

Shelley Sailing Club Inc.

Notes for informal catamaran training course,

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Disclaimer - These notes are based on my experience sailing Windrush 14 catamarans over a number of seasons. I'm only a middle of the fleet sailor when it comes to state champs etc. – to really learn, you need to go to the championships and talk to the experts, but this should at least get you started!

Part 1: Sailing to Windward

Downhaul (critical) – hard on to bring point of maximum camber (depth) in the sail forward and to increase mast bend, which is necessary for a decent sail shape. Maybe ease a bit in light winds, but still needs to be pretty tight.

Outhaul (not critical) – Light to moderate winds try to match shape of foot to shape of sail at bottom batten. Increase tension in strong winds to flatten sail and reduce power .

Traveller (most critical) – Light winds, about 5cm from centre line. Keep it there until you start getting overpowered in gusts, then let it progressively further out. If you feel the boat is responding to gusts mainly by healing, rather than by increasing speed, then let the traveller further out. Quite small adjustments can make a big difference, especially when the traveller is near the centre-line. In very strong winds you can have it out as far as the tow straps.

Mainsheet (critical) – Hard on to reduce sail twist and to bend the mast. The Windrush 14 main is cut for a bent mast. If you don't have the mainsheet hard on, the sail shape will be horrible. The precise setting should be chosen to optimise twist so the main starts to luff evenly all the way up. The only exception is in very light winds where it is critical to keep the boat moving at all costs and the wind may be blowing stronger and from a different direction at the top of the mast. In that case some extra twist may be beneficial. Also, in light winds excessive mainsheet tension may cause the leach of the sail to hook to windward which will slow you down a lot.

Jib sheet (critical) – Jib sheet should be hard on when sailing to windward but go a bit easier on it in light winds , otherwise you'll flatten it completely.

Fore and aft position of jib fairlead (not critical) – Because the jib sheet is tied to the front beam and only half of it goes through the fairlead this control is less critical than on other classes.

Conventional wisdom is to adjust it so that the jib luffs evenly all the way up. Moving it forward increases the sheeting angle but also increases the downward tension on the leach which reduces twist and closes the slot. Moving it back reduces the sheeting angle, but increases twist. I've never really figured out what is best - I tend to just have mine close to the stay so it is least in the way!

Crew weight – Forward to minimise drag from transom. Sailing cat in light to moderate winds sit forward of the side-stay. Sit immediately behind the side-stay in stronger winds if burying the nose in waves. Sailing a sloop to windward I'd usually have the crew forward of the stay and I'd be sitting right next to it. Be ready to move aft in a hurry if you have to bear away for some reason, otherwise

you'll nosedive. (I capsized this way on the gun, on the start line, in the Australian Champs once - very embarrassing!) It is optimal to have the windward hull just skimming the water which requires you to sit inboard in light winds.

Steering – Keep the sails hard in and steer to keep the telltales streaming. If sailing sloop concentrate on the jib telltales. If the windward telltale breaks, then you are too close to the wind so pull the tiller towards you to bear away slightly. If the leeward telltale breaks you are too far away from the wind so push the tiller away from you to head up. It is OK to have the windward telltale just starting to break upwards. CONCENTRATE! You should be looking at the telltales 70% of the time, and in the remaining 30% looking out for other boats, the next mark, wind shifts etc. Don't forget to check the upper half of the main every now and again to make sure you have the twist about right.

If you get overpowered by a gust you have the following options:

1. Ease the mainsheet slightly. This will cause the boom to rise, reducing the leach tension and allowing the top of the sail to twist off, depowering the top of the sail. This is a very effective way of reducing the heel because you are depowering the part of the sail that causes most of the heeling. Unfortunately on the Windrush it also allows the mast to straighten and ruins your nice sail shape, and then you have to haul it back in as soon as you can, which gets to be hard work after a while.
2. Push the tiller away from you slightly to steer a bit higher. The boat will initially heel a bit more (the top of the mast wants to keep going in a straight line), but will come back down as the sails depower. As soon as this happens pull the tiller towards you again to resume something like the original course. You end up losing speed, but you do gain a bit of ground to windward. If you are good enough you can use this method to just keep the windward hull kissing the water with continual slight steering adjustments.
3. Let the traveller out a bit. In theory this is the best solution because it maintains the efficient sail shape and lets you convert more of the excess side force to forward force. However the standard Windrush 14 traveller tends to jam making this method unreliable – which means you end up going swimming more often than you would like. A few boats now have a newer traveller design that makes this practical. I have one on my boat but when sailing supersloop never see to have enough hands to make this work and still be able to tack efficiently. I obviously need more practice.

I usually set the traveller so I'm not getting overpowered too often, then use method 2, with method 1 as a last resort to prevent a capsize in a big gust.