

LIGHT SPEED - Improve Your Light Air Sailing Performance

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Many racers find sailing in very light conditions frustrating, even boring, while others see it as an opportunity to make some big gains on the fleet. If you are one of those who dislike it when the conditions go light now is the time for a quick attitude adjustment and time to learn some new sailing techniques. Armed with a little knowledge you can quickly change your dread of light wind into something that you look forward to because you know that you can finish in the money rather than at the back of the pack.

Light conditions are all about powering up your sails and remaining calm. Keep any kind of movement to a minimum especially crew moving round the boat. Start out by powering up your headsail. Some boats have a number of headsails and if that's

the case for you make sure that you have chosen the lightest and largest sail. Many modern boats have only one headsail so you are going to have to do the best you can with what you have. Start by easing the backstay off as much as you can. As you ease the backstay the top of your mast moves forward and the headstay sags which is what you want. The sag induces more shape into the genoa and more shape means more power. You can also ease the halyard until small horizontal wrinkles start to show along the luff. The jib lead position should be at the front end of it's range.

Your goal is to power up the headsail but be aware that if your sail is too deep the wind may have a hard time staying attached to the sail. You want the wind to be attached from the moment it hits the luff until it exits off the leech. If the sail is too deep and the wind too light it may have difficulty remaining attached when it gets to the point of maximum draft. It will get to that point and separate. You will have to experiment with different cambers and because you are trying to find that sweet spot make sure that you have a notebook handy to record all settings so that you can duplicate them in other races.

One thing to be aware of is wind shear. It's very common in light conditions to have the wind at the top of the mast differ greatly from the wind at deck level. Look at your telltales and adjust the lead so that they all break evenly, perhaps the top telltale a little before the rest. Sometimes when there is a lot of wind shear you end up contorting the sail into something that does not resemble a decent foil. Keep an eye on the big picture and compromise between the telltales breaking evenly and a reasonably shaped sail.

When you eased the backstay off you straightened your mast and this in turn pushes some sail shape into the main and powers it up. You can also ease the outhaul a little but don't overdo it. Let the genoa provide the power and use your main to provide lift. In light winds bring the boom up to centerline. If it's really light the weight of the boom itself may be a problem as it closes out the leech and stalls the sail. If this is the case ease the mainsheet out and bring the traveler up to windward. You may end up with



the mainsheet eased way out and the traveler quite a bit to windward in order to have the boom on centerline. As soon as the wind fills in you need to lower the traveler and take back up on the mainsheet. Stand at the back of the boom and sight up the leech of the main. All the telltales should be streaming evenly. Trim the sail until the top telltale starts to dance in behind the sail and then ease it out a little, and then ease it out a little more. Oversheeting the main in light conditions can quickly kill boat speed. As the saying goes, “when in doubt, ease out.”

Helming in light conditions is critical and you should be holding the wheel or tiller with just your fingertips so that you can feel any change of conditions. Some sailors like to helm to leeward. Others like to sit to windward where they can make sure that they are steering a straight course. Here is a key tip for helming in light conditions; do not try and chase the wind all over the place. Pick a course and stick to it. If the wind shifts let the sail trimmers adjust the sails accordingly. Chasing after each wind shift will mean an excessive amount of rudder being used and this will inevitably slow you down. What you are looking for is to build momentum. Sail a little deeper than normal when going to windward, then try to steer the boat higher once you have momentum. You are trying to gain apparent wind and then use that gain to point a little higher. If you try and sail too close to the wind you will inevitably stall the boat and lose any apparent wind.

Crew weight is also very important. Try and keep as much weight to leeward as possible and preferably as far forward as possible. The weight to leeward heels the boat a fraction and often this heel is enough to allow the sails to “fall” into their designed shape and set better. Having the weight forward lifts the transom out of the water which in turn reduces wetted surface and by extension reduces drag.

Sailing downwind in light conditions presents a different set of issues as the forward movement of the boat further reduces what little apparent wind there is. Remember one important point. Wind is energy and some of that energy is going to be used simply to lift the spinnaker up. If the sail is too heavy or if your sheets are overkill for light air then most of the winds energy is going to get used to get the sail to set leaving what

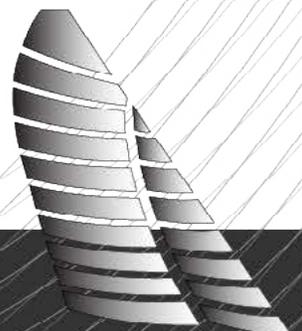




little is left over to propel the boat forward. You are going to have to generate some apparent wind by sailing hotter angles and when doing so take notes of true wind, apparent wind and boat speed so that you can duplicate what worked and was fast in future races.

Ease the tackline off on your asymmetrical to induce some extra sail shape into the sail but be aware that in any kind of swell this may make the spinnaker unstable. Strike a balance. If you are sailing with a symmetrical spinnaker then try raising the pole height. This will have the same effect as easing the tackline on an asymmetrical. Play around with different pole heights and again take note of what works best for future reference. Lastly keep the weight forward and to leeward for the same reason you do so when sailing upwind.

Light wind sailing is more demanding than sailing in a steady breeze, but there are big gains to be made. Take a big picture view of things. Power up the sails but at the same time making sure that they present a perfect foil. When the wind is scarce you need to put your best



shape forward. Sail a little lower to generate apparent wind and keep an eye out for boats to windward. The dirty wind coming off their sails remains dirty long after they have sailed on. If you feel a funk you are probably sucking some bad wind. Find a clean lane, keep your head in the game, and start bringing home the silver.

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