

On The Water – Gybing

Gybing the RS200

If you have not got a gybing strop on your boat then fit one. It is essential. It is a length of rope that hangs down about 12-18 inches from the boom and is attached at the same place as the front mainsheet block. The bottom of the strop has a loop that loops around the mainsheet. A couple of knots or bobbles will help your grip on it. They are not going to like hearing this but the helmsman holds the key to a perfect gybe! The speed with which you enter the gybe and the amount by which you allow the boat to round up after the boom has crossed over affect the success of the gybe fundamentally.

Problem areas:

There is less boat speed that with faster asymmetrics. This means that heading dead downwind in the middle of the gybe causes less of a reduction to the apparent wind. Therefore there is more force acting on the mainsail during the gybe than there would be on faster boats.

Aims:

No loss of boat speed and the kite filling as soon as possible after the gybe. Oh... and no capsizing!

Stage 1: Setting up for the gybe

Helm

Check you are not about to gybe into someone down under your spinnaker! Make sure you are holding the tiller in the way you find it easiest to gybe. For most of us this means holding it in the "dagger" position rather than the "pan-handle" position. Make sure the boat is travelling reasonably fast. In moderate wind strengths where going slightly higher may cause a marked increase in boat speed it may help to head up slightly.

Crew

Pre-set the jib. First pull the new jibsheet until the bottom corner of the jib touches the mast and cleat. Then uncleat the old sheet. It is essential to not lose any power out of the kite whilst doing this. Most especially don't let it flap! This is a key time to keep the speed on.

Stage 2: The gybe

Helm and crew

Lean the boat to windward to initiate the turn. The degree to which you do this is governed by the wind strength. In light winds it is a fairly significant roll to windward. It is important not to lean across to leeward (disturbing the boat balance) to grab the gybing strop before initiating the turn. The angle of turn should not be too sharp so that the boat slows down because of the sudden change of direction. It should however be quick enough to get back on the wind without losing any boat speed either. You should aim to steer the boat into the gybe entirely by moving weight in the boat.

Helm

Stand up as you initiate the turn, and don't sit down until the gybe is finished. Pulling the boom over at the right time is critical in the RS200 once it becomes breezy. If you leave it too late, the sudden increase in power when the boom comes over may well make the boat capsize to leeward if you are already starting to go high. Grab the mainsheet down near the block and give it a sharp pull in.

In a light breeze this may be enough to flick the boom across, but if it is any windier then combine this pull with grabbing the gybing strop in the same hand. Pull the boom across earlier rather than later.

Crew

Your main aim is to get the kite across and filling on the new side as soon as possible. It pays to start sheeting in on the new side just before the boom has come across, especially in lighter winds. The last minute flick of the old sheet just as the boat gybes seems to be less important on the RS200 with its small kite than on bigger asymmetric dinghies.

Troubleshooting

I don't seem to be able to get the kite filling quickly after the gybe...
Try gybing the spinnaker earlier. In light breeze we have it completely gybed at about the time the boom starts to come across. That way it fills instantly.
It is important not to let the sheets go loose through the gybe or you may find the leach of the spinnaker blowing around in front of the luff.

Stage 3: Immediately after the gybe

The boat has centrifugal force that is throwing the rig out of the turn and the force in the mainsail on the new leeward side will exacerbate that. These forces will be trying to make the boat roll to leeward and spin up into the wind.

Crew

The main role is getting the kite filling and set. Watch it is not oversheeted as that markedly decreases its effectiveness and can tip the boat in. Your secondary role is boat balance. It usually pays to know exactly where you are planning to sit after the gybe. That way the helm can watch you move and do the majority of the balancing. If the boat rolls to windward then be ready to stop it, and most importantly be ready to lean out hard if the boat looks like capsizing to leeward after the gybe. In our boat the crew ALWAYS sits on the new windward side whatever the wind-strength as that gives the best vision of the spinnaker and makes it easy to lean out if necessary. The helm knows exactly where the crew's weight is going and can balance accordingly. It also allows for going quite high out of the gybe and getting speed on quick.

Helm

Aim to head up onto the wind relatively quickly after the gybe, but if it is breezy or you feel the gybe is not going well then be ready to head up more slowly. Sometimes it pays to steer a slightly S-shaped course through the gybe so that you bear away again slightly as the main fills on the new side. This helps counteract some of the forces mentioned above.
Watch where the crew's weight is and be ready to balance the boat either way. You should be on your feet and mobile.
Keep steering with your hand behind your back until the gybe has finished. If you are finding problems with this then practice gybing and steering with your hand behind your back for the first 50 yards.

Stage 4: After the gybe

Helm

Power up as soon as possible. Aim to go high for speed initially so that you can get low with speed rather than just pointing low and going slowly!
Sheet in on the new mainsheet if necessary and possibly give a small pump to get the boat going.

Crew

Concentrate on maximum pull from the kite once the balance is established

Troubleshooting: -

I keep capsizing to leeward after the boom has come across!

Get as much boat speed into the gybe as possible. Don't let the kite flap just before the gybe.

Make sure you are not going too high too quickly after the boom gybes. It may help to bear off marginally just after the boom comes over before heading up onto the new course. (essentially steering a slightly S-shaped course rather than a smooth curve)

Make sure you are getting the boom over early rather than late.

Make sure both of you are ready to lean out hard after the gybe if necessary.

Make sure you are not stopping the boom short, but letting it all the way out on the new side after it comes across.

Make sure the kite is not oversheeted.

Make sure the jib is not still cleated on the old side. If it is not preset then it certainly needs to be released.

I sometimes capsize to windward after the gybe!

Make sure you are going high enough after the gybe.

The helm is in the best position to feel the boat balance after the gybe and see what the crew is doing. If the crew has sat down on the new windward side and rolled the boat to windward then you should be ready to balance the boat the other way.

I come out of the gybe going really slowly!

Don't steer through too sharp an angle.

It takes a while for the kite to get filling after the gybe!

Try pulling the new sheet in earlier. In a lighter wind practice pulling it in too early before the main has gybed. You will see what you are aiming for.... the kite just snaps full and sets as soon as the boat heads up. Now try finding the balance between when you pull the kite around and how well you can get it to set.

Don't let the old spinnaker sheet go, or ease it too far. If the kite is getting wrapped at the front then try giving the old sheet a final short tug before you start sheeting on the new side.

Best of luck

Malcolm Morley