

# Albacore Guides

A gathering of some of the Albacore tuning guide information available online with an average or favoured starting point in bold from which to experiment. Also includes information from Michael McNamara's and Barney Harris's presentations. Dimensions in millimetres. Where three figures are given, these are for light - medium - strong winds.

## **MAST POSITION: 3330**

Fore side of mast heel to aft face of transom. Class Rules allow 3250 to 3350, and 3225 to 3330 at deck level.

McNamara: 3289 - 3302 - 3327.

Speed Sails: 3330.

Hyde: As far forward as practical and in the rules.

Seldén: 3260mm to *back* of mast.

North: 3335

P Duncan (Elvstrom-Sobstad): Max forward.

## **MAST RAKE: 7000**

Black band at top of mast to floor at transom. More rake (smaller number) depowers the boat.

McNamara: 7010 - 6960 – 6883. Should result in the end of the boom being 100 – 150 up in light winds, more or less parallel to the waterline in medium winds, and dropping down in heavy winds, before any kicker is applied.

If the boat is heeling and not wanting to go forward then increase the rake.

Speed Sails: 7163 - 7086 - 7010, mast tip to gunwale level at centre of transom. First adjust halyard/tape to read 5640mm at the top of the gooseneck black band, cleat and swing to transom.

P&B: 7086 - 6885 - 6935.

Hyde: 7020 - 6975 - 6885.

Seldén: 7195 to 6935.

P Duncan (Elvstrom-Sobstad): 6782 - 6731 - 6591, mast tip to gunwale level at centre of transom.

## **SPREADER LENGTH: 420**

Shorter allows the mast to deflect and spill more in gusts.

McNamara: 432 for M7, Proctor D & Proctor D sleeved masts, 381 for M2 & Proctor Stratos masts.

Speed Sails: 420 for M7 masts, 425 for Proctor D sleeved masts, -10 for lighter crews.

P&B: 420, 410 if combined crew under 160kg.

Hyde: 470 for M7, 380 for M2.

Seldén: 400 for Cumulus.

North: 430.

P Duncan (Elvstrom-Sobstad): 432 - 387 - 406.

## **Mast Section Dimensions, to aid identification**

Superspar M2 = 72 x 57, recommended for crews over 165kg.

Superspar M7 = 69 x 57, recommended for crews under 165kg.

Seldén Alto = 70.5 x 59.5, recommended for heavier crews.

Seldén Cumulus = 70.5 x 58.7, recommended for lighter crews.

Proctor D = 73 x 57, sleeve this for heavier crews.

Masts may be stiffened by sleeving.

## **SPREADER DEFLECTION: 140**

More deflection will cause more mast bend as shrouds tighten. See also Strut information below.

McNamara: 165 - 127 - 140, M7 & Proctor D masts. 178 - 165 - 178, M2, Proctor D sleeved & Proctor Stratos masts. Reducing deflection stiffens the mast.

Speed Sails: 140 for M7 & Proctor D sleeved masts.

P&B: 140 for M7 & Alto masts

Hyde: 165 - 127 - 140, M7 & Proctor D masts. 165 - 127 - 165, M2 masts.

Seldén: 140 for Cumulus.

North: 190.

P Duncan (Elvstrom-Sobstad): 165 - 152 - 165.

## **MAST STRUT or MAST PULLER & MAST RAM: Neutral**

With rig tension on, pulling the mast forward at the partners will increase mast bend and this will flatten and depower the sail.

McNamara: Use strut to add 10mm prebend in light airs so that airflow stays attached.

Speed Sails: Spreader settings above should produce 10-25mm mast prebend when rig is tensioned. In drifting conditions, pull strut forward 25mm. Medium wind, pull strut back 12mm. As wind increases, release to neutral first and then forward 20mm to flatten sail.

P&B: Drifting, ease to allow mast to bend removing mainsail fullness. Then reduce bend as winds increase to straight mast.

Seldén: 40mm light wind.

North: If the mast is not pre-bent enough, the luff of the main is too full and the leech ticklers are difficult to fly all at the same times as the ticklers 1/3 back from the luff. When this is correct, all ticklers can be flown.

