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Roll Tacking - Skip Dieball

This past summer I was giving a clinic at Put-In-Bay for the Jr. Racers and we talked at length about Roll Tacking. The Jr. scene is generally coached up by College Sailors, so many times I'll notice that teams try to violently roll the boat through the tacks. Although the spirit is good, many times the execution is not good and sometimes counter productive.

In order to execute good Roll Tacks, we have to understand what it is we are trying to accomplish. In most sailing (outside of College Sailing), the goal of a good maneuver is to minimize the "pain" of losing speed. Tacks and maneuvers related to tacks (720s, leeward mark roundings) are sometimes the most painful in terms of "down speed" maneuvers. So as we've evolved in sailing, so has our attention to these maneuvers.

The first thing I try to communicate to folks is that you have to be smooth in executing all maneuvers. In order to be smooth, you have to be coordinated with yourself and your teammates. In this article you will see that Steve Frazier (Univ. of Rhode Island) and Jesse Shedden (Florida State U.) execute a great roll tack in the Interlake.

It didn't take Steve and Jesse long to make smooth Roll Tacks, but it did take a bit of coordination to get there. Let's analyze their maneuver.....

A successful Roll Tack starts on the front end. You've got to make certain that everyone is ready and that the driver has communicated his/her intentions of tacking. Once everyone is ready, the driver then scans the water to find a "flat spot" in which to start (and finish) the maneuver. If you try to pull off any tack or gybe in the presence of waves, it could be counter-productive.



Once you are satisfied that you can get through the water without the waves knocking you around, start off by communicating that you are turning the boat. On my boat, I simply count to coordinate the facets of the tack. The initial turn is "1", followed by "2" when you are in the eye of the wind and "3" when you want to roll the boat through the tack.

Here you see Steve and Jesse in their "1" stage. Notice that there are no violent motions with either the tiller or crew weight. The Interlake (and most boats) will naturally want to turn into the wind, so the job of the driver is to maintain a nice pace through the tack and the coordinated crew work.



Still in the "1" phase, you'll see that both Steve and Jesse are now moving their weight inboard so that the boat maintains a nice pace through the tack. If they didn't move in, Steve would have needed to use more tiller/rudder to turn the boat, which causes the boat to slow down slightly.



As they move into the "2" phase (into the eye of the wind), you'll see that they haven't moved drastically one way or the other. The boat still has a nice pace and Steve still has control over the turn of the boat. Many times (especially in Interlakes) I'll see the driver stand up or the crew lean against the boom. This might be needed

in some boats that have a tough time turning, but in most dinghies (especially Interlakes), the boat will turn on its own.



Now fulling into the "2" phase, you'll notice that both Steve and Jesse are moving their weight to the rail. This, coupled with the position of the tiller/rudder helps get the boat through the eye of the wind faster and gives you the heel you need to gain leverage through the "3" phase. Notice that the mainsail is still tight (you gain energy off the tight leech) and the jib is "boxed" or backwinded. This helps pull the bow through the eye of the wind.



Now the guys are through the eye of the wind and the boat has the proper leverage for them to cross through and exit the tack with hopefully the same speed as you entered the tack. Note that the tiller has never really been "forced" hard to the side.



The "3" phase is the quickest of the four phases. This is where not only will you slide your weight out, but you'll then cross over to the other side as the boat is turning to its "exit" course.



The 4th phase below is the final phase and here you see both Steve and Jesse on the new weather rail and the boat exiting the tack with great speed (evident by the flow off the rudder). You'll notice that Jesse has his arm above his head finishing the trimming of the jib. On 1407, the jib is 2:1 with a pulley off the clew. Jesse can make his life easier by always monitoring the "lazy sheet" and making sure it isn't too loose. If that lazy sheet is ready for the tack, the amount of sheet to pull will be substantially less.



As you can see there are many facets to the Roll Tack. What is important, and what I keep telling folks at clinics and seminars, is to be smooth with the maneuver. If you are like me and don't have the agility of a 20-something College Sailor, then scale it back, but always stay coordinated. Your boatspeed won't suffer if you concentrate and coordinate.

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