

SAILORS TIPS

SUBJECT: Head Sail Trim

Jim Little and I were talking the other day about how the Club could assist the newer sailors in the club to improve their skills in sailing and thus increase their enjoyment of the Club's activities. Thus because of those inquiries, this new web page is the result. Articles will be coming periodically from various authors on various subjects concerning sailing. I hope this Web page will be enjoyable and helpful to all our Club Members.

Jim ask me to lead off on the first article or tip and since we are at the mid point of our Fall Racing Season I thought I would talk a little about Head Sail trim.

The Head Sail is probably the most important sail in driving the boat, so the correct trim is critical. I will only talk about close haul sailing since that is the most important point of sailing in our race course most of the time. Other points of sailing are important also, but you have to start somewhere.

First the general rule is to tighten the headsail halyard to where there are no wrinkles in the luff area. Also remember that increasing the luff tension flattens the forward part of the sail. Luff tension controls the forward and aft position of the draft. The forward third of the sail is the most important portion. Draft should be about 10-15% and maximum draft about 33- 40% back from the head stay.

If you do not have tell-tales, please add them about 9-10 inches back from the luff wire with one at 1/4 way up, 1/2 way up, and 3/4 way up. Three sets are generally needed. The second and third sets are generally about a foot or so aft of the first set.

Next is to set the inside tell-tales so that they fly in unison. That is when you are close hauled; (head sail pulled in to where it starts to back wind the main or where you start to lose forward drive) the bottom, middle and top tell-tales lie horizontally or parallel to the water. As you gradually HEAD into the wind, the forward tell-tale will start to rotate from the 3:00 O'clock position (if you are on a port tack) to say the 2 then 1 and 12 O'clock position. The 12 O'clock position is normally the furthest one can sail into the wind with out loosing forward speed. This obviously varies with different boats.

To adjust the inside tell-tales so that they fly in unison while close hauled, move the sheet block forward to tighten the leach at the top of your sail and increase the draft at the bottom of the sail. Example: Suppose the bottom tell-tale is flying horizontally straight back and the top one is flying straight up or at the 12 O'clock position. This means that the top portion of the luff area is forward of the apparent wind and the inside of the sail is starting to luff and lose forward drive. Too correct, move the sheet block forward and retighten the sheet. Continue to adjust the sheet block till all inside tail-tales fly in unison

as you head up and down into the wind at the position you normally set the headsail for close haul sailing. Moving the sheet block aft tightens the foot and loosens the leach or top portion of the sail. Do this procedure for both port and starboard tacks.

One then to remember is that the **OUT SIDE** of the sail is the most important side. It pulls the boat forward by negative forces created by the curvature of the sail. This is the "VENTURI" effect. Thus the tell-tales on the out side of the sail **MUST ALWAYS** be flying horizontally straight back (aft). If they are moving otherwise, your sail is stalling and you need to point slightly more in to the wind. Importunely, being in the groove or having the apparent wind parallel to the leading portion of the headsail means that you have only 2-3 degrees of play. That is why driving the boat is so tiring, it requires **CONSTANT ATTENTION**.

Final note, three things always have to be in harmony with one another: direction of the boat, direction of the apparent wind, and the set of the sails. If one changes, one or both of the other has to change.

Happy Sailing

John & Billie