

## Teaching basic rig setup

Rig setup tends to be a bit of a 'black art' in the world of the instructor, little understood and either avoided or taught without much grasp of the essential principles.

One major reason for this is that good rig setup doesn't make much difference to an old Wayfarer with a wobbly tiller. However, it certainly does make a difference to an RS Vision, a Laser 2000 or any other mid-performance boat in which you might teach. If you need convincing, on a breezy day, start two identical boats alongside each other and sail to windward, one boat with a slackish kicker and a full mainsail, the other with a flatter sail and a tight kicker. The difference will almost certainly be obvious to you within a hundred metres.

Here are some good general principles, and resources.

### Explain the airflow

Most of the air doesn't rush through the 'slot', but diverts at high speed around behind the jib. The jib therefore makes a bigger difference than you might think. Teach crews to sheet carefully and adjust sheeting in the gusts to maintain



shape as the sail gives a bit in the puffs. See [www.arvelgentry.com/techs](http://www.arvelgentry.com/techs)

### Reefing by altering mast rake and sail shape

Many boats don't reef. The most common mistake is sailing a modern boat with more power than you can handle, so rake and flatten the rig on windy days. Buy a rig tension gauge and go to the class website to download the rake, spreader and rig tension numbers. Keep a simple version of these settings printed on a card in the

centre or clubhouse. This will teach your students good habits, enabling them to control the rig on windy and light days.

### Steering pays – sheeting in and out is really tiring!

On gusty days, teach your students to steer the boat flat. Upwind, use the (big) rudder blade to luff and bear away instead of pumping loads of sheet. Downwind, steer a course enabling both crew and helm to hike out, and steer the boat flat, bearing away as the gusts hit without moving crew weight.

### Study the top telltale

This is fixed at the second batten, the part of the sail with the steepest curvature. It is therefore where the airflow will 'fall off' the sail first. Upwind, apply kicker until the telltale starts to flick. Downwind, make sure it is flowing. In this way you'll get the best airflow over the sails and the most power and best pointing.



### Use a handout or checklist

Download basic rig setup instructions from the instructor resources section of [www.rya.org.uk/WorkingWithUs/instructors](http://www.rya.org.uk/WorkingWithUs/instructors). Even better – make your own class-specific version.