RYA Logbook Theory Notes
Performance Sailing

Using These Theory Notes

These notes are not intended to totally cover the theory in each stage but instead to provide a guide for students of the RYA Youth Sailing Scheme to supplement their learning from courses and activities.

Performance Sailing – Practical Skills Explanation

Once you've reached this level there's a limit to what our theory notes can impart. We've focused on explaining what will be covered, rather than providing fine detail on each. Instead, your instructor will cover the various concepts outlined here on the course in much more detail.

Sailing Techniques & Manoeuvres

Rigging

You'll need to be able to rig any type of boat, including spinnaker and trapeze (if equipped). So in the Irish National Sailing & Powerboat School, you'll have to be able to rig the following:

Boat Type	Can you rig it?
RS Feva	
Vibe	
Laser Vago	
Magno	
RS Quest	
420	

We're not sure this is correct?

Making best use of crew & equipment

You'll need to make the best use of the crew and equipment to sail efficiently on all points of sail. This includes effective use of both asymmetric and symmetric spinnakers.

Wind Shifts & Gusts

You'll need to be able to spot wind shifts and gusts then use them to adjust to the best and fastest course. This can include tacking and gybing both on up and down wind courses.

Sailing Theory & Background

Wind Shifts & Gusts

Your instructor will explain what this topic covers in the classroom and while coaching on the water.

Effect of Hull Shape on Performance

Understands the effect of full shapes and rig types will have on the boat's performance.

- There and many different hull designs and constructions for performance dinghies. The main factors are how easily the dinghy plains (lifts up in the water) and how different points of sail affect it.
- As with hull shapes there are many different mast designs. For double handed performance dinghies the mast is almost guaranteed to be supported (shrouds each side and forestay i.e. RS feva, RS200, R400, 420). The shape of the mast and how the supports are setup is how we can set up the mast for the best performance in the wind conditions we are going sailing in!

The effect of a dinghy plaining is the boat lifting up in the water while at speed. This happens when the boat moves forward and pushes the water out around the boat and down under the hull. The water follows the shape of the hull the length of the boat.

- Not all performance dinghies are designed to plain on all points of sail.
- The plaining effect can be affected by the amount of weight in the boat.
- Most new dinghy designs have chine's (sharp angles) on the hull to help deflect water away from the hull and help lift the boat up out of the water reducing drag and making the boat go faster!
- These are very clear and easy to see on the RS Quest, RS Aero, vibes and our fleet of small safety boats. They are also on the RS Fevas, RS 200s but a bit less clear.

Meteorology

1. Source a weather forecast - See stage 4
2. Characteristics of high and low pressures - See stage 4
3. Awareness of changing weather! Keep your head out of the boat and look around for changing weather, cloud formations and changes in temperature are all early warning signs for changing weather conditions and approaching fronts.