10+ knots. They would have been useful on May 8 when we raced in 20-25 knots with gusts to 39. *Unwind* took some water over the side, but handled the gusts well even with only one person on board. It was a good learning experience, but I didn't flatten the jib enough, which made windward legs difficult; and it took a 9+ knot broach on a broad reach to teach me to sit far enough back. I actually saw 10.5 knots at one point - she planes!

No stress and ahead of the fleet.

It was a heck of a lot of fun and, despite my screwups, I managed a 3rd and a 2nd. The two S2 6.7's, racing with spinnakers (and executing some visually spectacular broaches), each took one first. One of the Alerion 20's managed a second in the first race. I've raced against both Alerions five times and one or the other of them another four times and that's the only time either came out ahead of the Harbor 20. It's gotta be the boat, because I'm old and not very smart.

Our spring sailing season ended two weeks ago. There was an eight-race spring series (3 throw-outs) and the Harbor 20 finished second to one of the S2's (1,1,1,2,2 vs. 1,1,1,1,2). There was also a three-race regatta, and *Unwind* came out on top. The BYRA Fleet II consists of 16 boats ranging from a Beneteau First 29 (PHRF 182), a Santana 525 (PHRF 201), and up to a Catalina 25 (PHRF 237). The S2 6.7's are rated at 222 and the Alerion 20's and the Harbor 20 carry 223's. There's a 15-second PHRF takeaway for a spinnaker and both S2's normally sail with spinnakers at 207. Six to ten boats usually show up for each race. Most of our races were run in typical lake conditions - light winds and motorboat chop. May 8 was the exception.

The Harbor 20 is amazing. We raced Saturday, June 12, and a severe thunderstorm hit just after we finished. The news said gusts reached 50 mph. I don't know about that, but I saw a very small waterspout, the waves were about 2 feet with spray blowing off the tops and I was getting hit by oak leaves despite being at least 300 yards from shore. Two of the J/24's were knocked flat with 4 on board and mainsail only. The Harbor 20 took on some water, but was controllable with mainsail only for the 15 minutes it took to go upwind into a cove where I could wait out the storm. The race was in 4-8 knots of wind and it was the first time our club has tried match racing. I managed to win against an S 6.7. The Alerion 20's didn't participate.

I've had a lot of fun racing this boat. She sails great and can't be beat for comfort – even without the cushions.

Thanks,

John Breckenridge

COMMENTS & SUGGESTIONS



John Breckinridge sailing Harbor 20 #212 *UnWind* on May 8 in 20 – 25 knots with gusts to 39

The skipper's comments: *Jib shape all wrong and too much heel in a 20+ knot breeze. There's still not excessive weather helm.*

Tom Schock's advice: *Yes, you are way over-trimmed. You need more cunningham, more mainsail outhaul, max backstay, lots of vang, and a tight jib luff. I would play the main, letting it out in the puffs and pulling it back in during the lulls. The traveler is in the middle where it belongs, but the boom should be out to the corner of the cockpit. The main won't luff with the traveler down because tightening the outhaul, backstay, and cunningham will make the main flatter. Lots of boom vang will help flatten the lower part of the main, and it will also help bend the mast, which will also help flatten the main. Keeping the traveler in the center will let the boom bend upward in the puffs. This will soften the leech of the main and open up the top of the sail. This is an automatic de-powering system. If the traveler were to leeward, the shape of the main would hold the outboard end of the boom down, and that would make it very difficult to de-power the main in the puffs.*

These adjustments also reduce the camber in the main. If you look at the curve in the battens, especially in the lower batten, you can see there is way too much bend for

windy conditions. There is a lot of backwind in the main as it is trimmed in the photo above. A flatter main would have a lot less backwind, and the slot between the main and the jib would open to give the main more power.

Skipper's follow-up: *The jib halyard either stretched or I tied a lousy knot. I adjusted between races, but it came loose again. I may need a better setup for the jib downhaul than the V-jam block that's installed. The previous owner had rigged the jib with a 1.5 inch twisted D-shackle with a small block attached to the clew. I suspected that the extra 2 inches was one reason I couldn't flatten the jib. After the windy race, I talked to Steve Schupak, your production manager, about that setup and he suggested using only a small D-shackle on the clew. I re-rigged with a small shackle and even added an eye nut on the aft end of the boom to try and get more tension on the foot of the jib. Using the new setup and the bottom hole in the clew, there is still about 5 or 6 inches between the boom and the jib's midpoint and the outhaul is pulling straight down. Without downhaul, the tack is about 1.5 - 2 inches above the plastic on the furler. Does the jib need to be higher on the foil? Am I using the wrong hole? Would it help to adjust the boom height up or down?*

Tom Schock's advice: *You have too much tension on the foot of the jib. Try using the middle hole in the clew. There will still be about 5 or 6 inches between the boom and the jib's midpoint, and the outhaul is pulling straight down. The jib should be as close to the top of the foil. Then you should tighten the jib downhaul enough to eliminate the wrinkles in the luff of the jib. It won't help to adjust the height of the jib boom up or down. Remember that each sail is slightly different. You need to work with the three corners to achieve the proper shape for the sail.*