Some Thoughts After The Internationals

After the first day of racing at the '94 Internationals an informal seminar was organized by Mark Hess. It was to be conducted after dinner that evening. The panel consisted of Mark, Elliott Oldak and myself. Many topics were discussed from starting technique, to where we went on various legs of each race sailed that day. The subject that we hit on for a good part of the night was **how we set up our boats for the conditions that day**.

As Elliott, Mark and I answered questions it struck me how much a meeting like this was helping the people sitting in. This sharing of ideas and techniques is to be encouraged. We all benefit from the experience of others. Hopefully this article will go some small way to helping the Comet sailors who were unable to attend.

These Internationals were held at Tred Avon Yacht Club at Oxford, Maryland and as expected it was a light air series. As some of you know, light air has never been my forte' and we went to Oxford with not very high expectations. Steve Warren once again generously lent me his Comet # 4075. This is the same boat Sharpe and I sailed the year before at Shrewsbury. It was nice to know that the boat we were sailing was set up the way we wanted. This was especially important since we had not been able to sail Comets since the year before.

The boat was tuned using the measurements from my tuning guide. The butt of the mast was located 19.75 inches in front of the centerboard pin, from center of pin to aft face of mast. The mast rake was 21 feet, 10 inches measured by hoisting a tape to the top of the mast with the main halyard and locking it in the halyard latch. We then measured to the intersection of the transom and the deck along the center line of the boat. As far as jib lead position our lead was approximately 71 inches aft of the forestay and as far inboard as we could get them. 4075 is an Oberg boat and we were sheeting the jib directly across to the windward side. With the tracks mounted on the edge of the cockpit and the block leaning in we are effectively 3 inches further in than normal. The drawback to this system is the tendency to sheet too tightly and stall the jib. Great care must be taken to make sure that the upper leach of the jib is always angled out from the center line of the boat and an open slot between the jib and main is maintained.

For the light air (0 to 5 knots) we saw at Oxford we found that the setup described above worked well. The departure from our tuning guide came when we started to use our mast bender to induce more bend than ever before. In the guide the figure most recently quoted is 7/8ths of an inch. At Oxford we were finding that as much as 1.5 inches worked well.

I should back up a step and try and describe how came to this point. When we set the rig up on our Comet we made sure that all the measurements were in line with what we knew was fast. The next step was to make sure we were starting with the correct amount of prebend. Prebend is the amount of bend the mast has when the rig is under load on the trailer. With the rig set up and drawing the main halyard tight and holding it against the back of the mast at the gooseneck there should be about 1.5 inches of bend in the mast. If there is less, then the shrouds should be tightened until you get the right amount. Conversely loosen

the rig if there is more than 1.5 inches. Make a mark on the side of the mast where it goes through the deck and another mark alongside it on the deck. This is. your neutral mark. Next make a mark on the deck 1.5 inches in front of the neutral mark. In light air your mast should be bent until the mark on the mast lines up with the mark on the deck. This may seem like an extreme amount of mast bend, we sure did. What we learned was that our main had so much luff curve built into it that we had to bend the mast that much to smooth out the shape of it. Bending the mast also freed the leach up and moved the draft aft. These are very important ingredients to light air speed. The fourth benefit we got from bending the mast was to loosen the forestay. With a looser forestay we got a much fuller jib which gave us the power we needed. Remember that in light air, pointing is not nearly as acceleration and speed. With speed comes pointing since the centerboard works so much more efficiently and the boat does not side slip as much. Speed is truly paramount in light air. Under no circumstances do we find it beneficial to pinch. Instead footing off especially in the lulls will almost always get you to the top mark near the front of the fleet. For this reason I try very hard in light air to make sure that we don't find anyone sailing on our lee bow. Someone ahead and to leeward takes away our ability to foot when we need to. For this reason I will often allow a port tack boat to cross us even if it means ducking his transom rather than allow them to tack under us.

As the wind increases we will allow the mast to straighten until it is halfway between the neutral mark and the light air mark. This is the power spot and it is where we will sail with the mast until we begin to be overpowered. After exhausting all means of depowering ; vang, cunningham, traveler down, we will begin to allow the mast to bend forward once again toward the light air position. Let the mast bend until the boat is no longer overpowered or until a crease shows up in the sail running from the clew to the spreaders. If this crease appears you are bending the mast more than the sail was designed for and you might want to back off a bit. I hope that by reading this guide you have been able to learn a few of the things we've have.