

The Art of Crewing— Mastering the Forward Crew's Position

—ADAM WALSH, CHAMPION FORWARD CREW WITH TIM HEALY
AT THE LIGHTNING 1997 NORTH AMERICANS

Few crew positions on any boat are as difficult as the forward crew on a Lightning. This position requires agility, strength, balance, feel and smarts. Far too often skippers overlook the contribution of the forward crew, merely finding a warm body, who weighs enough for the specific conditions, who can pull in the jib and who can gybe the pole.

I hope I can help forward crew to perfect their techniques and, in turn, help their team to succeed in this article and several articles through the winter. The forward crew can, and should, make a strong contribution by acting and reacting independently of the other crew and the skipper. This article focuses on prestart and upwind activities. Next, I'll talk about tacking and jib trim.

Racing Upwind

Many crew neglect to take advantage of the few minutes prior to the warning gun to warm up. Everyone should make it a habit of sailing upwind on both tacks, collecting data on the breeze, the shifts and the wave conditions. After you've arrived at the race course and checked in, do a wind shot to get a wind direction and write it down. Generally, the forward crew keeps track of the compass headings. Then, you should sail upwind for several minutes.

On our boat, we sail like we are racing, reading the compass and creating a high, a low and a median compass heading for each tack. Before we head back to the line we check the wind direction again to compare with our previous compass readings.

A tuning partner can help check speed and settings upwind. You can split tacks and sail on opposite tacks for about three minutes and then tack. When you converge, any benefit to one side or the other should be evident and you can discuss the trends in the shifts and velocity.

During this warm up, the forward crew must get in tune with the waves and the jib.

As we're sailing upwind in the warm-up, I watch three things: the compass, the lower third of the jib, and the waves and wind a few boatlengths to weather. When I see a bad set of waves approaching, I make a quick decision. Do I slide in

off the rail, heel the boat up on one chine and knife through the waves? Or do I ease the sheet a bit, gain power, hike hard and flatten the boat as it powers through the waves? More than likely, I will choose a combination of these techniques. Almost everyone, your skipper in particular, will agree that the best time to figure this out is BEFORE the first beat!

The benefit of working 100% during this warm up is obvious; everyone gets into phase with the wave patterns, the breeze, and the puffs and lulls, so when the gun goes off your boat is already in the groove, sailing fast and you have a good idea of what phase the breeze is in. Sailing off the starting line is probably the most crucial time of any race.

Let's face it, few of us can hike as hard and as long as an Olympic Finn or Laser sailor. I've spent the last 14 years hanging from trapeze wires, so I despise hiking more than most. The key to successful hiking is to know when extra effort and pain will pay off. All the crew must max hike at specific times during a race, like at the start. By max hike, I don't mean droop hiking and groaning more than usual. I mean placing your weight out as far away from the centerline of the boat. This requires the crew to move their butts outside the rail, straighten their legs so that their torsos are extended out and place at least one hand above their head or up on

their chest. This max hike is going to hurt, but think how good it will feel to slide in a bit and just hike hard after a mean max hike!

When it's windy, the most important time for a max hike is the three to four minutes off the starting line. The max hike helps the boat accelerate and point. If you can pinch off the boat to weather, roll the boat to leeward or just save your lane, the rest of the race will be that much easier. The max hike helps when approaching a crossing situation port/starboard. Another time max hike works is when it's "blowing the dog of the chain", as it helps get the boat up to top speed before throwing in a tack. Too many crews let the boat become overpowered before the tack and the result is poor boatspeed out of the tack.



Balance and Boat Trim

It should be the job of the forward crew to continually balance the boat. Only one crew should do fine tune balancing. The middle crew often has their head out of the boat looking for breeze, competition and determining the tactics, so the middle crew may not have the best feel for the waves and balance. For this reason, the forward crew, with the finger on the pulse of the boat and its speed, should be the one to make the slight adjustments.

As a rule of thumb it is better to keep the middle crew and forward crew close together, centralizing the weight. The middle crew should never be on the rail while the forward crew sits to leeward.

Occasionally, the forward crew will have to ask the middle crew (because his mind is elsewhere) to move in or out to maintain a good separation between the two crew. With practice your team can become fluid and smooth, so that the boat remains at perfect trim all the time.

In the last issue, we discussed the difficulty and importance of the forward crew's position. We talked about racing upwind, max hiking and boat and balance trim. In this article, I would like to discuss jib trim and jib controls.

I sail with a 2-to-1 jib sheet system which allows me to make small trims and eases with minimal effort. I have an adjustable lead system lead to the weather rail.

In order to have steady boatspeed upwind, perfect jib trim is essential. Prior to the start, the forward crew should take a chance to sit to leeward and study the jib shape and the position of the top jib batten relative to the spreader tip.

Take a minute and overtrim the jib an inch and see how the leech looks. Then look to the lower third of the sail and look to see how flat it has become.

When the sail is over-trimmed, slide to weather and look to see how much backwind is in the main. Then, slowly ease the sheet until the backwinding stops. Then slide to leeward and see what the leech looks like at that position. Again over-trim the sail and try easing the sail 1/2 inch at a time while observing how the top batten reacts. Remember that when the lead is forward, the slightest change in sheet tension will have a greater effect on the leech at the spreader. All of these obser-

ventions will allow you to visualize what the jib looks like while you are hiking on the weather rail.

I have found that the windows in the mainsails are perfect for the helm on the rail to see the jib, but not very useful for the forward crew who is always moving around. For this reason,

I don't rely on the window but look at the lower third of the sail and the luff of the main to trim the jib.

Occasionally, I ask the helm to tell me how many inches in or out from the spreader tip is from the jib leech.

It is important to keep in mind that as the wind increases the upper jib leech will open up more, and as the wind decreases the leech will close.

Thus, the forward crew must realize that if the breeze is on and the jib

leech is at the ideal position, when the breeze drops, or the boat slows due to waves, that the leech will close and the jib will be over-trimmed. So the jib must be eased. Obviously the converse is true for a building breeze.

Therefore, the forward crew must always be on the ball ensuring that the jib trim is accurate all the time.

The Lightning jib has several controls which will effect its overall performance. The halyard or wire tension, the cloth tension, the jib lead and the sheet tension. It would be best for you to consult with your sailmaker's tuning guide for that sail's specific settings. However, I will offer some observations.

While sailing this years NAs, the primary jib adjustment was the sheet tension. Each day I would set the jib lead for each tack, because each tack had a different wave angle necessitating a different setting, and I left them there. As for the wire setting, it would be set so that the headstay was a bit looser than the wire at all times, and the cloth was set so that the scallops just disappeared. Once these were set, I did not adjust them.

But I adjusted the sheet tension frequently. The main goal of jib trim should be to keep the top of the jib working as efficiently as possible, without closing the slot, or killing the flow over the leeward side of the top of the jib.

—Adam grew up sailing in Niantic, CT and can be found often sailing on the top finishing boats in a variety of dingy classes.



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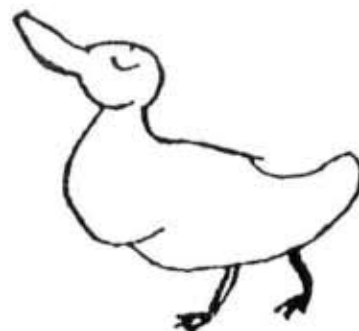
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