Let Loose and Plane Upwind

One of the most thrilling things about the Vanguard 15 is how it loves to go fast all around the course. Although planing is usually associated with sailing off the wind, it is a technique that can be very useful upwind as well. When mastered, planing upwind will get you to the top of the course faster while having way more fun than fighting with boring old displacement mode.

In order to achieve efficient planing upwind you need the following conditions. The breeze must be above 12 knots in flat water and closer to 15 in chop. Below this wind range you will have to reach to get planning and then you won't be making much headway upwind. You will also need a few pairs of strong legs, because you can't stop hiking once you're planing. Your rig set up, boat trim, sail trim, and weight placement will also define your upwind planing speed.

• **Rig Set-Up:** When it is windy your boat will get overpowered and in order to keep the boat flat you must depower. On the other hand, to plane upwind you want power. If you rake (depower) too much you won't be able to get enough power out of your sails to plane, and if you rake to little you won't be able to depower your sails enough to keep the boat flat and on the plane. Once your vang, cunningham and outhaul are max on and you are still easing your main more than 6 inches it is time to drop pins. I usually start by dropping a full pin, then sailing upwind to see how it feels. The boat should be able to sail upwind without huge amounts of main ease. It may be necessary to ease the sail controls (vang, outhaul, cunningham) to gain a little power in your setup. You want to be powered-up enough to be able to plane without easing your main more than 6 inches and your jib about 1 1/2 inches. In order to find your specific rig settings to optimize your speed in different conditions you will need to experiment with your settings and sail trim.

• **Sail and Boat Trim:** Once you have your rig set up and your sail controls in the ball-park it is time to play with speed! To start accelerating when going upwind bear down 2-5 degrees. While bearing away, the boat must stay perfectly flat. If the boat heels at all you will begin to feel windward helm. Once you have windward helm the boat will slow down and risk the rudder stalling. As the boat bears away, ease the jib about 2 inches—this opens the slot between the main and the jib and allows more air to pass through the slot. If you look up through the main sail spreader window you will see the leech of the jib open up. The main should be eased simultaneously, about 6 inches. Once the boat gets planing, slowly trim the jib and main back in while heading up slightly. As the boat comes closer to the wind it will slow down. In order to achieve optimum upwind efficiency, the boat must stay on a plane while sailing as close to the wind as possible. The boat must also stay perfectly flat the entire time you are planing. This will keep the rudder balanced and the boat fast. If you need to steer for a big wave or a starboard tack boat remember to use your sails to do most of the steering (main in to head up, main out to bear away).

• **Weight Placement:** Skipper and crew weight placement is often overlooked as an important factor in speed. It is just as crucial as trimming your sails correctly and needs to be thought about frequently. The flatter the water, the further forward you should place

your weight and inversely the wavier it is the further aft you must move. The best indicator for weight placement is the knuckle on the bow. (corner where bow becomes bottom) When planning you want the knuckle as close to the water as possible without it touching. This will provide the boat with the least drag while still allowing for you to plane upwind. Experiment by moving your weight radically aft and forward to see the effects it has on your boat. Finally, it is important to keep the weight of the skipper and crew together. This will allow the boat to react better to the waves and thus go faster.

Finding the groove of planing upwind can be difficult at first, but with practice a V15 can make it to the top faster when planing. Good luck, and see you all on the race course this summer.—Pete Spaulding, Dartmouth Sailing Coach