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SPINNAKER TRIM

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Over the past two issues I have discussed the general aspects of spinnakers and their set and trim. This issue we'll look at some special cases. For example, one hears a lot about easing the spinnaker halyard. But when is a good time to ease it off—and how much?

The next time you are on a reach with the spinnaker set, look up behind the mainsail on the lee side. Then ease the spinnaker halyard six inches or so while looking at the leech of the sail, not the head. It will become obvious how much the slot between the spinnaker and the main will open up to allow free air passage.

When running downwind in a breeze, easing the halyard has two effects. First, it gets the spinnaker away from the disturbed air of the mainsail and second, it allows the spinnaker to be more vertical than when it is fully hoisted.

In light air, however, the halyard can't be eased, for the spinnaker will just come straight down. Nor can it be eased on a reach in heavy air, because the sail's center of effort will go further out over the water and possibly cause a broach. And on a run in heavy air an eased spinnaker will be more apt to roll from one side of the boat to the other (oscillate) than one fully hoisted. In short, easing the halyard is rarely done on a run and is really only beneficial on a medium air reach.

As wind increases, there's a point where a spinnaker can overpower the boat if it's used at its maximum effectiveness. The choice then is to either reduce the effectiveness of the spinnaker or change to a jib. Doing the former is often the best choice. In some boats you can broach along and entire reaching leg and still beat a boat that does not have a spinnaker.

To reduce a chute's effectiveness, ease the pole forward and down, and overtrim the sheet. But make sure the spinnaker halyard is two-blocked. Then lead both the guy and the sheet further forward to pull the sail down and keep it tight behind the sailplan. Trouble usually results when the spinnaker gets out too far into fresh undisturbed air.

When reaching, the sheet lead should also be forward of the transom if the spinnaker is short along the foot. With the lead aft at the stern, trimming the sheet to stop a curl just stretches the foot. If the lead is brought forward, a pull on the sheet will uncurl the luff and, if the spinnaker is designed well, it won't tighten the leech. A tight leech must be avoided on a reach because it creates a drag to leeward and backwards.

Spinnaker -trimming in light air takes a great deal of patience. Lower the pole way down, but always keep the outboard end a little higher than the clew. Then when a puff of air comes and fills the spinnaker, the pole will be at the proper height. In other words, keep the pole at the right height for the 10% of the time that the spinnaker is filled; not the 90% of the time when it is drooping.

Another reason to keep the pole a little higher than the clew in light air is that a low pole can stretch the luff and fold it over. When a puff arrives, the spinnaker is unable to fill because of the shape of the luff.

This same thing can happen in some very full shouldered running spinnakers. The luff can collapse from a "starve", and though you know you must pull the pole aft, you have to first overtrim the sheet to unfold the luff. Only then can you pull the pole back.

Be careful in light air not to have the pole too high for this causes the spinnaker to droop to leeward and it will need a stronger puff to fill it

Another light air problem is caused by the jib. Air flowing past the lee side of the jib causes a suction on a reach and if the spinnaker collapses, it sucks into the jib and it is very difficult to fill it again. The natural tendency is to trim the jib to get it away from the spinnaker, but actually the opposite should be done. The first time it happens, free the jib sheet to break down the flow over the jib. If it happens a few more times, take the jib down.

A few words on jibing the spinnaker. The key person should handle the guy and sheet, and must keep the spinnaker downwind at all times. A masthead fly is very helpful at this time. As the boat turns downwind square the pole back and ease the sheet. For reach-to-reach jibes mark the sheet so that it's eased quickly to the mark.

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On a small boat, the foredeck crew should always be facing the spinnaker and be positioned for maximum stability. On the reach-to-reach jibes, he should take the pole completely off; first off the mast, and then the old guy. The spinnaker is then freewheeled through the jibe and the pole connected up to the guy on the new windward side. If he has trouble getting the pole onto the mast, the man on the sheet should collapse the spinnaker momentarily by easing the sheet.

On a run he should take the Pole off the mast, but should not disconnect the old guy. Don't pull the pole across the boat to the sheet, but rather hold the pole out (with the old. guy still in it) and reach for the sheet. This maneuver will keep the spinnaker full throughout the jibe.

Taking a spinnaker down to leeward is quite simple; the only major problem is letting the chute get out from behind the mainsail. The person gathering in the chute must have control of the sail by bringing the sheet forward to a spot just behind the shrouds.

The guy is then eased and "the halyard lowered as "the sail is gathered in behind the mainsail. On a small boat if someone lets the guy go before the sheet is under control, the chute will go flying aft to the stern and be the devil to gather in. About the only thing to do if this happens in a blow is to head the boat dead downwind.

There may be times when a windward douse is in order. If you are racing and are coming onto a mark on the wrong jibe, a take-down to windward will be the new leeward side after the douse. Or if you know you must set the spinnaker again and the next set is on the other tack, a windward takedown will prepare you properly for the next set.

Take the pole down before you intend to douse and then just pull the spinnaker around to windward with the new guy. In some larger class boats it's hard to do on a reach, but it can be done quite easily on a run. Many smaller boats set and douse the spinnaker to windward as a matter of course.