

Strong Wind Gybes

Perhaps one of the most underestimated training sessions is the shore drill. Take the wheels of the trolley and strap the boat well down. Put the rig tension on and hold the boom up with the main halyard to simulate sailing as closely as possible. Now walk through the drills, paying lots of attention to practising hand and feet placement. Where possible make large movements so at any time you feet are well spread (taking large steps), as this makes it easier to balance as well as reducing the number of places where an error could occur.

Take things slowly, and when and only when, the technique is good, then speed them up. Top crews literally run across the boat, but their foot placement is still excellent. It is not rocket science: the quicker you move across the boat the better! You need to try and instil good habits early. After hours of doing the same procedure it will become second nature, meaning you need to spend less time thinking about setting up for the gybe and can simply go for it when you want to for strategic reasons (the big picture, gybing for pressure or shift) or tactically (gybing because of the actions of the boats immediately around you).

It sounds obvious, but you want the boat to be going as fast as you can. This is done by, as much as possible, keeping the crew weight out (or rather, minimising the amount of time it is spent in the boat) and the sails driving. When the boat is going fast, the rig load is reduced, making things much easier... it is when you are going slowly you are in trouble! The steering needs to be very smooth, remembering as you head up, the boat powers up very quickly, and the greater the wind strength the more sensitive this is (and the smaller the angle you gybe through). Therefore adjusting the amount of steering (remembering you want just one continuous movement) in accordance with the wind speed is crucial.

During the gybe, the crew weight needs to be kept back if possible but the crew needs to be careful to give the helm enough room to cross the boat comfortably. The usual technique is: helm last in the boat and first out, so they move across the boat at the "easiest" point (when there is the least G force throwing them out of the boat). The crew of course needs to release the helm's foot from the toe strap! The better the teams are the smaller the difference which can be seen between when the crew starts to move and when the helm starts to move. The helm needs to clip and go, whereas the crew goes out on the handle, then clips on before moving to the back of the boat. With any sort of waves, getting into the toe straps ASAP is a must! Especially for the helm...

We have already said that to make a gybe as slick as possible we need to be going fast. In wavy conditions this means soaking down a wave, but this requires good communication, so both the helm and crew know exactly when the boat is going to turn. This is why teams who have sailed a lot together have a definite advantage!

In the upper wind range no roll of the boat is necessary. The boat will turn with relatively little rudder movement as long as the boat is kept flat. The mainsheet is brought across when it is unloaded, which is the same time as the helm crosses the boat. Very little if any mainsheet is required to be released on the new gybe as long as the turn is quick enough. The key elements here are timing and balance.

When setting up for the gybe the crew needs to take the slack out of the new kite sheet and from the moment you know you are going to gybe, the crew's focus is on the kite while the helm concentrates on the steering. The crew pulls in the old sheet slightly, backs the kite then set, using the new sheet as the kite crosses (blows through), allowing an armful of sheet out when the kite is ready to fill. The speed of the turn is kept relative to the set (when the kite is going to set quickly you can turn quickly), so the crew may need to decide whether to let the kite blow through. If it needs pulling through (forcing it through earlier, as the wind speed increases, it becomes less likely this is needed), it is then up to the helm to modify his/her steering.

However, before you even go afloat on a windy day, you need to make sure the basics are correct: the sheets are the correct length, the foot loops are easy to get into, but secure; the boat is well gripped; the tillers are stiff. Some of these things are down to personal preference, but you need to make sure they are correct as small mistakes are nearly always harshly punished in the Niner!

Jon Emmett