George Carter: Upwind, as you sheet in the main, if the top leech telltale dies first then the sail is stalling before it has been sheeted to the optimum angle to the wind, in this case I put more prebend on. If the middle outer luff telltale dies first, then I will remove some prebend. I then repeat, the aim being to get the outer telltale and the leech telltale to die at about the same time optimizing both the angle of the top of the mainsail to the wind and its depth. Now sheet the jib so that the lower telltales break at the same time as the main.

Harris: Use a lot of prebend going upwind to open the leech.

## **RIG TENSION: Leeward shroud shimmering**

McNamara: Upwind, if the leeward shroud loses tension and just “shimmers” then rig tension is correct, if it goes loose and floppy then you will get too much jib luff sag and pointing will suffer. Increase tension using the shrouds rather than the jib halyard.

Speed Sails: 240 lbs.

P&B: 240 - 300 - 350 lbs.

Hyde: 250 - 300 lbs.

Seldén: Leeward shroud just slack upwind.

North: Limiting Jib wire sag to about 50mm upwind is important until the wind becomes overpowering. Above this, the sag is less important because the jib halyard is let off to increase mast bend and rake. George Carter, non-adjustable shrouds, not UK: When wing on wing, it is important to get the boom out as close to 90° as possible, and the jib foot snug. With this in mind, the jib halyard is loosened off by at least 6” and the mast rammed all the way to the back of the partners. It is common to let the jib halyard off to give 8”+ of jib wire sag. Above 6-8 knots get the jib out and away from the mainsail. Normally the centerboard is fully in the case and the boat is heeled to windward.

P Duncan (Elvstrom-Sobstad): 50 to 100 mm of luff sag.

'Uncle' Al Schonborn (Wayfarers): If you ease the jib halyard, your jib luff entry becomes more

rounded, and what is called your steering "groove" becomes correspondingly wider (more forgiving of imperfections in angle of your sails to the wind). Thus, an expert helmsman sailing in a very steady wind on flat water can get away with a flatter jib luff entry, i.e. sail with a narrower groove, than a beginner struggling in big waves or very shifty winds. Flatter entry will point higher. Harris: Leeward shroud just slack upwind. To depower in high winds, ease jib halyard to increase rake, ease prebend, and pull on shrouds to compensate. Downwind, fully release the shrouds and strut to allow the mast to go all the way forward at the partners. Further release leeward shroud to allow boom out at right angles.

### **JIB: Line of sheet bisects luff**

McNamara: Our sails are designed to give maximum performance when the leech at three quarter height is 10 degrees "open" away from the centreline; at half height is parallel to the centreline and at quarter height is 10 degrees "closed" towards to the centreline. To achieve this adjust your fairleads so that the line of the jib sheet, when extended through the clew and diagonally across the sail should meet the luff at the half height windtuft or just below. Don't really need to move the fairleads for different wind conditions because changing mast rake will change the jib clew height. Reduce rake and the clew goes up and vice versa.

Upwind, boat going above walking pace, all three windward luff telltales should be angled up at 45 degrees when sheet tension is correct. Leeward telltales will be horizontal. If the top windward telltale stalls/circles then the leech is too slack so sheet in a little. If the bottom windward telltale stalls/circles then the leech is too tight so sheet out a little. Top leech telltale should stream for best slot performance.

Speed Sails: The line of the jib sheet, when extended through the clew and diagonally across the sail should meet the luff mid point. Move fairleads aft when windy, forward one hole when light.

P&B: Move fairleads forward one hole in light winds, two holes aft when windy.

North: The line of the jib sheet, when extended through the clew and diagonally across the sail should meet the luff mid point. The idea is to close the slot enough to generate maximum power whilst not stalling the sails or overly backwinding the main. If the boat just isn't moving very well you may have the lead too far forward, if the main looks good but you are not pointing well the lead may be too far aft.

It is a good idea to raise the jib in light air to get extra sail area, and lower it in heavy air to keep the foot touching the deck when the jib car is moved aft.

Seldén: Jib Fairlead position 510mm from centreline.

P Duncan (Elvstrom-Sobstad): 2489 - 2438 - 2362, transom to fairlead. Low aspect jibs have a longer foot and will need the fairleads about 250mm further aft.

