

# Tuning for going Upwind

## Upwind Sail Settings Light Winds

The sail should be smooth and flattish with no sharp curves. There should be a straight flow at the leech, with maximum fullness 40%-50% back from the mast.

**Downhaul** - Just enough tension to remove creases from the luff, any more will pull the maximum fullness too far forward.

**Outhaul** - Maximum foot depth should be 8-10cm [a hand width] from the boom.

**Kicker** - Pull on until the top leech tell-tale just stalls when sailing, with the other two flying.

**Sheet** - The boom should be about an arm's length outside the cockpit.

## Upwind Sail Settings Medium Winds

The sail should be as full as possible, curving from luff to leech with maximum fullness 40% from the mast.

**Downhaul** - Little or no tension. Only used to make the bottom of the luff straight if it starts to sag. Pull on more tension if the wind rises and starts to blow maximum fullness further back in the sail [when this happens, the helm will feel heavy and sluggish]

**Outhaul** - Maximum foot depth should be 14-16cm [a hand's length] from the boom.

**Kicker** - 2/3rds on for maximum leech tension, more if you are not pointing as high as other boats. The top batten end should be roughly parallel with the boom.

**Sheet** - The boom should be about 2/3rds of an arm's length from the cockpit, with the end over the corner of the transom.

## Upwind Sail Settings Stronger Winds

The sail should be progressively flattened with maximum depth kept 35-40% from the mast. It should twist off at the top, to spill wind in the gusts.

**Downhaul** - Progressively harder on, until almost on the boom. Pull with both hands if it's really windy, until the helm feels balanced.

**Outhaul** - Start with 14-16cm foot depth to keep maximum drive low down. If overpowered, gradually reduce depth to 8-10cm.

**Kicker** - Full on, to bend the mast but ease to release leech tension and spill wind in gusty weather.

**Sheet** - Should be progressively eased as the wind rises, to reduce leeway and keep the boat moving. The boom can be over an arm's length out, as it is more important to keep the boat moving than to point high, especially in waves.