# Setting up your OK & upwind tuning

More important than how you set up your boat up by a long way is how you sail the boat. Sailing it flat, smooth rudder movement, good starting skills, going the right way up the beat etc will make much more difference than anything written here. But here are some guidelines on setting your boat up.

You should bear in mind that every OK is different – centerboard bolt position, distribution of weight within the boat, mast type etc will all impact optimum settings. However, this will give you a guide to start from in your boat.

Wind strength is defined by what you are doing upwind so then the guide is applicable to all weights e.g. talking about what do in a force 3 would make little sense because it maybe light winds to a 110kg helm but heavy winds to a 70kg helm

## On-shore set-up

I am working with a mast foot position of about 3m27 (measured from the transom to the back of the mast) and was on 3m25 with the metal mast. On my old boat, 3m23 worked well so there are no hard & fast rules here. Generally further back gives more height and is suited to lighter airs & flat water.

Because each boat differs it is more important to know what you are looking for when setting this up - you want slight weather helm when sailing flat upwind so that you foils are giving you lift but not too much helm or you are having to drag the rudder through the water! Lots of weather helm => put you mast forward, neutral helm => put it back.

I am still playing with my mast rake but something in the range 6m03-6m10 is about right. Generally further back when windy & forward when light. Again this well depend on your rig set-up & leech length so there are no hard & fast rules. Best bet is to go with what feels right & is fast for your boat!

## **Upwind**

Light winds i.e. no need to hike upwind (with the boat FLAT!)

You are looking for power but without making your sails too full because the wind is light so will not have the energy to get round big curves. You do not want any major creases in your sail because the wind will not have the energy to get over them.

Generally the inhaul should be neutral (i.e. set to where the sailmaker has cut it too – where the tack falls with the main up and no outhaul or inhaul tension) or slightly eased to create a flatish sail at the luff so the wind can get round it.

As the wind drops, the wind has less energy so will stall more easily so you will need a flatter sail i.e. more outhaul.

Mainsheet tension – you want as much as you can get away with to flatten off the sail but be careful not to stall the leech by oversheeting. Look at the top of the leech – it should not be hooking back towards you.

## Medium winds (hiking but not overpowered)

You are still looking for power so settings are broadly similar to light winds but the wind has more energy so can get round a deeper, more curved sail i.e. fuller foot (less outhaul) and tighter leech (more mainsheet).

Inhaul neutral or forward for choppy water to develop a fuller luff entry to help you over the waves.

## <u>Heavy winds</u> (hiking & overpowered)

You are looking to depower so the boat is flat when you are fully hiked in the lulls. In flat water it pays to depower a bit less and pinch so you gain height. As the waves get bigger this pays less because you will not be able to get over the waves sailing higher.

As it gets windier rake your mast back so your boom is hitting the deck when you are fully sheeted in – but how much is this?... Your leech should be opening in the gusts – if it not then ease your main /rake back. If the leech is always very open then sheet main in more/rake forward.

By having the boom on deck you will be depowered as much as possible. There is no set measurement because it will vary depending on the stiffness of your mast & leech length.

You want your sail power low down because the heeling moment this creates is less than high up the sail. Hence you want lots of cunningham to open up the top of the sail and ease outhaul if you can accommodate some power.

Once set up, adjust your traveller so you can sail flat – ease off more as gets windier.

## Survival weather (lots of boats upside-down!)

You are looking to depower as much as possible

Same as heavy winds but pull harder! e.g. pulling on cunny before the start I put both my feet against the front of the cockpit to push against (sorry Rover!)

Traveller right to leeward.

No more mainsheet though or you will power up, you want the leech to open up in the gusts.

Outhaul bar tight.

Inhual on for choppy water, further back with flatter water

Have fun!

#### HAPPY OK SAILING!