

Crewing in a Star



By Magnus Liljedahl

I always loved sailboat racing. There was nothing else that I would rather do. To line up on the starting line and then play the game is what it is all about. To succeed, you must stick with the sport for a long time. There is always another race, so don't get down on yourself, whenever things turn against you. The ultimate reward is the one, which we all will gain, that is if we play it fair and square. It is the friendship and respect from other people, from all over the world. I wouldn't want to trade any of them, for any victory, that I have been fortunate enough to achieve. Remember, it is only a game and there is always another race.

The following is a brief instruction on how you can improve your skills and get the most out of your race. Our sport is filled with exceptions and variables. There are different techniques that could lead to the same success. It would take a book to try to cover them all.

Preparing for a season:

As always in life, it starts with a vision, a dream and the setting of goals to achieve. You are building a team with someone that you will be spending a lot of time with. You should both know that conflicts are to be expected, but as long as mutual trust exists, your foundation is solid.

Top priority ought to be the combined crew weight. All the top teams in the world weigh in at maximum weight. It used to be that the skipper would make the crew gain all the weight, but today it is different. Some top teams believe in having the skipper and the crew weighing the same is ideal. This may hold true if the skipper can hike as efficiently as the crew, but there are not many (if any) like that. As a crew, ideal weight is about 10% more than the skipper. This combination is favorable for tacking, since the crew is usually first over the rail and it is good for boat handling.

Physical training is a basic must for any athlete and the Star crew is no exception. Even though the most important training you can do is to sail the boat, spending countless hours hiking and tacking, it is practically impossible for two people to hook up and spend the required time working out on the water. Our sport is mostly aerobic, but it is also important to build up on anaerobic strength. The off season is usually when I hit my gym the hardest and the rest of the season becomes a maintenance phase. I was always keen on going to the gym and lift weights, but the last few years I have also included other forms of cross training. Power walking, biking, rowing and kayaking are some of my favorites. Stretching and maintaining a good diet are other important factors that you should make a part of your daily routine. You may want to consider a licensed Health Fitness Instructor i.e. a personal trainer. It makes a world of difference.

Getting down to the boat:

This is actually when the race starts. Your focus should be total and your concentration on top. Have your clothing planned out and your sun lotion applied. Make sure that you will stay comfortable in all conditions. It is your responsibility that your clothing weighs in.

I was never a great boat worker and some things are better to be left for the skipper. You can always make sure that the tanks are empty from water, that your backstay has the proper markings and that there is drinking fluid on-board. Check out your hiking straps and customize them if needed. How about a little Teflon polish where you sit, it sure helps sliding in and out. Learn your digital compass to perfection. If you don't have one on the boats, encourage your skipper to get one, they are a must. Hang around your boat; don't let your skipper be looking for you all over. Your main job is to help him do well in the race and he may need you for a last minute change.

Going sailing:

Hoisting the sails in heavy air could be a very difficult task, but if you follow these steps, it may ease the task. The sails are expensive and not only that, you need to have them fresh for the race. Flapping them in the breeze is not an option.

- The jib should be hoisted first in most circumstances.
- Facing forward, with the jib (rolled up) between your legs, hook up the clew, then turn around and hook up the sheets. If your jib has blocks, use the top block for the starboard sheet (it will help when you set the pole). If it is windy, you will need to have your skipper to help you from this point on, but if it is under 12 knots you can hoist it yourself.
- With one foot on each side of the jib and the head in your hand, you stand up, facing forward. In heavier air I lean, heavily, with my back on the mast and allowing it to support me from falling.
- Hook up the halyard and then (still with the jib between your legs and feet) move forward and zip up the luff as far down as you can.
- Hoist the jib some and then continue zipping it up. If it is windy, your skipper will have to help you. As you lean up against the mast, hand the head back to him so that he can hook it up and start hoisting while you are holding on to the forestay, standing up, zipping the luff.. Once it is 3/5th of the way up, you must move your leeward leg, allowing the jib to fly freely. Your skipper can now move back in the boat while holding the halyard. It is your job to get back to the mast and lock it in.
- If the luff is not zipped up all the way, get back up to the bow and do so.

While hoisting the main in windy conditions, I like to start out on my knees, in front of the mast, facing aft.

- Help un-roll the sail, while keeping the luff tightly together on the leeward side of the boom. It is very important that you keep the luff together thus preventing it from falling in

the water. Unless you are still tied up to the dock, keep in mind that your jib is up and the boat is moving. Losing the luff in to the water is not an option and it could easily ruin your day. If it is very windy, I would sit on one knee, using the foot of the other leg to lock in the luff. If the conditions are moderate, I would stand up and hoist, still locking in the luff with my foot.

