The Pond Side ToDo List

1	Mast Bend

Use the Back Stay adjustment to obtain the desired mast bend and a good downward moment at the clew end of the jib boom.
Too little tension and the mast will be leaning forward causing terrible sail shape along with not enough downward force at the clew end of the Jib Boom which will allow the Jib to collapse in a gust. Too much tension and the top of the mast will come back too far and allow the head of the main sail to fall off.
Tip: To adjust the mast bend carefully lay the boat on its side and sight down the mast. You'll see how tightening the Back Stay will bend the mast aft. Notice the curve of the mast as you do so. I adjust for a slight curve aft in the lower 2/3 and virtually straight in the upper 1/3. There should not be any side to side bend. The mast pre-bend has a lot to do with the success of this procedure.

2	Main Sail Cunningham and Jack Line tension

If your rig is equipped with a jack line, apply just enough tension to prevent the line from sagging.
Apply just enough tension to the Cunningham to smooth the luff of the Main Sail when sheeted in.
Tip: A little more tension will work to flatten the entry of the sail and move the point of maximum draft further aft. Too tight and the Main Boom will hang up when tacking or jibbing in light air. When sheeted out the luff should be loose enough to allow it move easily across the aft face of the mast.

3	Power Up the System

Set the Sheet control stick at mid-position, then turn the transmitter on first and then the boat. When Powering Down reverse the order.

4	Sheet Control Lines

Check that the Sheet Control Lines have full travel and use the End Point/Travel adjustment on the transmitter to set both Sheeted In and Out positions of the Sheet Carrier.
The two sheet drive lines, the Tension and the Take-up, join at a point with the Main and Jib sheets to form the Sheet Carrier. Use the End Point/Travel adjustment on the transmitter to set the Sheeted In and the Sheeted Out positions of the Sheet Carrier. Adjust the position of the carrier to supply just the right total amount of sheet travel to position both booms where you want them.
Tip: I have the Sheeted In and the Sheeted Out positions marked on the deck of my boat with small pieces of tape for easy reference. You usually don't need to change this adjustment but knowing where they are and what they mean makes step 5 easier.

5	Main and Jib Boom Offset.

With the Sheet Carrier set to its sheeted in position, set the offset for each boom by adjusting the individual sheets.
Set the Main Boom offset by measuring from the center line of the Boat to the center line of the Main Boom at the Main Sheet Post and the Jib from the center line of the Mast to the center line of the Jib Boom at the Clew end. Double check that the sheeted out position of the booms is correct, the Main Boom Just touching the shroud and the Jib Boom just at or a bit short of perpendicular to the center line of the boat.
Tip: I've been using an offset of 10 mm for the Main and 65 mm for the Jib. These numbers will vary from boat to boat but they are a good starting point.

6	Main and Jib Sail Draft at the Foot
	Set the draft of each sail by adjusting the individual sail Clew. With the sail inflated with wind measure from the deepest part of the draft to the center line of the boom. For average conditions I usually start at 35-30 mm for the Jib and 30-25 for the Main, maintaining a 5 mm difference between the two. Tip: More draft in unsettled conditions, less in flatter water or steadier wind. When the wind picks up, be thinking about less draft. If the wind really gets cooking think about more draft to depower the sails. While all this is going on, pay close attention to your helm. Keep that boat in Balance. When you're cranking on the rudder you're slowing the boat. Not good.
7	Main Sail Twist sheeted out
	With the sails fully sheeted out use the Vang to adjust the amount of twist in upper part of the Main Sail. Tip: With the system powered up, the wind at your back and a very firm grip on the fin, view the boat and rig from astern. Let the booms out to their fully sheeted out position and notice how the top 1/3 of the main sail relates to the mast. Now with your free hand push down on the clew end of the main boom and note how the top of the sail moves aft. Use the vang to adjust the top of the sail so it sets more or less perpendicular to the center line of the boat. Check this adjustment with the boom on the port and the STBD side. They should be the same. If not investigate. Possible causes could be the shrouds being tighter on one side than the other causing the mast to be out of column, or the goose neck could be installed out of plumb. Optimum sail shape will be impossible until this is fixed.
8	Main Sail Twist Sheeted In
	With the sails fully sheeted in, use the Mast Ram to adjust the fullness of the lower three quarters of the Main Sail. With the same death grip on the fin and view from the stern as in step 7, concentrate on the curve of the leach of the entire sail. Look for a smooth, fair curve from head to clew with no falling off at the top and no curving back toward the center line near the bottom. As for "how much curve?", re-read step 6.
9	Jib Twist Sheeted In
	Use the Jib Topping Lift to adjust the curve of the leach of the Jib Sail to more or less match that of the Main Sail.
10	Jib Haliyard
	In general apply just enough tension on the jib haliyard to smooth out the luff of the sail. Tip: A little more tension will flaten the entry of the sail and move the area of maximum draft further aft.
11	Center the Rudder
	Use whatever means that are needed to center your rudder exactly.If you are off by the slightest amount then all the work you have done toward tuning your boat will be wasted.
12	Notes on Sail Trim and Helm
	Put your boat close hauled going to weather and determine if the boat wants to round up into the wind (weather helm) or fall off away from the wind (lee helm). Too much weather helm? More offset for the main and/or less for the jib, more fullness in the main and/or less in the jib will move the Center of Effert forward and drive the bow off the wind and move you toward a more neutral helm. Too much lee helm? Less offset for the main and/or more for the jib, less fullness in the main and/or more in the jib will move the Center of Effert aft and drive the bow up into the wind and move you toward a neutral helm. Tip: I shoot for a neutral helm, maybe some weather, but no lee. I think a bit of weather helm helps the boat follow a lift in the wind. A good thing.