

# ODOM Tuning Guide by Proxy

by Will Wagner

I am very new to the ODOM class but not new to model yachting and not at all new to sailing. I have sailed Marbleheads for years but just built my ODOM last year. I have sailed three local race days and the 2006 nationals in Ohio for a total of ODOM sailing days that you just barely need two hands to count. While I was waiting for my kit to arrive, I searched the net to find all of the information I could about the boat, so I could build the most competitive boat possible. In my research I found the COA website and the WindPower

forum but didn't find too much on tuning, except one post from back in 2004 that was a good list of where to put things and set up the boat. After reading the directions, the one ODOM tuning post on WindPower at <[www.rcsailtalk.com](http://www.rcsailtalk.com)>, and comparing them to all of my sailing experience, I wasn't convinced that the measurements for the placement of things given in the directions were the best. I couldn't find anything else that really told me otherwise, so at that point I decided to throw away the directions and figure it out on my own, which is more fun anyway.

In my searching on the Web for ODOM information, I got sidetracked and spent some time on the EC12 websites. They have every bit of information about those boats that you would ever need to know. Granted, the EC12 is a very established class, but it still seemed strange that there was no concrete information like that for the ODOM. I decided to put my

money where my mouth was and try to start the ball rolling. Being so new to the class, I knew I had nothing to offer on the tuning at this point, so I decided to ask the best in the class about

their boats. I sent out a questionnaire form to the top three finishers at the nationals, the top three season finishers from the North and South Bay (San Francisco area) fleets, the top three season finishers in my local fleet, and a couple of other notable people that have helped make the class one of the fastest growing classes. The spreadsheets starting on the next page are the compiled chart of replies I received. The ball was hard to get rolling, but I did get some great replies and made some new friends along the way. I think every ODOM sailor, from the top of the class to the bottom, will come away with something after spending some time going over the chart. The things I found most interesting were the inconsistencies, even from the top of the class, rather than the consistencies. One of the first things I noticed about the boats at my local lake was that they were all very different in their setups but very close in speed. Even after spending a lot of time with everyone's thoughts

while compiling the spreadsheet, it is still a bit unclear what the best setup really is. My setup is the most different from the norm, with the mast butt at 19-1/2 in. and the jib pivot 8 in. aft of the bow. I even moved the headstay attachment aft on the mast-head crane 1-1/4 in. My setup was meant as an extreme starting point for me to work back from to find a tune that I was happy with while learning about the boat along the way. As it turns out, my boat sails great and shows some great point and speed at times. I guess there are 100 ways to skin the cat, as they say. The thing is

the ODOM is still rather new in the big picture and still very much evolving, which is what makes it interesting.

The spreadsheet that follows has just about everything you need to know about setting up an ODOM to be successful on the race course, from some of the best in the class. After you cross the start line, it is all up to you though. A big thank you to everyone who helped me out and contributed all of the outstanding information. Also, a thank you and an apology to those that took the time to contribute but aren't in the spreadsheet due to space limitations. It wasn't in vain, because at some point, everyone's response will be accessible through the COA website. Take a look at the names in the chart, and if you see any of those guys on the dock, give them a big thanks. The information in the spreadsheet is bordering on sacred to some, but it is all spelled out here for the better of the class. Enjoy.



Typical ODOM action at the weather mark from the Maryland Model Yacht club's March series on lake Kittamaquidi in Columbia, Maryland (<http://www.mmyc.mmdgi.com>). Second around, sail number 484 is Will Wagner. Photo by Richard Wagner.

*Editors Note: Will did a great job in gathering the information in the spreadsheets on the following six pages. It was an unusual format, and difficult to fit on our pages, so please bear with us in reading this data. The first three pages include information about Boat Setup Measurements, and although the columns don't line up, the data down the left column is the same on each page. The same goes for the last three pages which include information about Tuning for Light, Medium, and Heavy Air. It is fascinating how successful skippers can use very different, and sometimes contradictory techniques, and make them work. It certainly validates the idea that attitude, strategy, and tactics are just as important as boat setup and technique. John Davis.*

