

## Quick Tips

- #1** Jib sheets - If you have 2-1 jib sheets always rig the starboard sheet over the port sheet. When you go around the mark (to port) the upper block will keep the lower block out of the way making it easier to hook up the whisker pole.
- #2** Measuring Intermediates - When checking your intermediates make sure that the mast is supported at the jib intersection and the boom gooseneck. If you support it at the top of the mast the bend will cause the measurements to change.
- #3** Spreader Swing - On the newer Spartech masts make sure to remove the 2nd clevis pins behind the spreaders so the leeward spreader will swing forward more. The new spreaders have more notch on the back of the spreader but an unneeded 2nd set of clevis pins. On older masts make sure you increase the notch in the spreader.
- #4** Mast Ram - Put a knot in your mast ram so that it has just a slight amount of tension in it when the backstays are set and the mast popped forward (mast bend and spreaders swung aft). This will keep the mast from inverting when you are reaching before the start without having to make any ram adjustment.
- #5** Vang - Preset your vang before the start for the first reach or run. If the second leg will be a reach or if you will have an offset mark preset the vang for a reach. When you ease the main around the windward mark the main will have full power immediately. If you will be going on a run preset it accordingly, so when the main goes out and rig goes forward your leech will not be all choked down.
- #6** Measuring lower shroud tension - Measure from the top of the mast band at the boom up the mast 915 mm (36") and make a mark. Then pulling the shrouds together measure across from shroud to shroud. It should measure close to 735 mm (29"). It will probably have to be adjusted on the water to get mast straight but this is a good starting point. Lighter crews or when sailing in constant moderate but overpowering winds you may want to tighten a little on the lowers to reduce power.
- #7** Bailers - Put McLube on the bailers to make them open and close easier, if they leak coat them with Vaseline.
- #8** Spreaders Running - On the run your mast is properly set up if the spreaders come straight out from the mast and just swing forward in the puffs. If the spreaders are swung back you need less mast forward puller.

**#9** Tape your spreader tips – This prevents torn main sails (there was one at this years Bacardi). It will also prevent possible loosening of the bolts on the Spartech mast and the intermediates coming loose (this also happened at the Bacardi, no names mentioned).

**#10** Staymasters - Scribe a line on your Staymasters so you know where you are in case you lose track of your starting point or the clips fall off. Use an ice pick or awl to make a scratch right were you read the scale. You can do it on the blank side.

**#11** Halyard pin - Replace the twist pin on the main halyard shackle with a pin and ring ding so it won't accidentally come undone.

**#12** Batten Tension - You should put a lot of tension on the top full batten. There should be enough tension to prevent any wrinkles appearing at right angles to the batten. The batten pocket is at an angle to the plastic front end fitting. When tensioning the batten slightly twist the plastic fitting at the top toward the batten to ensure that the batten is at the bottom of the fitting and then put a lot of tension on the Velcro adjuster. Check your bolts on the plastic fitting to make sure they remain tight. We now put lock tight on the bolts but have seen some older ones back off.

**#13** Intermediate measurement - Some guys are starting to use a small scale to get a more consistent measurement on their intermediates. The feeling is that it's a very important adjustment and the more accurate the better.

**#14** Shroud position - Move your upper shrouds forward about 1" and ease them slightly to keep the upwind tension the same. When the mast goes forward on a run your leeward shroud will be much looser.

**#15** Outhaul - Your outhaul should just be long enough to be able to hook up the sail. On my boom I even have to pull the sail pretty hard to connect the shackle. When you go on a run just completely release the outhaul in all conditions.

**#16** Folding mains - When you fold your main make the luff folds slightly smaller and the head will end up closer to the tack to make raising it easier. If you can, keep your sail rolled. I fold it over at the top batten and start rolling from there making sure that all the battens stay parallel to the roll. Tie a line around it on your boom for the night or put it in a roll bag and get it out of the sun.

**#17** Hiking Stick joint - Check your rubber hiking stick connecting joint for cracks. Mine is less than 6 months old and is almost broken. (it will be replaced in the morning).

**#18** Controls - When approaching the leeward mark always readjust everything for the next upwind in the same order every time. The order of what I do as the helmsman is; Jib cars in (if

they are out), cunningham on, outhaul on, jib tack on, mast puller off and then I pull in the jib sheet (usually the windward one) as the pole comes down.

**#19** Halyards - Wax your jib halyard to make it hoist and adjust easier. If you don't wax your halyard it will eventually cut through the fitting.

**#20** Rake - Tie a knot in your rake adjustment line tail so if it comes out of the cleat you will not have more than another  $\frac{3}{4}$ " of rake. Better yet when you find the right place for your rake adjustment tie the knot right at the cleat.

**#21** Battens - I normally use a softer top batten with no taper for light wind and a stiffer batten with the draft a bit further forward for strong winds. I've never felt at a big disadvantage if I have the wrong batten in. Last weekend we sailed in very light winds with the heavy air top batten in and still had great speed. If I'm unsure about the wind strength but think it might get windy I go out with the heavy air top batten. If I get out on the water and it's light, it's easy to drop the main and switch top battens. If it's windy and you have the light wind batten in you don't want to change out on the water, it's too tough on your main to drop it and put it back up again.

