



Dinghies

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To soak or to plane?



In part two of our asymmetric technique series Melges and skiff champion Mike Lennon gives his tips about the angles to sail downwind

Following [last weeks introduction](#) to this new 10 part series, Andy Rice talks to Mike Lennon.

This new series of 10 features will be looking at the skills required in boats with asymmetric spinnakers, both the new generation of skiff-type dinghies and the lightweight sub-30ft keelboats known as sportsboats.

The series is sponsored by Holt, so if you want to be in with a chance of winning £250 of Holt hardware, click on the competition panel further down the article.

Mike has had success in a broad range of dinghies and keelboats. He has won the Melges 24 Nationals twice, the RS800 Nationals once, finished third in the 1720 Nationals and fourth in the International 14 Worlds. His day job is Technical Director of Hyde Sails, so he knows a thing or two about fast sail shapes too.

Here he talks about one of the most straightforward aspects of asymmetric sailing – how to sail in a straight line. Actually, not as simple as it sounds. There's more than one way to skin a cat, and more than one way to get down the run too, apparently.

Which angle to steer?

Knowing where to point the boat downwind is one of the first skills to learn with asymmetrics. It's all about finding the best VMG to get you to the next mark in the

"One of the most important tactical considerations is to sail a deep line away from the windward mark on starboard"

Mike Lennon

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shortest time. That might sound simple enough, but as soon as the wind changes in strength or direction, the chances are you're going to have to switch modes. There's a trade-off between bearing away to sail more slowly and point closer to the mark, compared with heading up to sail faster, but for a greater distance through the water.

Exactly which mode of steering you choose depends on a whole range of factors – the wind strength and direction, wave conditions, tactical considerations (ie other boats around you), strategic considerations (wind bends, current etc), and the nature of the boat you are sailing.



Soak or plane?

Finding the optimum angle of steering in a dinghy is more straightforward than a sportsboat because you get quicker feedback in the acceleration/deceleration of the boat. There are some good universal rules of thumb that apply to all boats. Generally speaking, in light winds where you are not going to plane, you should steer deep and 'soak' as close as possible towards the next mark. In stronger winds, you want to head up to get the boat up and planing, because the extra distance is more than justified by the enhanced speed of the boat. Medium airs are the toughest to work out, because conditions might vary minute to minute from 'soaking' to 'planing'.

Here, you need to keep your wits about you and constantly evaluate your speed relative to the other boats around you. It's easy to hoist the kite and blast off on a fast plane on starboard gybe, only to find that when you gybe other starboard boats behind you have successfully soaked down inside your line, and now have right of way on you. So it's important to learn how to get the best out of your boat for a wide range of sailing angles.

These transition points are more obvious in dinghies, where the switch from displacement and planing modes is relatively easy to feel. If in doubt, head up and aim to get the boat planing, as the extra pace usually overcomes the extra distance in light boats. Once you're on the plane, the added apparent wind you've just 'created' allows you to bear away and start steering lower again. You'll really see this apparent wind effect come into play in strong breezes – particularly in twin-trapeze boats like the 49er, 14 or RS800. In these conditions you can sometimes end up going lower AND faster than other boats if you have the balls to twin trapeze compared with other people who are single-stringing.

In dinghies, you can often find that two very different sailing styles can get you to the leeward mark at the same time, but keelboats tend to be more defined in the way they like to be sailed in a certain wind condition. In a relatively heavy keelboat like the 1720, you're nearly always soaking because it doesn't pick up enough pace to justify the extra distance you sail when you head up.

But in a lighter boat which is more easily driven on to a plane, like the Melges 24, there's a very definite cut-off point. With winds of less than 12 knots, and you're soaking the Melges as low as you can before the kite loses its pressure. Above that point – around 12 to 13 knots of true wind, and the boat will suddenly get up and go if you arc it up, get the keel to work, and move into planing mode. If you're the first to try it – and it works - you can get a jump on the rest of the fleet before they've worked out what you're doing. Get it wrong, though, and you've needlessly sailed extra distance for little extra speed. This tends to be more critical in a sportsboat than a dinghy.

Earlier, I mentioned a number of other factors to consider when sailing downwind, and they will be dealt with in greater detail in later articles of this series, but here are a few points to bear in mind:

1. Wind strength and direction

If the wind is gusting in streaks, rather than uniformly across the course, it pays to get into the stronger streak and stay in it as long as possible. If you can see a gust out to one side of you, arc the boat up and sail faster towards it. Once you are in the gust, bear away and soak a little more so that you stay in the gust as long as possible. And even gybe if you think that will keep you sailing in the gust for longer.

2. Tactical considerations

One of the most important ones to think about, which we touched on earlier, is to sail a deep line away from the windward mark on starboard gybe, to prevent others getting inside you and having port/starboard rights on you when you gybe. Another one that often works is when you see a gaggle of boats just ahead of you, all trying to run deep – and slow – into the leeward mark to avoid another gybe. Here it can pay to hang on a few moments longer before your final gybe, so that you are approaching the mark with good pace and even with inside mark rights on some of the other boats that were ahead of you. I could go on with numerous other examples, but these will be covered in later articles. The important thing to take away from this article is that you have to be comfortable sailing your boat in a number of different modes. There is no single answer to getting an asymmetric boat downhill.





3. Strategic considerations

These differ very little from other conventional-spinnakered boats, except that the potential for gain or loss in say, a strong tidal situation, is much greater. This is because your separation across the course from one side to the other is much larger than on boats with spinnaker poles that tend to stick to the rhumb line. If you are going down the run with the tide running with you, you can afford to gybe early even if you find yourself soaking to the mark, as the tide will carry you there. Far better to do that than gybe late and find you're having to tight reach back to the mark as the tide tries to sweep you off downwind.

On the other hand, with the tide running against you down the run, you are safer to over stand on your final gybe, and come in towards the leeward mark with pace and control. There's nothing worse than running deeper and deeper towards the leeward mark against an adverse tide. The more you bear away the less efficient the gennaker becomes, and you often see people wrapping themselves around the leeward mark as a result. And that can ruin your day.

4. Wave conditions

If you are going a bit faster than the wave speed, it will most likely pay to head up and go for pace, so that you are easily going from wave top to wave top, rather than lurching down one and up the next. But if your boatspeed is more or less the same as the wave speed, or slower, then it is going to pay you to sail deep, and use the waves to surf on for as long as possible.

Conclusion

Learning to steer the right angles with asymmetrics is more art than science, but keep your eyes open and watch what the fast boys are doing, and you'll soon get the hang of it.

Andy will be back next Tuesday with the next installment in this series.



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Published: 20 Jan 2003