

# Keelboat Fleets On the Water Coaching Notes

Royal Perth Yacht Club has asked me to assist by giving "On The Water" Club Keelboat Coaching.

An observation of all the Fleets starting mid-river on the windy last Saturday race of 2017, showed many yachts with room for improvement in sail setup and trim. Those yachts with the better Trim and setup showed up at the front of the Fleets in the results. Some of this gain can also be attributed to good tactics for the weather system on the day, and being able to change gears with the changes of wind strength during the race, and good crew work/organisation aboard.

We aim to lift the fleet knowledge base offering On the water coaching from a Club RIB, with a debrief in the Junior clubhouse after the race prior to Results. The following notes are designed to get to started if you don't already have a system setup to use.

A starting point is Calibration and Recording, so we can learn the best settings, repeat settings and be able to change gears as the conditions dictate. This will also make applying suggestions from off the boat relevant. If you are armed with a Texta Marker and a roll of insulation tape you will be able to do some basic setup. A Pen and Notebook is also useful.

## Basic Yacht Calibration

The Goal is to be able to record good/fast settings for a given wind range and sail combinations so they can be repeated. It is also good to know the effective wind range of each sail, so you are using the correct sail for the wind range. Having reference points is important.

Incorrect halyard tensions were one of the standout errors observed. Before race start or when rounding a leeward mark, you should have pre-tensioned the Main Halyard, or Cunningham (after relaxing to let the sail set better on the downwind leg), and Jib Halyard to upwind tension setting and car position, especially if the wind has increased since the last upwind leg. It is useful to sail on the wind on the main course area (i.e. Melville Water) before a Club line start so you know the right sail combination/settings for the leg, and after the reaching leg to Foam Buoy, as the reach should require different settings.

## Halyards

### Jib/Genoa

Raise snap shackle to full hoist with a sheet attached to a bosun's chair with a crewmember's weight taking out the stretch.

Mark the Halyard with a contrasting Texta or sew a whipping around, at the front of the rope clutch.

Mark a scale in front of the clutch in 25mm or 50mm increments, numbering 0 at the full hoist position (i.e. Zero halyard available at full hoist) and far enough forward to cater for any short hoist headsails. If some jibs well short of full hoist, a second mark may be required. Some Stick-on scales from Ronstan may be a solution if you don't want hand Texta markings on your deck.

### Main Halyard.

If you are governed by a measurement band for full hoist, hoist the crew up in the bosun's chair to measurement band, after transposing the top of headboard position onto the shackle, or view from the side to ensure the shackle to measurement band is met.

Otherwise, mark at full hoist, but check that the headboard can clear the backstay when tacking. Use a scale in front of the main clutch as for the Jib halyard. You may end up with a relaxed position for sailing downwind.

### **Jib/Genoa Tracks**

Number Jib Car pin holes from the stern end. Alternatively, if you have a base Pin position for each sail, you can use the "one aft, two aft, or one forward" type of recording for different wind ranges.

### **Jib Sheets**

Jib sheets can be marked with a tape mark near the winch as a reference for sheeting to accelerate out of a tack, before to full trim when boat speed has been achieved. If you are not using clips/shackles to the clew of jibs, you can mark one sheet where your bowline rounds the clew ring, then remove and equalise the sheets adding the same mark to the other sheet. When you have a maximum sheet mark position near the winch on one sheet it should be near the same on the other. You may use different colour or number of tape bands for different sails.

### **Other scales**

Main Outhaul: A scale on the boom in 25mm increments in front of any rating measurement band, or marks on the tackle for maximum, midrange and minimum.

Main sheet coarse tune: Raise Mainsail to full hoist, Mark sheet at jammer with fine tune, if fitted, fully eased, and backstay off. This may be done underway.

Mainsheet fine tune: a scale against the coarse tune so you know how much additional sheet tension/travel you are achieving.

Backstay: Mark the backstay at fully eased position, and then pull on to maximum and mark. Divide the range into appropriate scale.

Main Traveller: Mark at 50 or 100mm increments either side of centre, Zero at Centre. Make sure the traveller is lubricated, free running and has appropriate size line for easy handling of the load, 8 to 10mm?

Examples Recording Tables

Wind Range	0-5	5-10	10-15	15-20	20-25	25-30
<b>Sail</b>						
<b>Main Hal /Cunningham</b>	1/0	0/2	0/3	0/4	2/Reef 1	4/Reef 2
	Hal/Car/In	Hal/Car/In	Hal/Car	Hal/Car	Hal/Car	Hal/Car
<b>No1</b>	5/4/	4/3	2/2			
<b>No2</b>			6/8	4/7		
<b>No3</b>				8/11	7/10	
<b>No4</b>					10/15	12/13

Blank example

Wind Range	0-5	5-10	10-15	15-20	20-25	25-30
<b>Sail</b>	Hal /Cunning	Hal /Cunning	Hal /Cunning	Hal /Cunning	Hal /Cunning	Hal /Cunning
<b>Main</b>	/	/	/	/	/Reef 1	/Reef 2
	Hal/Car/In	Hal/Car/In	Hal/Car	Hal/Car	Hal/Car	Hal/Car
<b>No1</b>	/	/	/	/	/	/
<b>No2</b>	/	/	/	/	/	/
<b>No3</b>	/	/	/	/	/	/
<b>No4</b>	/	/	/	/	/	/

## **Sail Preparation**

### **Jibs**

Wool tell tails up luff at 25%, 50 % and 75% up the luff, and perhaps a low set of steering wools at 15%?

Leech ribbons at top batten and second batten as a minimum, on all battens preferred. On Genoa's at the end of the 25%, 50% and 75% draft stripes. These are to indicate over sheeting and stalling of the sail.

### **Mainsail**

A row of centre Depth Wools at 25%, 50% and 75%, usually under the draft stripes. An additional set under the top batten is recommended. Another set under the bottom batten near the leech are useful too.

Leech ribbons under each batten. Again these are to indicate over sheeting and stall.

### **Spinnakers**

A row of Tell-tale wools at 25%, 50% and 75% of luff length on both luffs in a symmetric sail back, about 500mm in a contrasting colour are a good indicator against over trimming.

In an Asymmetric sail, Tell-tale wools at 25%, 50% and 75% and also on the Leech too. And leech ribbons can also be useful.

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