

## helpful Basic Sail Trim Adjustments.

### Light airs - approx 0 - 5 knots. (under powered)

In light air the biggest problem is to get the sails flat enough so that what little air there is can attach to the sail and flow across it without stalling - that is "falling off" the middle of the sail before it gets to the back edge of the leech of the sail. When the sail is stalled the leech ribbon telltale does not flow and the telltales in the centre to back of the sail drop down to below 45 degrees to the horizontal and look dead - they are not flowing parallel and horizontal to each other. To get the sail to work it needs to be set as flat as possible with lots of twist in the leech. To achieve this :

- 1- pull the outhaul on so the foot at the centre of the sail touches the boom.
- 2- move the tack of the main up to 70 mm aft of the mast
- 3- use no vang or downhaul (luff tension)
- 4- set the jib low on the forestay
- 5- sail with both sheets eased to let the sails twist open in the leech
- 6- sail boat heeled to leeward to help sails set
- 7- concentrate on keeping the boat moving and don't point too high, speed through the water will give you height by at least giving your centreboard some flow of water over it and thus letting it generate lift.

### Medium airs - approx 7 - 15 knots. (powered up)

In medium airs it is important to get the boat to go as high to the wind as possible and still keep the boat moving through the water. To achieve this we need to set the sails as deep as possible without the sails stalling, so we can still hold the boat upright (sail the boat flat) whilst we lean out as far as we can to do this. We need to set the sails as deep as possible so that they are on the point of stalling. That is the leech ribbon is flowing approx. 50% of the time and the windward telltales on the sails are drooping down to 45 degrees from the horizontal whilst the leeward telltales are flowing horizontal to drooping a touch.

To achieve this :

- 1- ease the main outhaul
- 2- hold the main tack forward close to the mast
- 3- pull the sheets in firmly to remove twist from the leech of the sails
- 4- use some vang, just so it takes the pressure if you ease the main sheet
- 5- raise the jib up the forestay a little (move the jib track forward)
- 6- sail the boat flat and lean out as far as you can to achieve this
- 7- point as high as you can whilst still keeping the boat moving. This may require you to sail the boat high for short periods until you start to lose speed and then ease the sheets slightly and bear a way a touch and build up speed and then sheet on again to point high again and so keeping the boat moving in this fashion.

### Heavy airs - 15 plus knots of breeze (over powered)

When your boat is overpowered you are leaning out as far as you can and the boat still wants to tip over. In these instances it is important to keep the boat flat and keep it moving through the water fast so that it does not stop every time you hit a wave. To get the boat to do this we need to flatten the sails off progressively as we become more overpowered as the breeze increases. We need to set the sails so the leech ribbon always flows, the leeward telltales always flow and the windward telltales are flowing horizontal to up to vertical depending on how over powered you are. The front of the jib and the main may well be luffing somewhat as well.

To achieve this :

- 1- pull the outhaul on progressively to flatten the foot of the main
- 2- tension the luff of both the main and the jib on progressively harder
- 3- tighten the vang on progressively harder to bend the mast (gaff) to flatten the main
- 4- lower the jib on the forestay (move the jib car aft) progressively
- 5- lift the centreboard up slightly
- 6- ease the jib sheet slightly in heavy winds
- 7- ease the mainsheet on and off as the wind comes and goes and don't be afraid to let the front of the main luff regularly
- 8- sail the boat flat and in the heavy gusts don't be afraid to point the boat up into the wind slightly to luff some of the wind out of the sails so you can keep the boat flat.