FatSparrowRacing

Baseline Settings

One of the keys to consistent race performance is being able to consistently set up your boat to match wind and water conditions on any given race day. With experience we can do this by eye at the side of the pond, but until that experience develops, we need a process that will get us there reliably. The first step in this process is to have a baseline.

Baseline Measurements

We always start by setting up the boat to a standard set of measurements and make small alterations from there to match conditions and the competition on the water.

An example DF65 setup will look something like this:

	Setting	A Rig
1	Back face of Deck Eye 2 to front face of mast	176
2	Back edge of bow bumper to centre of hole in forestay tang (V5, V6)	740, 744
3	Top of Backstay Hook on transom to mast crane rear hole	950
4	Jib Tack Hook to middle of Jib Silicon Rings A & B (jib boom downhaul)	65
5	Jib Tack Hook to back of Jib sheet Guide Eye	170
6	Lower Gooseneck bolt to front of Mainsheet Guide Eye	80
7	At aft end of jib boom, centreline to centre of boom when close hauled	40
8	Main close-hauled from centreline at end of boom	10
9	Jib outhaul adjustment (measured at centre of jib foot)	20
10	Main outhaul adjustment (measured at centre of main foot)	20
11	Jib leech twist (measured as mid leach point to jib boom topping lift)	50
12	Main leech twist (measured as outer end of batten 2 to backstay with main close hauled)	70

Let's look at each setting in turn:

1. The sliding gate where the mast goes through the deck controls the amount of bend in the lower section of the mast. Moving the gate forward induces more bend, aft allows the mast to straighten. Mast bend controls mainsail shape – more bend, flatter sail.
2. Sets the mast rake. More rake moves the driving force from the sails aft (tendency for the boat to round up); less moves it forward (tendency for the boat to bear away).
3. This measurement sets the forestay tension and

induces bend in the top section of the mast. The effect is to flatten the top of the mainsail and soften the leach (more mainsail twist), which de-powers the sail.

4. Sets the correct fore-aft position of the jib.
5. This measurement sets up the correct jib sheet geometry to allow the jib to swing out to 85º when the sheets are trimmed right out.
6. This measurement sets up the correct main sheet geometry to allow the main to swing out to 80º when the sheets are trimmed right out.
7. Sets the sheeting angle for the jib when close hauled.
8. Sets the sheeting angle for the mainsail when close hauled.
9. Adjusts the depth or draft of the jib.
10. Adjusts the depth or draft of the mainsail.
11. Sets the amount of twist in the jib. Make the adjustment with the jib boom topping lift. When looking at the sails from behind, you should see same amount of twist in the jib leach as is in the main.
12. Sets the amount of twist in the mainsail. Make the adjustment with the vang control at the front of the main boom. When viewed from behind, the middle batten should be parallel to the centreline.

There are sample DF65 and DF95 baselines on the website.

© 2020 FatSparrowRacing