

As many handicap racers have discovered, the Thunderbird can really fly upwind when the breeze pipes up. The working jib is a great asset in these conditions. Like several other one-design keelboat classes, Thunderbird class rules permit an overlapping genoa and a working jib to be included in the sail inventory. Like most of these classes debate regarding the usefulness of the working jib is ongoing. Many sailors prefer to use their genoas well into the higher wind velocities. While one can sail the Thunderbird very effectively in a lot of wind using the genoa, the working jib offers some advantages which should not be ignored.

One of the nicest things about sailing with the working jib is its relative ease of handling. Ask your crew, would they rather short tack the beach in twenty knots of wind using the genoa or would they prefer the jib? The jib's minimal overlap with the mast and shrouds make it a snap to tack. With good timing and technique, only the last several inches of trim usually require a winch handle. As the boat begins a tack, hold off on the release until the front third of the sail has started to back; then, release the sheet making sure to get all the wraps off the winch. Of course the new sheet should be preloaded on a winch with 2 to 3 wraps. As the boat passes through head to wind 2 big pulls of jib sheet will get the sail in before it loads up. If the trimmers timing is good and the skipper doesn't turn the boat too fast, the sail will now be set about right for acceleration. While the crew gets another wrap or two on the winch and throws in a handle, the mainsail should be trimmed for acceleration with the traveler down low and the sheet slightly eased. By the time the trimmer is ready to crank in the last couple inches of jib sheet, the boat will have nearly reached full speed. Some people like to cross sheet when using the little jib (so the sail is trimmed from the upwind winch). On Rev, we've found this to be a bit much for the cockpit combings. Tacking isn't the only advantage to using the little jib.

As the wind strength increases, a cross over point is eventually reached where the working jib outperforms the genoa. This exact cross over between the 2 sails is of course widely disputed. On Rev, we have found the sails to perform fairly equally from approximately 18 to 22 knots. The boat can be sailed in this range by twisting the genoa slightly, and flattening and twisting the mainsail using maximum backstay. Unfortunately under this configuration, the helmsman doesn't have much liberty to try sailing around bad waves. The boat must be kept in a relatively narrow groove and feathered through puffs to avoid excess heeling. The mainsail will be backwinded a good portion of the time. In the same conditions using the little jib, the mainsail can carry more power and the boat can be steered in the waves more aggressively. During shorter buoy races, the little jib can be left up on the reaching legs keeping the foredeck crew off the bow. The helmsman's view to leeward is slightly better with the working jib than with the genoa. One big drawback to opting for your working jib exists. If the wind strength drops significantly during a race, you might find yourself severely underpowered.

Several factors should be considered when deciding which headsail to use. What is the rest of the fleet using? What are your closest competitors using? Does your current position in the standings call for a conservative or aggressive approach? How good of a sail is your working jib? We really like sailing with the working jib and have a lot of confidence in ours; therefore, we don't mind being one of the first

boats to switch down to the jib. This is especially true during the early stages of a buoy regatta. Later in the regatta, we might be more apt to stick with the competition if in doubt. If it's blowing much over 20 and looks at all like it will last however, we go with the jib for speed and maneuverability.

To get good speed out of your working jib (or any sail for that matter) you need to start with a well designed sail that is still in good shape, then set up and trim it properly. A working jib should actually be relatively full. A depth to chord ratio of 12 to 14 percent is common. The maximum draft should be positioned further forward than on a genoa at 25 to 35 percent aft. The sail's entry should be somewhat round and the aft 30 percent should be very flat with a clean exit. This shape will provide a lot of forward drive, a relatively forgiving steering groove, and minimal backwinding of the main. Does this sound like your sail? Trimming a working jib is relatively simple. Fairlead position and sheet tension combine to control draft in the lower half of the sail and set twist. Because the foot of the jib is so short, small adjustments have a big impact on shape so it's a good idea to drill some additional holes in the jib tracks. We find it useful to adjust the car position over about a 2 inch range to suit the wind velocity (back in more wind, forward in less wind). The jib sheet should be trimmed so that the middle batten is parallel to the centerline of the boat. This will place the top batten slightly twisted open. If it's really hootin, let the sail twist a bit more. If the helmsman experiences leeward helm or has difficulty keeping the boat in the groove, the jib may be overtrimmed. Placing marks on the jib sheets which can be gauged against a reference point on the deck and seen from the weather rail are a good idea. Once the proper trim for the conditions is established, the marks allow the crew to gauge the sheet position without getting off of the rail.

The Thunderbird deck and rig design has resulted in the creation of a variety of jib trimming systems which often affect the geometry of the sail. The jib tracks on Rev are positioned immediately outboard of the house. Several boats have tracks mounted further inboard on top of the house. An inboard position seems good in theory; however, in practice the outboard position definitely works well. If your boat has in line lower shrouds, the LP of your working jib will have to be reduced slightly as the shrouds will interfere with the leech of the sail. If you don't have in line lowers, the jib can be sheeted inboard of the main shrouds and utilize the maximum LP allowed by the Black Book. If we sailed more races in little jib conditions on Puget Sound, we might settle the lead position question here; but, unfortunately the debate is sure to continue indefinitely. It should be noted that Predator, a boat optimized for the windy conditions down under, carries her jib leads outboard of the house.

No matter how your boat is set up, the best way to improve your performance with the working jib is to get out and use it. It's never easy to try and learn new techniques or trouble shoot your rigging system in the heat of battle especially when the winds really blowing. Next time you're out sailing in 15 or more knots of breeze, throw up your working jib and give it a go.