## Boat Setup Measurements:

<i>Skipper</i>	<i>ODOM Building Directions: Adrian Olson, GRPMY</i>		<i>Bill Mullica</i>	<i>George Ribeiro</i>
	Original Directions	New 2007 Directions	Class Secretary	Original Builder
Mast Butt location from bow	18.5 in.	19 in.	18.5 and 19 in.	18.75 in.
Jib Deck Pivot location from Bow	6.5 in.	5.75 in.	Approx. 5.0 in. when mast is 18.5 in. from the bow. This is adjustable. Generally the jib pivot should be far enough forward of the mast to allow the jib boom to clear the mast and may be even more forward than this to open the slot and decrease weather helm.	6.5 in.
Jib Pivot location on Jib Boom from Headstay	Between 3 in. and 3.5 in.	Between 3 in. and 3.5 in.	0 in. On my current rig, the jib pivot is directly under the headstay. The jib boom extends forward from the pivot approx. 3 in. and there is a line running from the forward tip of the jib boom up to the masthead crane. Tensioning this line produces tension in the jib luff, thereby reducing sail twist. If I had used the conventional jib pivot location on the boom (about 20% of the boom length aft of the headstay), then the pivot location would be about 2.5 in. aft of the headstay.	3.5 in.
Mast rake measured from the bottom of the transom at the waterline to the CL of the top of the mast at 56.5 in.		Adjust the mast rake so the measurement from the tip of the bow to the top center of the mast is 60.5 in.	63.5 in. when the mast is 18.5 in. from the bow. I can adjust the rake by moving the jib pivot point forward or aft on the deck.	Keep mast rake perpendicular to the waterline.
Stay locations relative to the mast centerline	0.75 in. behind	0.75 in. behind	Inline: when the mast is 19 in. from the bow. This is the light air position and causes the side stays (shrouds) to be looser than when the mast is forward at the 18.5 in. position. Aft 0.5 in. when the mast is 18.5 in. from the bow.	0.75 in. to 1 in. behind
Type of sails used			I use Black Magick sails. The Black Magicks seem to have an "average" cut—not too flat—not too full. I really like the look of their airfoil shape.	I am currently using Windjammin sails. I have used DT sails with success, and my favorite sails were Gordon Stout.
Typical conditions sailed in			Conditions at our pond are usually light and variable. (When the wind comes up, we go home—no kidding!)	Flat with very little chop and 4 to 10 kt. of steady wind.
Further comments regarding Boat Setup		At the bottom of the next page, see separate "Further comments regarding Boat Setup."	On my boat, the entire rig can be moved forward or aft and the rake can also be adjusted. In light air, the mast position is aft (19 in.), and the jib pivot is aft as far as possible (so the jib boom just clears the mast) and the rake is aft also. As the wind increases the mast is moved forward (18.5 in.) and then the jib pivot is moved forward to reduce the rake, all in an effort to reduce weather helm and keep the boat balanced.	In very light conditions, < 2 kt., open up the jib slot. Never allow the leeches of the sails to hook in any conditions. Keep the mast rake perpendicular to the waterline. It will actually look like the mast is tipped a bit forward due to the increasing freeboard at the bow. Raking the mast aft may be faster upwind but is slower downwind.

## Boat Setup Measurements:

<i>Skipper</i>	<i>Craig Mackey</i>	<i>Scott Rowland Windjammin Sails</i>	<i>Joe D'Amico</i>
	1st 06 NCR	2nd 06 NCR	3rd 06 NCR
Mast Butt location from brow	19.5 in.	18.5 in.	18.5 in.
Jib Deck Pivot location from Bow	6.38 in. to 6.75 in.	6.5 in.	6.5 in. from bow to center of stainless steel eye screw on deck, there is no adjustment fore or aft with this eye screw.
Jib Pivot location on Jib Boom from Headstay	3 in.	3 in.	Mast rake measured from the bottom of the transom at the waterline to the CI of the top of the mast at 56.5 in.
Mast rake measured from the bottom of the transom at the waterline to the CL of the top of the mast at 56.5 in.	60.63 in. measured at 55 in. to aft of mast.	62.75 in. or a straight mast. Rake back in really heavy air—it will reduce the tippyness of the boat, especially when a huge gust hits.	60.5 in. To change the CE (center of effort) for heavy air, ease the backstay and take up on the jib pivot line which lowers the jib boom closer to the deck. For medium air, it's at midpoint from the deck (midpoint measurement is 2 in. from deck to bottom of jib boom), and for light air, raise the jib boom and take up on backstay.
Stay locations relative to the mast centerline		0.75 in. behind mast centerline.	I always keep my shrouds (sidestays) in line with the center of the mast, which allows me to tip the top of mast fore or aft.
Type of sails used		My own Windjammin sails.	The sails were made by Gordon Stout. They are full cut.
Typical conditions sailed in			I sail in all wind and water conditions.
Further comments regarding Boat Setup		As a boat heels, its center of balance moves forward. Move the mast forward in heavy air, which moves the sail center of balance forward and counteracts or neutralizes weather helm. This keeps the boat balanced better and keeps it from heading up in the puffs.	Proper tuning is the key to boat speed, along with a good set of sails. If you want to compete at a high level of competition, please buy a good set of sails from a good sailmaker. When you go to a major regatta, talk to the sailors that win and ask them what they think of their sails. Then, walk around and look at other sails. If you know good sail shape, you can usually tell a good set from a bad set.

