

Yachting New Zealand

Coaching Notes

Mid-winter racing (7 week programme)

This is a guide of some topics that can be used to assist sailors who are at a racing level improving their skills through off the water discussions. These are bullet points only, and need to be targeted to suit the levels of sailors at each session. They are in an order which shows a progression from training through to on the water and overall race strategy and performing while racing.

This list is in no way extensive, but gives a broad range of skills that will assist sailors.

Topics included are:

1. How does a sail/boat work, boathandling
2. Boatspeed – adjusting sails
3. Starting
4. Rules
5. Windshifts and Tide
6. Putting it all together
7. Training and Nutrition

Discussion Lessons

1. How does a sail/boat work/Boat handling

Theory of Sailing/How it all works:

- How a sail works
- Forces on the boat and sails (centre of effort)
- Using centre of effort to turn the boat

NB: Where possible use models/diagrams to explain. Keep simple, ensure sailors understand what the centre of effort is and how moving changes the reactions of the boat – ie more mainsheet and vang, rakes sail back, moves centre of effort aft, therefore increases weather helm.

Boat handling:

- What is boat handling – ie rudder, tiller, sails etc
- When do you use boat handling – starting, rounding marks etc
- Stopping and starting – how to
- Tacking and gybing – technique relative to different boats
- Mark Roundings – different techniques

NB: With regards to stopping and starting, emphasise the effects of this on the start line, so sailors can learn to accelerate off the line quickly. Go through correct technique for tacking – step by step processes (don't presume sailors will have remembered correct techniques)

2. Boatspeed

What happens when you adjust the following:

- Cunningham
- Mainsheet
- Vang
- Outhaul

NB: Discuss the order of adjusting sail, can be practically shown using a boat on the shore. A laser is perfect to demonstrate on because of its simplicity. Show how draft of sail moves when cunningham is pulled, and the effects of vang on mainsheet tension.

3. Starting

Different starting techniques

- Port tack “shark”
- Starboard tack approach
- Time on distance

NB: Go through the benefits of above approaches, how to execute each manoeuvre.

Goals at the start

- Hole to leeward
- Clean air
- At favoured end of the line

Transits and Bias on the line

- Using a line sight
- Using a compass to find the bias on the line
- Breaking the line into thirds

NB: Discuss benefits of breaking line into 3 sections, and why starting in the favoured third of the line can be as effective as being right at the favoured end.

4. Rules

Using rule scenarios, cover some of the following rules with explanations:

- Avoiding contact (rule 14)
- At marks and obstructions (rule 18 and 19)
- Tacking within 2 boat lengths of a mark (rule 18.3)
- Room to tack at an obstruction (rule 19)
- General definitions

NB: Using model boats and showing on ground/horizontal whiteboard is an effective way of demonstrating the above rules. Focus on rounding marks being the right of way boat or the keep clear boat and the differences.

5. Wind shifts and Tide

Wind shifts

What are the different windshifts and how do they effect conditions on the race course

- Oscillating (wind flicking left and right)
- Geographical (bending of wind when approaching land)
- Persistent (a trend of the wind changing in one direction e.g as low passes over.)

Relate back to specifics in the location you are teaching in. ie summer sea breezes, offshore winds etc. Apply to conditions on the day you are giving the discussion, then review after racing what actually happened.

Tide

Different strength of tide in a cycle (rule of 12th's) – sine curve
Effects on a starting line
Effects going around marks
Tactical decisions based on the tide

NB: Practical application – use the tide on the day of the discussion to look at what time relating to start time will the tide be at its strongest.

6. Putting it all together

Game Plan

- Putting together a game plan

NB: Include all the different areas to consider including weather, course area, equipment, tide, current etc.

Tactical decisions

- Breaking the first beat into three sections
- Tactical decisions before sailing the leg and each leg in advance.

NB: Cover the reasons why breaking the windward leg into three sections is beneficial. Thinking a long way ahead regarding tactical decisions.

7. Training and Nutrition

Putting together a plan to build up for a regatta (planning ahead)

- build up regattas
- time to work on different areas of sailing
- preparation off the water
- coaching
- tuning new equipment

How to train by yourself/in pairs etc

- drills you can do
- how many hours you should train

Eating right to perform right

- drinking water (min 1-2 litres per day when racing)
- eating good food as soon as come off the water
- what to eat between races

Off the water training – what you can do.

- exercises you can do at home (sit ups, press ups, wall sit etc)
- running, skipping, biking etc

Other Topics

There are many other topics of discussion that help improve sailors performance on the water. If you would like other topics, or more information on any of the above, please don't hesitate to contact rob@yachtingnz.org.nz