

Light Air Upwind Gears

Trying to go fast in light air (4 - 9 knots) requires a shift in priorities from sailing in breeze. In breeze where we want to have flatter sails the opposite is true in light air. Because we are looking for power, fuller draft aft sails (slightly used older sails too) are better. Also, instead of driving fast forward, we need to change our focus in light air and flat water, and think that the boat is only going to go so fast, so we want to go for max point without any loss of speed, or flow over the keel.

Light air rig tuning

To help power up the rig, there are few light air specific changes that can be made:

- First, longer intermediates are better for light air. By easing the intermediates to 3" you are powering up the top of the mainsail. We had our intermediates at 2 31/32" for the North Americans,
- Increasing your spreader sweep to 5 ½ or 6 inches helps the mast bend more, which in turn opens the leech of the mainsail when your lower backstay is eased off all the way. The disadvantage of having the spreaders open is that it is more difficult to set your lowers just right when the breeze comes up (some believe that by using more lower runner, you are also increasing your forestay tension),
- Easing the lower ½ turn will give some sag to your mast and provide even more power and point, but make certain to put the ½ turn back on if the waves come back up or you may lose some pointing ability.

Changes to the sail/crew setup

- When the crew is in the boat, it is normally fast to ease the outhaul 1 ½ inches,
- If the crew is not sitting on the rail, the crew should stay far forward in the boat so that their belt buckle is at the vang track, and their head is near the shrouds (windward or leeward depending on the boat heel and wind velocity). By keeping the weight forward, you help bury the bow in the water which helps the boat point higher. Once the crew is sitting on the rail, move them back to their normal position near backstay to help the boat go faster forward,
- Raise the jib halyard 1 or more inches higher than your heavy air setting so that only one inch of the foot curl is touching the deck. You will also need to move your jib lead aft one hole when you make this change. The result is that the jib will project as much area as possible,

- I like to add a telltale to the leech of the jib that I can see through the spreader window. And another telltale to the top and upper middle batten on the main.

For the following conditions, my general set up is:

6-8 knots:

- Crew forward,
- Lower backstay all the way off,
- Upper backstay set just snug so the rig doesn't bounce, and the jib looks good (not too flat),
- Jib cloth eased so some wrinkles in luff of jib to get the draft aft,
- Main cunningham off,
- Outhaul eased 1.5 inches from the black band.

6-8 knots with flat water:

- If you have too much helm, you may need to point higher, sail flatter, move the crew further to windward , or a combination of the above.
- Lead set so middle jib batten set parallel to centerline of boat to begin with. if the water is bumpy, keep it there. If the water is extremely flat, try sheeting ½ inch inside the spreader.
- Keep the boat rumbling upwind. If you sail into a lull, ease the mainsheet to reaccelerate and put heel back into the boat to keep it moving – especially in waves. If the water is flat, you can keep the chine by the backstay just barely skimming the water, but no flatter than that.
- Try stalling the top batten telltale, but keeping the upper middle batten telltale flowing. This will get you some extra height.

6-8 knots and waves:

- Weather chine near backstay may be as far as 3" out of the water,
- Top of main sheeted so that in chop the last foot of top batten is parallel to the boom.
- Sheet the jib leech on the spreader mark.

- No pinching. Rumble, rumble, rumble.

8 knots, when you are thinking of getting the crew over the side, I like to:

- sheet 2-4 inches tighter on the mainsail,
- put the leech of the jib on the spreader mark, or slightly outside,
- power up the mainsail by pulling the 2-2.5 inches of line out of the lower backstay from my “slack” position (where I pull the lower on from no tension to where it just barely has tension) ,
- Skipper sits as close to centerline as possible to keep crew out of water
- When the crew begins to complain that they are getting too wet – tell them that you are going really fast and that they should stay there, crews always think they are getting too wet – and try to sail flatter still without dragging your crew.

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