

## THE ART OF DOWNWIND SAILING

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There is a certain amount of art to downwind sailing. Have you ever noticed how some sailors helm with just their fingertips and somehow seem to finesse their way downwind often beating you to the leeward mark? It's not difficult, but it does require that the helmsman and sail trimmers work in concert to get the best out of the boat. And we are not talking just about the spinnaker. Many sailors often forget that the mainsail also plays a big part in the performance of the boat. First of all power up your main by easing the outhaul and releasing the backstay. With the backstay released the mast is straighter and it pushes the luff curve that's on the mainsail back into the body of the sail adding camber which in turn adds power. Ease the traveller all the way down to leeward and let the boom out until you get a bubble in the front of the main. A small bubble is fine. It's definitely more desirable than having the sail over trimmed. Also pay attention to leech tension and use the

vang to get the leech telltales streaming out behind the sail. If there is too much vang the top telltales will start to duck in behind the leech. Ease the vang a little until they start to flow again.

Sailing downwind with an asymmetrical spinnaker is different from sailing

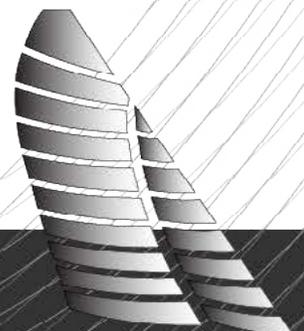


Asymmetrical nicely rotated out to windward

downwind with a symmetrical spinnaker so let's start with a symmetrical spinnaker. The sail is set on a spinnaker pole and as such you have a lot of options when it comes to placing the outboard end of the pole where it can be the most effective. Rotate the pole aft to suit the wind angle. 90° to the apparent wind is a good place to start. You want the luff of the sail to be directly above the outboard end of the pole. If the spinnaker is falling off to leeward you have the pole too far aft. If the luff of the sail is billowing out to windward you need to bring the pole further aft. Next adjust the height of the pole so that both clews are at the same height. Lastly make sure that the spinnaker pole is parallel to the deck. You want to use as much of it's length as you can.

adjusting the height of the pole will have an effect on the shape of the sail. A higher pole gives a fuller, more rounded shape with a center of effort further up the sail. Lowering the pole has the opposite effect. It flattens out the head of the spinnaker which may be more

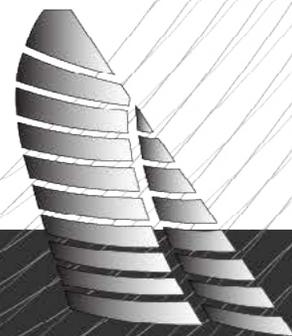
It's important to remember that





desirable in windy conditions because it depowers the sail and also makes it more stable and easier to trim.

As you bear away to sail deeper downwind angles, rotate the spinnaker pole aft to keep it close to 90 degrees to the apparent wind. You will notice that when you ease the sheet to match the wind angle, the clew will rise and will be uneven with the windward clew. Don't try and match the two by raising the pole. Instead you need to add a tweaker to the sheet to bring the clew down. A tweaker runs from a winch through a block on the rail located around mid-deck, and up to the sheet. Tightening it up will lower the clew. As the wind increases it's a good idea to lower the pole a little and tighten up on the tweaker. This will depower the sail but it will make it more stable and easier on the helmsman.

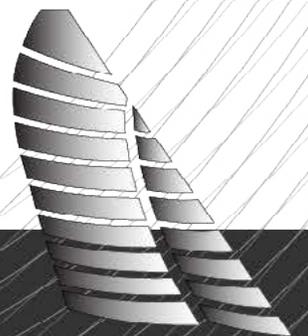




Trimming an asymmetrical spinnaker is a little different because you don't have the ability to place the tack of the sail anywhere you like. You are limited by the tackline. For initial placement of the tackline adjust it until a crease forms along the luff of the sail. If the sail is starting to curl inward you have too much tension on the tackline so ease it out a little. The helmsman now needs to work with the trimmer to build speed by sailing slightly sharper wind angles. In doing so the luff of the sail will start to break. Either trim the sail or communicate to the helmsman that he (or she) needs to bear off. There should be constant communication to keep the sail properly trimmed and the boat sailing as fast as possible.

Not unlike adjusting the height of the outboard end of a spinnaker pole, easing and tightening the tackline will have an effect on the shape of the sail. Easing the tackline will result in a fuller, more powerful shape and it will also allow the sail to rotate to windward when going deep downwind. Conversely tightening it will flatten the shape and be better for reaching. It's easier to trim an asymmetrical spinnaker if you have telltales along the luff of the sail. Add a tweaker to the sheet and adjust the height of the clew to keep all the telltales streaming evenly.

While the sail trimmers play a very important role when sailing downwind, it's the helmsman that really counts. Communication is



key. In light winds it's all about keeping the boat moving to generate apparent wind. Fingertips on the wheel is a good idea. You are able to feel the tiniest of vibrations from the rudder as the boat starts to pick up speed. When the breeze builds you will need both hands on the wheel and your job now is to keep the boat on course and moving fast. Steer the course you want and let the trimmers adjust the sails accordingly. As the wind builds you can sail deeper angles if you choose. Remember that it's very important to keep the boat under the spinnaker. If it rotates out to windward come up on course but don't try and chase it all over the place. Get the trimmers to lower the pole and take up on the tweaker to get control over the sail. Sailing downwind is where you can make huge gains on a racecourse. Many crews break out the lunch and relax. Instead you need to remain vigilant. Works as a team. In light winds get the crew weight forward to reduce wetted area which in turn reduces drag. In a breeze get the crew weight on the rail. Keep constantly trimming and remember the old adage; when in doubt ease out. Ease out until there is a curl in the luff and then sheet it back on again. That's how you win races.

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