### *Further comments regarding Boat Setup: New 2007 Directions by Adrian Olson*

The new ODOM Assembly Instruction Manual, dated 2007 (check the front cover), has been updated. The most important changes are found on page 11, Section E—Installing deck hardware. Measured from the bow, the new manual shows the location of the Jib Deck Pivot to be 5-3/4 in., the Jib Sheet Exit Guide (fairlead) is 15-1/4 in., the Mast Step is 19 in., and the shroud wire Chain Plates are 19-3/4 inches. Another change is found on page 16, step 10—Jib Club. The adjustment here is the location of the Jib Sheet attachment point to the Jib Club, which is now 13 in. back from the forward end. This corrects the sheet length issue so the booms move out together and the boat performs correctly off the wind. Once the boat is complete, using all the measurements as per the new manual, adjust the mast rake so the measurement from the tip of the bow to the top center of the mast is 60-1/2 inches. This will now give you a starting point to tune the rig. Most of the adjustments from this point forward depend on the shape of the sails and the weather conditions you are sailing in. For specific sail adjustments I would suggest contacting your sailmaker, as most usually have that information available.

Why did I change these measurements? (Of course, because the boat goes faster this way.) The prior measurements for mast and jib swivel locations were based on the original building manual, which dates back many years. Over the last few of years I have been keeping track of these measurements based on some of the faster boats. Many of these skippers have been kind enough to share this information with me. I began building to these specs and found the boats did, in fact, move very well and resist nose-diving much better.

I would also like to mention that these specs are within the allowed measurements in the Class Rules, and it is my hope that skippers in the future will continue to experiment within the confines of the rules to see if there are other, perhaps better, measurements for things such as hardware locations. My father taught me an important lesson when I was a kid; copy the fastest boat, and you will only go as fast as he does; try something else and you may just beat him...

## Boat Setup Measurements:

<i>Skipper</i>	<i>George Pedrick, Jr</i>	<i>Steve Schneider</i>	<i>Jess Atkinson</i>
	1st 06 season North Bay R/C Sailing Assoc.	2nd 06 season North Bay R/C Sailing Assoc. (#38)	3ed 06 season North Bay R/C Sailing Assoc. (#38)
Mast Butt location from brow	19 in.	19.5 in.	19.5 in.
Jib Deck Pivot location from Bow	5.75 in.	6 in.	5.5 in.
Jib Pivot location on Jib Boom from Headstay	3.38 in.	3.5 in., in medium to heavy air.	2.75 in. I move the pivot point on the boom a little.
Mast rake measured from the bottom of the transom at the waterline to the CL of the top of the mast at 56.5 in.	61.69 in.	61.75 in.—I prefer to measure from the bow tip to the mast top CL @ 61.0 in.	I go from the top of the spar (56.5 in.) to the top of the transom at the back stay—59.63 in.
Stay locations relative to the mast centerline	0.38 in. aft of mast CL	Inline. Anything else complicates backstay adjustments.	Aft about 1 in., maybe a touch less.
Type of sails used		Karl Tulp, a local amateur ODOM builder and sailmaker, makes my sails. I've used standard cut Scott Rowland's sails, Gordon Stout's sails (Canada) and Black Magick sails (New Zealand) in the past. All are good, but Karl's are made to my spec.	I build my own. The sails are most certainly a big part of it all—flat sails are harder to get going in light puffy condition, and fuller sails slower at the top end with boat speed, however, they build speed faster after a tack.
Typical conditions sailed in	San Francisco Bay Area	We sail in the San Francisco Bay Area, known for windy conditions. When sailing in the Bay, we get winds ranging from 8 to 25 kt., with short but steep choppy waves.	San Francisco Bay Area
Further comments regarding Boat Setup	In any given race, you will see a variety of conditions, so I tune my boat for best all around performance. About the only adjustment I make is adding additional backstay tension when I am confident the wind will stay up.	We sail in mostly breezy conditions (San Francisco Bay). I leave my mast step at 19.5 in. for all conditions. I adjust for lee helm in lighter breezes by moving the jib boom pivot forward on the jib boom, moving the jib aft and closing off the slot. How far I move this depends on how light the breeze is, keeping in mind the boom must still clear the mast.	