Harris: Jibs leads back a little in extremely high winds and all the way back in extraordinarily high winds.

### **JIB POLE**

McNamara: Don't use in very light winds because gravity will prevent jib from filling.

### **BARBERHAULERS**

P Duncan (Elvstrom-Sobstad): If still used should be located 190 ahead of shroud.

### **MAINSAIL: Just remove backwinding above jib**

McNamara: Upwind, sheet to just remove backwinding in the mainsail luff just above the top of the jib. When boom is off the centreline, you need to use the kicker to just remove this backwinding.

More kicker will bend the mast, flattening the main and opening the slot to suit higher winds. Make sure you release if the wind drops to avoid hooking the leech and keep the top leech telltale flying.

If in doubt, let it out, until the backwinding reappears, then back in a little.

In light winds, avoid sheeting all the way in to the centreline as it is too easy to hook the leech.

Speed Sails: If you get a vertical crease running up the luff of the mainsail then the main halyard is

too tight.

### **KICKER: Top batten parallel with boom**

McNamara: Upwind, as the wind picks up, use to keep the top batten parallel with the boom.

In windy conditions, one armful of sheet should cope with gusts if you have enough kicker on.

For best speed on the runs, set the kicker so that the middle leech deflects about 100mm in puffs.

Too loose and you'll roll capsize.

Speed Sails: In light winds just take up the slack. More when windy to fly the top leech telltale 80% of the time.

P&B: In light winds just take up the slack. More when windy to fly the top leech telltale 80% of the time.

Seldén: Slack in light winds increasing to hold leech up when boom is over quarter in strong winds.

North: As the wind picks up, use to keep the top batten parallel with the boom.

Harris: Dead downwind, enough so that leech is not quite hooked.

### **OUTHHAUL: Pull on upwind, ease for reaches, half way for runs**

McNamara: Bar tight, upwind in light winds so that leeward airflow stays attached along foot. Bar tight, upwind in heavy winds to keep the slot open. Ease it for moderate winds.

Speed Sails: To band upwind, 40 from band on reaches, 12 on a run.

P&B: 30 - 40 - 20 from band.

North: The pocket or shelf in the foot of the main should always be closed upwind, open when reaching.

Harris: On upwind, otherwise eased.

### **CUNNINGHAM: Off**

McNamara: Only apply when very windy and if you have time, and if there is a photographer about, just enough to remove luff wrinkles. Must release immediately the winds drop.

Harris: Enough to not quite remove the wrinkles. Pulled tight in extremely high winds. Off downwind.

### **JIB CUNNINGHAM: Off**

McNamara: Jib luff tube should be free to slide 5mm with halyard fully tensioned.

North: The jib max depth should be further forward than the main, about 1/3 of the way back from the luff, like an aeroplane wing. It is important that the jib and main cunningham are released off wind.

Harris: Goose-winged downwind, release the jib cloth (Cunningham) allowing the jib tack to rise up from the deck and move over to windward, separating from the main.

### **CENTREBOARD**

McNamara: Upwind, board vertical, rake back a little when windy to balance increased mast rake. Use 1/4 board on runs, particularly in waves, to assist steering. And gybing with some centreboard will help maintain forward drive, in light winds gybe with full board.

Hyde: Upwind, once over powered raise a very small amount.

North: Upwind, fully down or even raked forward. As the wind increases start to rake back.

Harris: Upwind, 5 deg forward. Vertical when windy, rake back a little more in extremely high winds. Dead downwind, board fully up.

### **HEEL**

McNamara: Release the tiller and if it doesn't move then boat is upright (good), if it goes to leeward then the boat is heeling to leeward, if it goes to windward then the boat is heeling to windward, both of which are slow. This is particularly important on a run.

Harris: Heel slightly to windward on runs, boat will be slightly "crabbing", goes best in steady state

with no kinetics, except can pump on a wave.

### **TRIM**

McNamara: Adjust for smoothest wash.

Harris: Level on runs.

### **WAVE PROPULSION**

McNamara: When reaching in waves, don't stay on the wave too long, catch the next one. Watch the wave in front as your guide to the wave you are on. Heel to boat to windward so that you are not using the rudder to stop heading up as the wave starts lifting the quarter.