

Faking it for Lightweights

Graham Bailey · BDA Magazine 2006 Annual, p. 18

Summary. Graham Bailey offers five rig changes that help a light crew make up a 45 kg weight deficit by making the rig more forgiving. Rake the spreaders aft by 10 or 20 mm at the tip, move cap and lower shrouds to the forward deck holes, fix the jumpers at about 4 or 5 on the Loos gauge, and ease the mast ram once maximum runner is on and you are still over-powered. For a race that will be very windy all day, set the forestay one hole higher for more rake – but test it first, as you may run out of runner adjustment.

or How to make up a 45 kilo deficit by building some automatic gears into the rig set-up – some tips from Graham Bailey

Excellent tuning guides are readily available from the main boat and sail manufacturers – use these as your set-up bible and if you are confident of your speed, then read no further. Sailing light? Don't have the edge against the max weight crews? Consider the following suggestions, which make the rig more forgiving.



GBR 660 Aimee testing raked spreaders, forward shrouds and slack jumpers prior to Cowes Week 2005

1. Rake the spreaders

The spreaders are connected by a bar that runs through the mast. In the standard set-up this bar is straight, which makes for a fairly neutral setting in terms of the fore/aft deflection. You can alter the spreader setting by bending the bar, but leave this to a pro unless you have metalwork O-levels and a full shed of tools.

Raking the spreaders aft by 10 or 20 mm (measured at the tip) puts a bit more life into the mid-mast, which otherwise can be too stiff for us lightweights. This change allows the mid-mast to bend more readily, making it easier to de-power as the wind increases. It also helps to encourage a slightly more automatic wave and gust response because the tube is not held so rigidly in column.

2. Move the shroud position forward at deck level

The shrouds may be taken to the forward adjustment holes through the deck so that, when sighting through the shrouds from athwartships, the entry point of both cap shrouds is just about in line with the forward face of the mast at deck-level. This has a similar effect on the mid-mast as moving the spreaders aft, but to a lesser degree. Move the lower shrouds forward also – as close behind the caps as your equipment will allow.

In the breeze as you tighten the runner, you also put more tension in the caps since you now are pulling against them, which is like having automatically self-adjusting cap shrouds.

In the light, you can ease the runner and the mast wants to go forward slightly more. This reduces tension in the cap. You also get more headstay sag – good for power and pointing – (yes, sag the headstay to point higher).

In effect, you get a wider power-band with the ability to lose and gain power more easily adjusting only the runner tension.

3. Slacken your jumpers

Some people like to adjust their jumpers and have the facility to do so from the cockpit. There may be a small benefit to this if you get it absolutely right and you don't mind spending your time thinking about it and looking up.

If you have a very small brain like mine, the less things you have to think about the better, so try fixing the jumpers at about 4 or 5 on the Loos tension gauge and forgetting about them. This tends to put a bit more life in the top mast and is probably the best all round fast-forward gear, particularly in unstable conditions.

4. Let the mast go forward at deck level as the wind increases

The new boats are now leading their mast ram controls aft so that it can be controlled while hiking. It's simple – if you have maximum runner on and you are still over-powered, ease the ram a bit.

5. Put more rake in the mast

If you are expecting a very windy race, set the forestay to one hole higher than your usual setting. Lightweights really can fake that extra 45 kgs with this adjustment.

Be careful though and only do this when it is going to be very windy all day because the power disappears easily if the wind should drop again, so you will be sitting in while the fatties are still hiking hard.

Don't go straight into a race without having tried this first as you may find you run out of adjustment on your runners. Remember also that you cannot alter the forestay length while racing.

Summary

GB is not generally a believer in minute dimensional changes but the above suggestions all promote a more forgiving rig tune which will particularly appeal to the lighter crews.

Lastly, you will note that there is no suggestion that you should sit out further – but if you can, you should, if only on the front of the gust to help keep the tiller from loading up.

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