## **Tuning for Light, Medium, and Heavy Air:**

<b><i>Skipper</i></b>	<b><i>Bill Mullica</i></b>	<b><i>George Ribeiro</i></b>
Outhaul Settings	Approx. 0.75 in. I don't fool around with sail draft too much. I definitely don't flatten the sails in light air, as is common on full sized boats. If anything, the jib is a little flatter than the main, as I like to be able to point as high as possible. If the boat is overpowered in heavy air, I will flatten both main and jib.	Light: 1 in.—less than 4 kt. Medium: 1.5 in.—in 4–10 kt. Heavy: 1 in.—10-plus kt.
Backstay Tension	Light: loose Medium: snug Heavy: tight Comment: I use backstay tension to adjust the twist of the jib...more backstay tension means more tension in the headstay, more tension in the jib leech and less twist in the jib.	Light but just enough to prevent the jib luff from sagging in all conditions. Not tight.
Headstay Tension	Headstay tension is directly related to backstay tension, as the headstay and backstay oppose each other. If the headstay is too loose, such that the leading edge of the jib starts to flutter or fold over, then I will increase backstay tension to harden up the leading edge.	See above. Also, keep light tension on the jib halyard but do not over tighten.
Sail Twist	Light: slightly more twist than in medium air. I don't want to choke the air flow in light air. Medium: second batten on mainsail parallel to boat centerline. Jib twist matches main twist when viewed from the back of the boat. Heavy: more twist as the wind gets heavy, allowing air to escape high in the rig to keep the boat on its feet. Comment: Adjust the backstay to match jib twist to main twist.	Mid leech parallel to CL of boat. In heavy air, twist off the main a bit to help reduce weather helm.
Jib Slot	I want the slot to be as small as possible without backwinding the main. This allows the boat to point as high as possible while still maintaining good speed. When in doubt, close the slot a little more and then look for wrinkles or fluttering in the luff of the main (backwinding). Then open the slot until the backwinding stops.	Much about the sail trim depends on the cut of the sails. Mid leech parallel to CL of boat, with the jib boom pointing just inside the shroud base. The main boom should be just off of the CL, and use the vang to maintain proper twist.
Stay Tension	Light: side stays (shrouds) slightly loose Medium: side stays (shrouds) snug Heavy: side stays (shrouds) snug on shore, but wind pressure will make the windward shroud tight and the leeward shroud loose in heavy wind.	Just enough to keep the mast from moving from side to side.
Further comments regarding Tuning	I like to set up my boat for upwind performance and pointing ability. I don't use too much mast rake even in light air, because it hurts downwind performance. In very light air, I stay on a tack as long as I can, because tacking slows the boat appreciably.	The ODOM is a medium to light displacement boat that quickly loses a lot of boat speed in tacks. In light to medium air, make nice round tacks. In medium air, ease the sails a click or two after the tack, snapping them back in a boat length or two after the tack to help get the boat quickly back up to speed. In heavy air, make quick tacks to avoid getting into irons from tacking too slowly.



