

# GP14 Sail Setting

## The Foresail

When the wind is flowing over the sail properly the windward windtufts will angle upwards and the leeward windtufts will be horizontal.

In order to point as high as possible the sail must work as a complete unit throughout its length. So, make sure that all three windward windtufts collapse at the same time when you luff up. If the top windtuft collapses first, the leech is too slack and so, the fairlead must be moved slightly forward and/or the sheet tensioned. If the bottom windtuft goes first, then slacken the leech by easing the fairlead aft, and/or easing the sheet

Keep down to a minimum the amount of jib luff sag (which gives unwanted fullness at the front) by adjusting rig tension so that the leeward shroud does not go slack.

If there is an eye at the tack, the luff of the sail can be tensioned to suit the weather conditions. This usually means tightening the luff in a breeze or when the sail gets older. If horizontal creases appear along the luff then tension it slightly until they disappear but do not over tension as this drags the flow forward and ruins pointing.

## The Mainsail

The sail is designed to give optimum performance when the last 6" of the top batten and the last 2'0" of the boom are parallel. Use kicking strap and mainsheet to achieve this, i.e. if the top batten is more open than the boom, tension both, while if it is tighter, ease them both.

Set the luff tension of the sail so that when running in light winds the sail is smooth without ridging. If a vertical ridge occurs ease the luff tension until it disappears. If this is hard to remove then check that the mast is not bending backwards in the middle and forward at the top. This will prove disastrous on the run. Angle the spreaders aft and/or let the mast move forward at the mast gate until it is straight or bent forward slightly in the middle (pre-bend).

As the kicker is used to bring the top batten into line with the boom, the mast will start to bend forward causing horizontal ripples in the luff. Tension the cunningham just enough to remove these. Under no circumstances use more tension than this as this will cause a vertical ridge.

The fullness along the foot can be varied considerably according to wind strength and point of sailing. As a general rule, set the foot so that the sail is quite full and the sail is backwinding. Then, and this is especially true when beating, flatten progressively until the backwinding is reduced to a minimum. Do not over tension as this will flatten the sail too much and power will be lost. You will find that in both light and windy weather the foot will need to be tight, while in middle conditions it can be eased, say 1" - 2".

## The Spinnaker

The aim of the design is to give a good reaching performance, but which will also give good speed on a run. If the pole height is correct the leading edge of the sail should fold in when under-sheeted at about half height.

Remember also to keep the leeward sheet eased as much as possible to keep the slot open. Under-sheeted rather than over-sheeted is the important rule.

Finally, I recommend that before you race new sails, you spend some time afloat getting used to how the various controls affect them.

Our environment varies all the time. On most days the wind constantly changes in both velocity and direction. Those sailors who can adjust their sails quickly to suit these changes are the ones likely to be in the lead. So:

## When the Wind is Increasing.

The effect this has on the sails is to open out the leeches, helping air escape and encouraging extra speed.

However, if the leech twists away too much then the front of the sail backwinds at the head, the sail becomes unstable and may even flog, wrecking both speed and pointing.

The solution is to load the kicking strap until the whole leading edge of the mainsail collapses at the same time. The jib sheet should also be tensioned enough to stop the top windtuft collapsing before the bottom one. At the same time, moving the fairlead aft one or two holes will open the slot allowing more air to get through the gap. Don't forget to ease the mainsheet too!

## When the Wind is Dropping.

This tightens the leeches; closes the slot and at its most extreme the main is so loaded that the sail becomes board flat and all speed is gone

The solution is to ease the kicker and ease the jib sheet after moving the fairleads forwards slightly. But only do it enough just to get the whole leading edge to collapse at the same time.

**Remember the Golden Rule** - the later you leave it the further behind you will be. So, don't delay. Adjust the sails and adjust them **NOW**.

Good sailing.

Mike McNamara

## Sail and Rig Settings Guide

Conditions	Light Winds Flat Water	Light Winds Chop	Medium Winds Flat Water	Medium Winds Chop	Breezy Winds Flat Water	Breezy Winds Choppy, Rough
	Crew Sitting In		Crew on the Rail		Spilling Wind Over Powered	
<b>Rig Tension</b>	Medium	Medium Slack	Medium Tight	Medium	Very, Very Tight	Very Tight
<b>Jib Sheet Tension</b>	Fairlead forward, sheet eased	Fairlead well forward, sheet medium eased	Fairlead middle, sheet medium	Fairlead middle, sheet medium	Fairlead aft, sheet medium	Fairlead middle, sheet middle
<b>Mainsheet Tension, i.e. boom end position</b>	Boom eased, leech eased	Boom eased, leech eased	Boom inboard, leech medium	Boom slightly eased, leech medium tight	Boom out, leech very tight	Boom out, leech tighter
<b>Cunningham</b>	Nil	Nil	Nil to minute	Nil to minute	Medium	Medium
<b>Kicker</b>	Very light tension	Light tension	Light to medium tension	Medium tension	Tight to very tight	Very tight
<b>Main Foot Tension</b>	Very tight	Slightly eased	Slightly eased	Well eased	Tight	Tight
<b>Mast bend</b>	No chocks, mast bent	Slightly chocked, mast straight	Very chocked, mast straight	Very chocked, mast straight	Chocked, mast bent	Medium chocked, mast bent
<b>Sailing trim</b>	Minute heel, weight forward	Minute heel, weight forward	Upright, weight central	Very upright, weight central	Upright, weight central	Upright, weight aft