



## FLYING SCOT TUNING GUIDE

### MAINSAIL

**Mast Rake** — The mast rake should be somewhere in the range of 28' 5" - 28' 6". There are 2 ways to check if the mast is positioned at the correct angle:

#1 connect the main halyard with a long tape measure and raise the halyard until it is snug at the top of the mast. Measure the length from the top of the mast to the back of the center of the deck and it should be in the range of 28' 5" - 28' 6". \*

#2 Take the jib halyard and lower the shackle so that it is barely touching the deck right in front of the mast. Swing the jib halyard forward to the forestay and mark the fore stay right at the bottom of the shackle. Measure the distance from the fore stay mark to the hole on the bow plate. The distance should be 16" ¼" to correspond with a rake of 28' 5" - 28' 6". \*

**Main Halyard** — It is better to err on the side of too loose than too tight. Raise the main until the luff is smooth and then ease it back until small wrinkles appear at the luff.

**Outhaul** — It is better to err on the side of too tight than too loose. Tighten to create a very hard crease in heavy air, a tight crease in medium conditions and a loose crease in light air and in choppy water.

Note: Opinions vary, but I do not believe you need to ease the outhaul when sailing downwind. My reasoning is more outhaul equals more projected sail area.

**Cunningham** — Cunningham usage is not recommended in light to medium conditions. However, it becomes important when you are overpowered in heavier air. With your main all the way up, tighten the cunningham hard. This adjustment pulls the draft forward which de-powers the sail.

Note: A trick I learned from David Ames, is on days when we know there will be very heavy, sustained wind conditions and we are lacking sufficient crew weight to handle it — we put the cunningham to a new use by essentially turning it into the new tack of the sail. The critical difference here is that it must be done **before** raising the main (eg. preferably before you've even left the dock). Simply connect the cunningham hook and pull it all the way down securely to the boom. Now raise the main. This new method acts a bit like a reef in reducing the overall sail height and is very effective in de-powering the sail.



## JIB

**Rig Tension** — Check forestay tension regularly to ensure it is holding at your desired setting.

**Loose:** With this system, no measurements are required because there is no measurable tension on the shrouds. Loose rigs vary in the amount of “slop” and can range from as little as 1” to as much as 6”. (“slop” is simply a term denoting how far the mast is able to rock fore and aft — as measured at the top of the mast). It should be noted that loose rigs can be hard on the base of the mast, as it grinds back and forth and eventually will begin to mushroom out.

**Snug:** Set the forestay tension at 90 lbs for light winds and up to 130 lbs in heavy winds. \*

**Jib Halyard** — Raise the jib until the luff is smooth and taught, then let it back a click or two until you see a hint of a crease at the hanks. You must sail close-hauled to accurately check this. If an adjustment is needed allow for a couple of tacks for it to settle in.

**Fairleads** — Move them aft in heavy air and when you are overpowered. Otherwise they should remain all the way forward.

\* See notes on *“Improving your Flying Scot”* by David Ames