## Tuning for Light, Medium, and Heavy Air:

<i>Skipper</i>	<i>Craig Mackey</i>	<i>Scott Rowland</i>	<i>Joe D'Amico</i>
Outhaul Settings	I generally have the foots fairly flat.	1 in. main and jib Really heavy, go to 0.5 in.	In light to medium air, there is about an inch between booms and sail; in heavy air about 0.5 in.
Backstay Tension		Drifter, very little tension Medium, slightly tight Heavy, a lot Use backstay tension as a means of controlling jib twist. More wind means more pressure to twist the top of the jib, meaning more backstay needed to counteract this wind force.	The backstay tension is the main adjustment in my tuning. I don't use a jib topping lift, so I ease the backstay to get more twist in the jib leech or tighten the backstay to close the twist in the jib leech. That's the reason all of my boats have the shrouds (sidestays) in line with the center of the mast; it allows the top of the mast to go fore or aft.
Headstay Tension		It works in conjunction with backstay. More backstay causes the jib boom to want to center on the boat... making it hard to go wing-on-wing. Thus, in light air, carry as little backstay tension as possible so the jib stay is loose and can swing freely, but enough to keep the jib's leech parallel though.	The headstay takes care of itself. In light air when you ease the backstay to get more twist in the jib leech, the headstay is going to sag whenever it wants to. This keeps the tuning simple. When the wind is stronger, you tighten the backstay to bring the jib leech back to its proper position to match the twist in the main, and that will tighten the headstay, which is what you want. You can see that by just adjusting the backstay. It really simplifies the tuning process.
Sail Twist	Not too much twist.	You want the jib leech to be parallel to the jib boom. You don't want the jib to twist open past this parallel, as that will make the top luff too soon and lose power in the upper section. This will also kill your pointing. You want to use just enough backstay to tension the jib stay and, more importantly, the jib topping lift. You also don't want the leech of the jib to hook to windward, so use the topping lift to control the leech of the jib from hooking in the lulls.	When looking at sail twist, I set the twist in the main first; then match the jib leech to the main leech. Heavy air, less twist. Medium air, medium twist. Light air, more twist. I know its not very technical, but I just use my eyeball.
Jib Slot		When boom is 2.75 in., mid jib is about 3.0 in. You want the jib to funnel the wind down the back of the main. As in an airplane, the wind over the backside of the main creates the lift—the faster the wind goes, the more lift—the jib increases the wind and wind speed of the back of the main. Too far out and the wind breaks off the main, losing lift, and too tight and the air gets to the topside of the main—no good.	When you set the jib leech to match the twist in the main leech, that automatically sets the jib slot.
Stay Tension	All of the tuning adjustments I make depend on a lot of factors like wind	Tight all the time. I don't like a loose rig, as it is not as responsive.	The shrouds (sidestays) are adjusted to a medium tension, enough so the mast won't jump out of the mast step, I never change shroud tension unless the wire has stretched.
Further comments regarding Tuning	speed, wave height, and course type. I don't measure any of them; I just try to get the boat feeling good.	Set for speed! I set my jib to 2.75 in. jib boom to centerline of mast and the main to 2.5 in. to 2.75 in. (light air) from centerline. This is measured from end of the main boom to centerline. These two settings seem to work well—a great upwind setting for good power and acceleration. I use this setting 95% of the time. When I need to pinch or shoot a mark, I then click my trim tab on my radio five clicks in for point or pinch mode. However, as soon as I get past the obstruction or away from the guy I was trying to climb above, I let the trim back out the five clicks back to drive mode. Also, ease in the lulls, head up in the puffs; the boat should naturally slightly head up ever so slowly. Let out a tiny bit after a tack, then pull back in 3 seconds after getting up to speed.	The best advice is to get out and race, and race and experiment to see what works. I don't think there is any substitute for time on the water under race conditions; you can't know how you're doing when sailing alone.