- Now your sails are up, the Cunningham is on, your lines are organized and your clothing and harness is on (I suggest that you get dressed before hoisting the sails. Don't make the skipper wait for you to do so. You may lose valuable time to check out the wind and the racecourse).

To avoid "assholes" in the jib sheet, I often undo one end and throw it in the water so that it will straighten out. Don't coil it back up. Simply pull it back in to the boat in a pile. If you coil it, chances for another "asshole" to develop increases. I usually gather the jib sheet on the port side, under the deck. I do the same with the back stay line, except I put it under the starboard side. In windy and wavy conditions, where you get a lot of waves rolling in to the boat, the ropes have a tendency to float aft and they end up around the Barney post. To prevent this, simply keep kicking the ropes forward.

Final preparations:

- Calibrate the compass to the heading given on the committee boat. Adjust the tacking angle if needed. It should be somewhere between 65-72 degrees. I usually read the high and low indicator on our compass while my skipper reads the actual course we are steering. It is very helpful for the crew to be aware of the fact if you are on a header or a lift. If you pay attention to this, no more tacks will come as a surprise.
- Try to find the weather mark before the start. This will be your job all day, so the sooner you will find it, the better off you are.
- Look for the breeze and don't block the compass as your skipper tries to find the favored end of the line.
- Keep an eye on the committee boat and be prepared for the sound signal. An added benefit with the digital compass is the timer function. Even though the display is visible for the skipper, I still count the time down.
- Make sure that all the lines are cleaned up. In my case I stuff the excess vang- and out-haul line inside the Barney post.
- Keep the bailers open if needed but let's not forget to close them if the conditions permit.
- Inform your skipper where the "hot teams" are on the line and help him keep clear of other boats.

On the final approach to the line, I make sure that the weather jib-sheet is pulled in. The same applies to the leeward back-stay. You may have to tack right away so you got to be prepared. Keep the bulk of the jib sheet to one side under the deck and the backstay on the other side, under the deck (I don't believe in storage bags). If it is real windy, keep kicking the sheet and the backstay line, up underneath the deck, or else it will float back to the Barney post area and may cause a tangle. Try to help your skipper by looking behind him and up the line, informing him about approaching boats and also if you can see the committee boat. Chances are that if you

can't see them, they can't see you. Again, make sure that your weather sheet is pulled in after each and every time that you let the jib out to slow down the boat. By the time the gun goes off, your boat-speed should be "full throttle".

First beat:

Feed information back to your skipper throughout the race. Let him know what you see, especially after the start. Let him know if there is an opportunity to tack, if he should put it in a point mode or foot and avoid being run over. Feed information about where other boats are going. Who passes behind your transom? Did the boat that just crossed us on port clear the boats to windward? Keep feeding the information. My skipper usually knows before I tell him, but I keep talking to him as much as I can. I won't hurt. Some info needs to be edited in order not to distract the skipper but that usually works itself out, as the two of you become a team. It is helpful if you can develop an eye for the trim and crew position of your competition.

Keep looking for that mark. You got to find it. Not only do you need to find the weather mark, your job is also to find the leeward gates. If you know where they are before you get around the weather mark, it will be of great help for your team. Keep looking back. You will eventually find them.

As you approach the weather mark your job is now to find the offset mark. Is it up or down from the weather mark? Will we be reaching to it or is it going to be tight? Are we lifted going in to the mark or are we headed? This information will help in deciding what gybe will be favored on the run. A final check to make sure that the keel is clean is in order. If you know that there is current you may want to remind your skipper.

Offset leg:

Make sure that your skipper got the vang tight, before the rounding. This will help maintaining an optimum sail-shape as you get around the mark. While on the offset leg, I start looking for the breeze. Depending on the conditions for the day, I will keep looking for puffs all the way down to the leeward gate, and then some. Adjust your trim according to the apparent wind. Usually, you need to drop the jib leads out-board and sometimes start bringing the mast forward but it all depends on the angle to the offset mark. Talk about which way you want to go on the run, pole-set or jibe-set

The run:

Once around the offset mark I usually let the mast forward first of all. If we do a gybe-set, we may gybe first but the standard rounding would be mast forward, pole up, jib up, get forward in the boat and never ever cause a leeward heel. Stay on the weather side of the boat at all times (yes there are exceptions, but not many). Since the standing-up technique is now prohibited I believe that it is critical to move as far forward as possible. You have to keep the bow down (with

a Folli for sure). One advantage is to keep a longer water line, but there are other advantages as well. After years of testing we have found this to be faster.

Look at the boats that are still sailing upwind and approaching the mark (hopefully, there are some boats behind). Can you detect either of them being lifted and or in a puff? Let's say that you are running on a starboard gybe and when you look back, you see a group of boats, lifted on starboard tack and also in more breeze. This may indicate that you should gybe right away. A basic technique is to have your skipper put the boat in the direction of the next mark. You would want to stay on the gybe were the main wants to be. If you programmed your Tactick before the start, you did the right thing because the display will tell you how many degrees off course you are.

