

Theo Galyer's RS700 Training Notes

There are three requirements that you need to achieve if you want to win a race. Firstly, you need to ensure that you start and finish the race. Secondly, you need to sail consistently faster than all the other boats. Thirdly, you need to make less mistakes than your competitors, all the way round the race course.

To sail a boat as fast as possible requires a combination of skill and concentration. Sail trim and boat trim are the main ingredients to sailing fast. The best way to get an understanding of trim is to sail without a rudder.

Trim is key

A boat that heels to leeward will want to head up towards the wind. Powering up the mainsail will have the same effect. This is as a result of loading up the centre of effort, which is behind the centre of lateral resistance, the dagger board. A boat that heels to windward will want to bear away from the wind. Powering up the jib and depowering the mainsail will have the same effect - centre of effort ahead of centre of lateral resistance. Heeling and sheeting can be used together to steer the boat, with the rudder used as a fine control. Overuse of the rudder will act as a brake on your transom, slowing you down.

No drag at the back

The boat should be trimmed fore and aft for maximum performance. In light to moderate breeze sailing upwind, move the crew weight forward to lift the stern to prevent it dragging and slowing the boat down. This will also push the bow down, increasing water line length which will boost your performance. As the boat speed increases, the transom will lift, pushing the bow down more, move the crew weight aft so that the bow isn't buried and skims across the water without dragging the stern. Constant fore and aft weight movements are required to ensure optimum trim. Sailing by the seat of your pants allows you to assess how your dinghy is performing in real time but requires a wealth of experience.

A flat boat is a happy boat

All modern dinghies are designed to be sailed as flat as possible, if a dinghy heels too far to leeward it will

slip sideways - less resistance from the dagger board

lose power - less pressure driving the sails

slow down - gunwale burying in the water

be difficult to steer - weather helm and rudder blade partially out the water

The solution - keep the boat flat, trapeze lower, ease the mainsheet or luff into wind in the gusts. If the boat is permanently overpowered, depower your rig by using your kicker and cunningham, this will move the centre of effort forward and twist open the top of the sail, allowing air to escape without powering up your mainsail. You may also find it beneficial to lift your dagger board slightly to reduce the heeling moment.

How to use your telltales

Wind streams over both sides of the sail creating high pressure on the windward side and low pressure on the leeward side of the sail. Telltales provide information on how the wind is flowing across the sail, the windward telltales give instant feedback while leeward telltales are slower to respond. Lower telltales are more important than those higher up the sail as they provide feedback on the area of the sail where the most power is generated.

Sailing upwind the windward telltales should be starting to stream slightly upwards while the leeward telltales stream back horizontally. If the windward telltales stop streaming – pull in the sheets or bear away. If the Leeward telltales stop streaming – ease out the sheets or head up. To set the jib on a reach pull in the sail until the windward telltales collapse, sheet out until the leeward telltales collapse, this will give you the effective range of the sail, the optimum setting is somewhere in-between.

30 Sept 20