**#22** Tiller - Make sure that your tiller is tight on the rudder head and that your rudder head is tight on the rudder post. You don't want any slop in the system.

**#23** Control Lines - Prevent tangles and extra weight. Cut all of your control lines and sheets so they are the right length and no more. It's amazing how much line you can cut out of most boats. Leave just enough room on the control line to put 2 knots in the end so you always have something to grab on to. Before the start put all the tails of the control lines coming from the center consol into the consol it's self so they will not get wrapped in the mainsheet.

**#24** Running trim - When running in light winds with swells and chop try slightly over trimming the main. It keeps the main a little more stable, it doesn't backwind quite so much.

**#25** Spreader angle - You can quickly check to see if your spreaders come back the same amount of each side with the rig up. Set the rig in it's measuring mode (both upper backstays on 5 units with little or no mast puller on). Push each upper shroud forward slightly to see if there is the same amount of pressure on each spreader stop. You might even pull back slightly on the mast with the lower backstays until the spreaders just swing off their stops. Be careful, the mast may twist a little in the step so check to see if the mast is not twisted to one side or the other. If they don't both hit the stops at the same time pull the rig and check the normal way making the shock cord between the tips square with the mast butt plug.

**#26** Running - When running it's very important to keep the helm balanced by trimming your weight athwartships. In moderate winds you can actually steer the boat by letting go of the tiller and just using your weight. As the boat heads up you hike out and if it falls off you lean in. This is a great way to check to see if you are using your weight properly. To keep the boat going straight you need a fair amount of windward heel. You may find that you need to sit further to windward to keep the boat going straight. A good rule of thumb: keep the boom in the air so that in waves, when you see the boom drop, the crew or helm needs to lean out to windward to keep the boat from turning. The next step is to use your weight to bear off to catch a wave, or to head up so you are using less and less rudder.

**#27** Light air run - In very light wind when running try sailing higher and heeled to leeward. The skipper can even sit to leeward "scow style". By heeling the boat to leeward slightly you reduce wetted area, and by sailing higher you create more apparent wind, resulting in better VMG toward the leeward mark.

**#28** Cunningham - Often when you release the cunningham as the wind decreases the tack of the main will not ease up. We switched to a more elastic boltrope a few years ago which helps but sometimes it still needs a little help. What you can do is quickly ease the mainsheet about a foot and instantly trim back in again. The sail will go up the groove and your draft will move back giving you a proper sail shape again. A little McLube on the boltrope and mast groove doesn't hurt as well.

**#29** Jib Sag - If the jib is trimmed ahead of the main at the leeward mark rounding, the headstay will probably have more than the normal amount of sag. This is especially true if you happen to be set up with the backstays somewhat loose. If that is the case, the only way to get the sag out is to momentarily ease the jib and then haul it back in.

**#30** Weed Stick - For sailing in areas with kelp, weed or just a lot of trash it's important to have a good weed stick and clearing technique. This is critical in San Diego but important on Biscayne Bay as well. We generally use a stick about 115 cm (45") long made out of fiberglass but a 1.9 cm (3/4") pine stick will do as well. For the thick kelp found in San Diego we use a fiberglass tube slid into a cover pulled off a large diameter line. You can also wrap it in some type of cloth tape to keep the keel and rudder from getting scratched. In Miami the weed is thinner so the stick can be as well. We use a glass rod covered with cloth tape and when there's a lot of weed even keep one on each side mounted under the bull ring for easy access. When clearing the keel aim the stick forward and let the water pull it back and down the leading edge. Don't try to poke at it. With the rudder you have to poke a bit to get it behind the keel and under the skeg and then again let the water pull it down the rudder. It's generally easier for the helmsman to clear the rudder.

**#31** Loos Gauge - I've known that the new black Loos tension gauges we are using vary slightly but I just learned one reason why from Ian Barker. Often it's because the 2 plastic pieces that the wire fits between get flattened. If you rotate them a bit you will get a different reading on your gauge. It's enough to make a difference; my rig tension shot up about 1.5 units when I moved mine. My suggestion is to rotate them from time to time, and check your gauge against others as well. You are certainly welcome to test yours on any of the Quantum Team's boats when you see us at regattas.

**#32** Bent masts - At both the NA's and Kiel Week I chartered boats, and both masts were bent at the deck from the ram being left on at the leeward mark. It's possible to straighten masts bent like that, but a bit risky as the mast can break in the process. What I did was adjust the mast step position to account for the bend. I was able to measure the bend by putting a batten on the bottom of the mast. The NA's mast was bent about 2.5 cm (1") so I just moved the mast step back that amount. Seemed to work just fine.

**#33** Bent Masts (tip 2)- You can straighten a bent mast. It's easily to straighten a bent tip and with some effort a bend in the lower section as well. In the 2000 trials we bent our mast in both the fore and aft direction and sideways when we stuck the pole in on a run. We slid the mast under a motor home and put a 3' piece of wood between the mast and the motor home frame at the point of max bend. With the spreaders on so one guy could hold the mast from rotating I lifted the mast at around the jib intersection slowly bending it back a little at a time. We were able to completely straighten it and went on to use this mast to win the US trials, Worlds and Olympics!