Other than balancing the boat and finding the next mark, the most important task for the crew, while sailing down wind, is to keep your air clean. Obviously, if your boat has a masthead fly, you will find your apparent wind easily. The problem is, so will your competition. We have substituted the masthead fly with two pieces of yarn (each about six inches) on each shroud, below the spreaders. It is a good practice to keep calling the distance you are in front of disturbed air. This way you give your skipper has chance to "double check" your information, before it is too late.

Similar to the up-wind leg, it is great if you can develop an eye for how your competition is set up. Look at crew position, main trim, vang tension, mast position and jib hoist. In addition, I try to see how the spreaders are angled on the fast boats. The information can be valuable in adjusting your own boat. Look up your mast from time to time. Chances are that your vang is too tight. As you approach the leeward mark, you have to be "lightning" quick with the takedown and putting the boat back in the upwind mode. It is always helpful to talk about your next upwind leg strategy while you are on the run. Ask you skipper what his plan is, or even better yet, tell him what you see and make suggestions. Make sure that your jib leads are back in up-wind mode. By now it should also be determined which gate marker to round. If you know that you will stay on the same tack for a while, after the rounding, you may put less emphasis on making the boat tack ready and perhaps make a later takedown. If you plan on tacking right away, obviously your leeward backstay needs to be tight and the slack taken out of the weather jib sheet.

Our standard rounding would be:

As I move back to put my feet in the hiking straps, I put my hand on the slug (the fitting attached to the sail below the Cunningham). My skipper now pulls the cunningham, then:

- Slug down
- Out haul on
- Jib down
- Mast aft (pull backstay – ram off)
- Pole down
- Trim your sheet and take up as much slack as you can in the weather jib sheet and leeward backstay

- Balance the boat as needed.

Critical here is that your skipper trims in the weather jib sheet for you. He will not be able to get it all the way, but the more the merrier. The advantage with pulling the mast back before you take the pole down is that it is a lesser chance that the jib will blow around the forestay.

Pay attention to any course change as you get around the mark. Make sure that the leeward backstay is in tight. Be observant as always.

Reaching:

To be fast on the reach, spells hard work and proper technique.

To be successful, you need to:

- Know where the next mark is.
- Get out of the wakes from any boats ahead of you.
- Keep clean air.
- Pull the vang very tight
- Drop the mast forward, sooner rather than later.
- Adjust your sail trim.
- Drop the jib-leads.
- Hike as hard as you can.

A good skipper will keep the boat moving all the way. Keep telling him to head up in the lows and, very important, to bear-off in the puffs (this is key).

No crew could straight leg hike the entire distance. Similar to a wrestling match, you need to put your system in a recovery mode now and then, in order to go the distance. An added benefit by bearing-off in the puff, or on the top of a wave, is that it gives your team that opportunity.

Once you gybe on to the next reach, you have got to know where the bottom mark is. Keep looking for the puffs. Again, head up in the lows and leave yourselves with plenty of space to leeward so that when the next puff hits, you have room to bear off and make gigantic gains.

Next lap:

Now, the upwind game starts all over again. Keep reporting where the competition is headed and start looking for the next mark. Whatever your position might be, do not give up! Think of it as a basket ball game, where you may end up winning at the buzzer.

Once you cross the finish line, you may rest.

Sail trim and boat handling:

I usually trim the jib, keeping the leach at the band on the spreader. I do trim and ease a fair amount as we sail along. In general, if it isn't too choppy, I will sometimes sheet block-to-block (when both fully hiked). This is usually for short periods when my skipper rides the momentum of the boat and is pointing super high. It is very important to ease out as the boat starts to slow down and your skipper comes back to build speed. If we encounter exceptional chop (like power boat wake) I sometimes ease the jib briefly, from time to time.

I usually hike from the forward cleat on a Folli and I believe that it is very important to keep the weight as far forward as possible, not only down-wind, but up-wind as well.

A roll-tack can make a big difference. It takes timing between you and your skipper to perfect it. The best roll-tack is when you can stay on the old tack as long as possible, give it an extra hike (push) at the last possible moment and then jump over to the new weather side and hike out fully. However, there are many variations. The first part is often the same, but the amount of hiking required on the new tack will vary.

The gybing techniques are many, but if we narrow it down, you either gybe the pole first or the main first. The tendency today is a serious roll-gybe, with the pole first. The advantage is that once the main is gybed the jib is already full, aiding in keeping the bow down and you are ready to ride. Obviously, you need to work on both techniques. Gybing the main first provides an "anonymous" gybe. It also enables you to gybe in heavy air whenever you have top speed i.e. the least amount of pressure on the rig.

See you on the race course!