

White Mischief

Tuning Notes

July 2001

1. Mast Rake.

The forestay and mast heel positions are fixed by Class Rules, so no adjustment is permissible.

The forestay fixing point on the forward face of the mast is also tightly controlled and from measurements taken, the differences between various yachts is minimal and there appears to be no speed advantage by being close to one tolerance or the other.

Forestay length can therefore easily be measured as follows:

- Jam the jib halyard and take it to the bottom of the mast extrusion, where it meets the casting, and mark the halyard.
- Swing the halyard out to meet the luff foil, making sure the halyard is still jammed, and mark the forestay where the mark on the halyard meets the luff foil.

Note

Use the same tension on the jib halyard for both measurements.

- Measure the distance between this mark on the luff foil and the centre of the pin and the bottom of the forestay.
 - White Mischief 43 inches
 - Pepsi 43 inches
 - Lucent 41 inches.

Note.

My belief is that a heavier crew can take greater mast rake than a lighter crew. We therefore are set up with the longer forestay measurement, than Lucent who are a lighter crew.

In very heavy conditions we might be tempted to remove an inch or two of rake to help reduce weather helm by tightening the forestay bottle screw.

2. Rig Tension

Yacht	Uppers	Lowers
White Mischief	43-	42+
Pepsi	43+	43
Lucent	43-	42+

These are good general setting for conditions ranging from 8 to 24 knots.

In lighter conditions – below 10 knots true wind speed - we would take 1 or 2 turns off the uppers to remove pre-bend and get more drive off the leech of the mainsail. The turnbuckles on the backstay should also be slackened to tighten the leech of the mainsail – backstay would then be quite sloppy and slack in it's off position.

In heavier conditions – above 25 knots true wind speed - we would tighten the uppers by a further 1 or 2 turns to induce more pre-bend, to flatten the mainsail and produce a tighter forestay. The backstay turnbuckles would be tightened significantly so that as soon as backstay lever is applied it has an immediate effect in opening the leech of the mainsail.

3. Other Tip's

- Always look for target boats speed – not point
- Adjust your target boat speed to suit changing conditions – get your tactition to remind you of the target speeds for various conditions and work to these.

Note.

Best point comes from optimum boat speed for current wind speed, with 3 – 5 degrees of weather helm and the boat reasonably upright.

- Don't allow excessive heel. The lee rail should never be under water – try and keep it at least 6 inches clear of the water at all times – otherwise you go sideways.
- Use the main sail traveller to assist in reducing weather helm – down the traveller reduces weather helm, up the traveller induces weather helm. Talk to your mainsail trimmer and tell him/her how the helm feels i.e., do you have excessive weather or lee helm etc.
- Use the backstay to de-power the main and reduce weather helm. Remember if the wind fall light or you want to power through waves you may have to let it go again to give more power into the mainsail.
- If speed is low, bear-off 3 – 5 degrees, lower the mainsail traveller a few inches along the track, until you get back to your target speed, then bring the traveller back to it's normal position.
- If the target speed is to high, luff slowly and bring the mainsail up the traveller – try to maintain target boat speed + or – 0.2 of a knot.
- Adjust the mainsail sheet tension so that in winds 8 to 15 knots, the top telltale stalls 50% of the time and the other three tell tales flow evenly 100% of the time.

Note.

The mainsheet trimmer is as important as the helmsman going to windward. Both must work together to get maximum speed and point. A good mainsail trimmer will react at the same time as the helm and help reduce heel and rudder movement.

- The mainsail outhaul always out fully in 10 knots and above.
- Check your vang tension. Adjust it so the luff of the mainsail lifts evenly. A crude but general rule is that if the luff of the mainsail lifts high up then you need more vang. If the luff lifts low down then you may have to much on.
- Adjust jib car positions –
 - i. Below 8 knots or in a “slop” move forward fractionally
 - ii. Once the yacht is overpowered in any sail combination, move the jib cars back to reduce heel. Don't be afraid to move the jib cars back 6 – 8 inches if this helps reduce heel

- iii. Standard setting for 8 to 15 knots is to have the genoa equidistant from the shroud connection points and the spreader tips.

We also learnt.

- Don't carry too much sail
- De-power quickly once you become over-powered.
- It is better to go to full main and number 2 or
- Full main and number 3
- Pepsi was the quickest boat in all conditions. They constantly changed gear as conditions changed. To do this successfully, is down to a regular crew work and time on the water.