

RS 700 Frequently Asked Questions

The following "frequently asked" questions were generated on the RS700 e-mail list. At various points, people have asked these questions, and sailors in the fleet can discuss their techniques. Some of the questions are basic, and some highly technical. They don't necessarily represent the ultimate answers, but are provided to help your understanding of some of the issues. If you want to join in, send a subscribe message to RS700@yahoogroups.com.

=====

Q : How firm should the leech of the mainsail be?

A : Upwind, you're always looking for a firm-ish leech, but it's a trade off. The slacker the leech the faster you'll go but the lower you'll point. And vice versa for a harder leech. In light winds it's easy to overdo it, and you can easily stall the sail. In strong winds, however you'll never really get the leech to stand up as the mast has long lengths of unsupported section and is very bendy. This makes it blade off, a bit like a windsurfer rig. For this to work best you need lots of vang and downhaul

Q : Pre-bend.... what's the purpose of pre-bending the mast? (Is it loosening the leech, or changing the fullest point of the sail or what?) I guess the lowers vs. shrouds, combined with rig tension determines pre-bend and what effect does the kicker have on this?

A : Pre-bend flattens the sail fundamentally. It does a little bit to loosen the leech.

I would always call "pre-bend" what the shrouds and spreaders induce into the mast, without the mainsail up. For the 700, the setting appears to be anything between completely straight, and up to about 4 inches of bend. The mast should always be straight sideways. If you're absolutely sure that everything is symmetrical, upright and the same length, any sideways bend should be eradicated using the spreader deflection (my personal opinion, and not everybody works this way).

The lowers act to restrict the force of the boom bending the mast at gooseneck level (they're just slack without the main up on the 700 lucky for us, but not on most boats creating more confusion!). The bending force is generated by the vang (mostly) and the mainsheet, in light winds when you don't carry so much kicker. You can see that a combination of kicker and opposing lower tension will create varying degrees of sail fullness and leech tension. Its a bit trial and error, but I personally believe that the lowers are the most important control in the boat.

Q : Also, as a lightweight (60Kg), should I be rigging flat or full for acceleration or speed maintenance in light winds?

A : Trial and error I'm afraid! Acceleration means less kicker and a fuller main, slacker leech. If you're fine with your acceleration out of the tacks, progressively increase tension until you're happy with straight-line speed and vice versa.

Q : Bottom line is that right now, rigging is a bit of a random activity for me, and as I tend to be at the back of the fleet, I don't have anyone really to compare changes with..... so I guess... help.... how does this rig work?

A : The best thing you can do is to attend one of our training days, or come along to an open meeting sometime. We're a pretty friendly bunch and happy to spend some time helping you look at set up, technique etc. Of course this help is well lubricated by lager...

Dave Geal from Eastbourne Sovereign is the Training Officer for this year, and he'll be arranging some training days in the spring/summer. We'll keep this informed via the yahoo groups mailing list.

Q : How tight should my mainsheet strops be?

A : My strops are adjustable, using spectra which is tucked back inside itself for 9 inches or so. In practice however, I've not done much adjusting as I've hit on a good setting which gives good tension in light winds and upright rig, but is also overly-long for the windy raked rig stuff (but I like this because it removes any tendency to over sheet!).

Q : How tight should the spinnaker be to the end of the pole when its extended?

A : You should also always have the kite tied tight down to the pole. I won't go into huge technical detail as to why, but if you read Frank Bethwaites book on High Performance Sailing, he explains that the key to high performance sailing is how far forward you can carry the apparent wind. This applies in all except in winds of >20knots, and in those conditions you want the thing tightly under control anyway!!!

Q : What is a fast way to sail downwind in gusty conditions?

A : Downwind in a gust, you need to ease the kite, whilst keeping the boat flat by bearing off slightly. The boat should pretty much do all this for you, as it takes off in the gust.

Q : How long should my trapeze adjusters be set at?

A : Trap lengths depend very much on the strength of the wind. In full power conditions and above you need to be quite low to maximise your leverage. I find this position is quite a bit lower than the "just able to hook on when sitting on the wing" length. There are two solutions to this.

1. Mark off the "just able" length on the trap adjuster, and return to this setting prior to any manoeuvre, only letting your self down when you are settled. Adjustment of the trap height one handed should be entirely possible. Be slow and deliberate, and only adjust a couple of inches at a

time. You do have a 2:1 mechanical advantage, so it shouldn't be too hard. You might want to change the adjuster rope so that you can wrap the end round your hand for better control.

2. Take the plunge of launching yourself over the side whilst holding the trap ring in place with your hand. This is a very risky manoeuvre, which you shouldn't try until you're absolutely confident of everything else in your tacking / boat handling repertoire.

Q : How do you handle the 700 in strong winds?

A : The good news is that the 700 is actually a pretty nice boat for trapeze helming, with ergonomic cockpit, high raked boom, etc.

The technique to employ upwind in a blow is to make sure you are going fast all the time - pinching is slow and difficult to do well because the foils are small and you side slip a lot. Then it's pretty much a case of feathering (at pace!) and steering through the gusts. For best effect you would ease main in the gusts and pull it in the lulls. By not pinching you should always have a bit of main to pull on in those lulls.

You'll also need to bear off quite hard in the lulls, a) to generate more power, and b) because the apparent wind moves forward as you slow down (before settling at further aft than before after the deceleration).

So the key is pulling both tiller and mainsheet in a lull. If it's a massive lull you might need to drop in off the wire - just lift your feet up and swing in.