<b>Tuning for Light, Medium, and Heavy Air:</b>			
<i>Skipper</i>	<i>George Pedrick, Jr</i>	<i>Steve Schneider</i>	<i>Jess Atkinson</i>
Outhaul Settings	My main measures 1.25 in. My jib measures 1.19 in. This measurement will be different for different sails, depending on the fullness of the cut. My sails are quite full, so someone with flatter sails would have the outhaul set even looser.	Jib: 1.75 in. Main: 1.38 in. My outhaul positions do not change. More wind, more twist. I then match the leech curves, sighting from behind the boat.	The jib in general is fuller than the main. I adjust the jib to ensure that the sail shape allows the smooth flow of the air that passes over the backside of the main...
Backstay Tension	Light: just take out the slack. Medium: snug Heavy: tighter	In light and medium, just tight enough to prevent headstay sag and in heavy, very tight. A tight backstay prevents the jib from winging easily. In lighter winds, the backstay should be as loose as possible but not allow headstay sag. In heavy breezes, a tight backstay doesn't matter for winging, as the wind forces are greater.	As the wind builds up, tighten the backstay when you notice that the head stay has some sag.
Headstay Tension	In light air the headstay may show some slack when sailing down wind. It will sag a bit to leeward when going upwind in a puff. As the wind builds the headstay will sag and the jib leech will twist off. Adding backstay tension will tighten the headstay and the jib leech. The jib leech is prevented from getting too tight by the jib topping lift.	No sag. All related to backstay tension as stated above. I can adjust the jib luff tension separately but seldom do.	I do my best to keep it tight/straight.
Sail Twist	In light air, set the sails so that when the boat is sailing upwind, the top (if you have three battens) or 2nd batten down (if you have four battens) is set parallel to the boom. This is a good starting point to fine tune from. The leeches will twist off more as the wind builds. To reduce the amount of twist in the jib, add backstay. This will also reduce weather helm, as the jib will have more power, and the main will be twisted off, which will depower it, moving the effort forward.	I find that the boats sail better with some twist in all conditions. The more wind, the more twist needed. If my upper jib telltale is breaking before my main mid-point telltale, I have too much twist in the jib. I find this fast in all wind conditions. This requires setting up the main twist for conditions first, then matching the main leech twist with the jib twist, sighting from behind. Most of us sail with a jib boom topping lift that allows for adjusting jib twist independently of backstay tension. Launch; observe the boat sailing directly away; adjust as required.	I set the main boom pointed just inside the corner of the transom and the mainsail twisted about the same as the jib. At the point when it is really blowing, I may twist the main off just a little to relieve weather helm (let the sheet out an 0.13 in. or so) or back off the vang and 0.5–0.75 in. twist. That really depends on the conditions; gusty, choppy, strong breeze, etc. In light conditions, I just ease the sails out just a touch. Twist and settings remain the same.
Jib Slot	Measurement of jib boom from fwd. CL. of mast: 3.5 in. Measurement between mid-leech and fwd. CL. of mast: 3.75 in. These numbers will vary greatly depending on the cut of sails, location of mast, location of jib, settings, etc. I don't think this is the best way to quantify these settings, although it is a place to start.	Jib boom: 12 degrees from boat CL, measured from the jib pivot. I have a short run of white pinstriping on the deck at this angle for ease of angle alignment. For the main boom angle, I run a line from the mast base CL to a point 0.5 in. inboard of the transom corner and use this for main boom angle. White pinstriping here also. These angles do not change for wind conditions, only adjust twist.	Jib boom position on the deck is 12.5 degrees. This points it at just outside the raised section of the deck. The twist: I look to get the top batten inline with the boom (topping lift is tight).
Stay Tension	I always keep my shrouds very tight. They make a twang when I pluck at them.	Just tight enough so the mast doesn't move from side to side but loose enough to keep static load off the chain plates.	When my boat is set up, the side stay tension is very tight.
Further comments regarding Tuning	One item that is peculiar to the ODOM is the size (surface area) of the keel. It is small relative compared to some other model boats and is easily overpowered. This particularly shows up when you are tacking. If you just leave the sails sheeted in tight and tack the boat over, it will heel over on the new tack, the keel will stall, and the boat will slide sideways momentarily. This will kill your speed, and you will lose about a boat length. Do this five times on one beat, and you have given up five boat lengths. The method I use to tack requires a bit of practice and a bit of technique. Just as the sails are filling on the new tack ease the sails out about three or four clicks on the transmitter. This unloads the keel and reduces the amount of heeling caused by the sails filling. This allows the boat to begin moving forward on the new tack without stalling the keel or excessive heeling. As the boat starts moving forward, I snap the sails back in to the upwind position. This puts the boat back up on the wind and brings the boat up to speed quickly after the tack.	I build my boats stiffer than the standard. Accordingly, in the heavier winds I am able to out point most of the fleet and still foot with them. I pay a little for this in lighter winds as my boats are a bit heavier than most (7 lb 9 or 10 oz. average). In lighter air, I have to make up for this with skill, if possible. I use the sail trim fine tuner on my transmitter coming out of tacks. I have this adjusted so I can ease the sails a pre-set amount coming out of the corners. As speed builds, I slide the tuner back to the full in position.	I feel I do not change my boat much...? if at all... for the change in conditions. I set the boat up at the pond for the conditions of the day and leave it. If it really starts to blow, I sheet out a touch or maybe loosen the leech of the main so as not to get overpowered with weather helm. Jib does not change. Good shape is needed for all wind ranges.. If it is good in the light air then why would it not be good with just a touch more breeze. Only if the settings change... If the wind builds up, I tighten the backstay if I noticed that the headstay had some sag. I do my best to keep it tight/straight... My rig and jib triangle are pretty tight, so they stay in shape... If things are too loose, it will change as the wind blows up and then you lose speed...