

Another Side to Crewing

Lets assume that you have perfected your crewing technique and are now able to balance the boat, trim the sails and tack and gybe with the best of them. What else can a crew do to while the time away..?

Picture painting

The crew can have a major role in increasing the amount of information available in the boat. If you have ever had a go at helming you will realise that one of the big problems is trying to make the boat go fast **and** look around to see what the other boats are doing so that you can position the boat on the racecourse. Your boat may be the quickest in a straight line but unless it is positioned correctly on the course you will never get the best results.

The crew has a lot more time than the helm on certain parts of the racecourse to look around and see the bigger picture.... *Where is the windward mark, Where are we on the track, near to a layline, Are we lifting or backing, are there any gust coming, Will it back or lift, Waves, Who has more pressure, Where is the majority of the fleet, Are the boats approaching crossing or ducking.....*

It could be argued that this picture painting is more important than actual sailing technique. The boat length lost by a "slow" kite hoist would be more than compensated for by a sharp crew spotting that the run is incredibly one sided and an immediate gybe is called for.

The rest of this article deals with each part of the racecourse and the input the crew might provide.

Starting

- How many laps?
- Position of the first mark?
- Which end of the start line is upwind? Who did well in the previous fleet's start?
- Which leeward mark is upwind (leeward gate only)?
- Keeping an eye out for what the race officer is doing. Is he moving the line or the position or the windward marks?
- Time keeping, counting down the start. This can only help the helm who doesn't need to look at the watch all the time. On top of this try to keep the countdown reminders the same for every race i.e. every minute until 2min every 15 secs until 1min every 5 secs until 10secs then every 1 second. It helps the helm in timing of runs to the line. Make sure you correct for any offset you have noticed during the countdown, i.e. you pressed the button too late.
- Keep an eye on the line for any obvious position problems, are we too early or late.
- Keep the helm aware of other boats, sharp luffs to leeward, late arrivals barging, cowboys on port blasting across the front of everyone.... The last thing you need is to be rafted up at the start; it is the point of the race where you have the biggest influence on your final race position.

Beating

- **Shifts**
Are we lifting or backing? The method for determining this comes from quite a few sources, and it is best to use as many as possible to gain a full understanding of what is going on.

I prefer to use the relative positions of other boats. As you are going up the beat there may be boats to leeward and visible in the window or level with a shroud or the main sheet. If they start to move forward against your marker, e.g. the middle

of the window, then you are backing. If they move backwards, you are lifting. This can be done with the boats on either the same or opposing tack to you. This involves a basic assumption that you are roughly as fast everyone sailing around you. You will need to track more than one boat to make sure that it is not just boat speed causing the movement against your marker.

There may not be boats to leeward so look over your windward quarter. Is *the following boat pointing down at you?* If so you are probably backing. If he is pointing higher then you are is lifting. Warning: track the changes over time because as it may be that you are in your own private backer and everyone else is lifting. If so, this needs flagging up as the helm either needs to sort the pointing ability of the boat out, or make sure he is on the wind. Another reason for differences in track could be that you are in a different gust. This also needs flagging because you will probably want to get into the lifting gust quickly to avoid loosing a place.

Tracking the wind through opponents relative track and position can be tricky on the sea as there are fewer shifts. The shifts tend to hit the fleet as a whole and are more progressive in the way they change the direction of the fleet. Therefore positions changes of opposing boats are slower and subtler and it may be that you need to combine the methods above with the compass.

To use the compass you need to do some practise beats before the start and note down the mean compass heading on each tack. You then know your course relative to the mean on all subsequent beats.

You shouldn't use the compass on its own because there is a high probability that you will miss shifts on the other side of the course. Concentrating on the compass all the time also reduces your awareness of what is going on outside the boat, which is not good.

- **Pressure**

Gust and pressure spotting is another job the crew can help out with. This is very easy to spot inland as there are usually big differences in the patterns of the wind on the water. Judgement is required to know how far up the racecourse to look for the next gust so that you can be in a position to use it. The distance to look upwind varies depending on venue and conditions and comes with practice. On the sea this is much more difficult because of the underlying wave pattern. I can't offer much assistance here other than I find it hard too. The following method may help.

Are both helm and crew hiking or sitting in? What are you doing both hiking or sitting in? This is a good pointer to the wind strength on various parts of the course. Again the basic assumption is that you weigh the same as the opponent and that they have similar power in the boat setup. You will get better at judging this the better you know your competitors.

Where does the opposing helm have the main sheeted compared to ours, what is the boom angle, lots of kicker or Cunningham?

This information also provides a longer term picture on how your boat is set up compared to others....*Are we generally over or under powered compared to others?...*Which leads to questions of have we got the boat setup right... shroud position, spreader length and angle etc.

- **Tactics**

Common questions might be...*where is the windward mark, where are we on the racecourse, awareness of the laylines, spotting laylines,*

Can we tack across the boat to windward safely? This is especially useful just after the start when boats are close. The helm can concentrate on speed and pointing while the crew looks around and makes the judgement.

Are there any boats around just before the tack? The worst thing is to tack and find somebody was just about to duck you, this could result in breaking some rules. Also don't tack when there will be a boat to windward taking your wind on the new tack. *Is the boat to windward about to tack* is also an important piece of information because of the same reasons as before. You may end up on the new tack in the same position.

Is the boat ahead and to-leeward tacking—a quick decision is required here *are we going to tack* before he crosses to gain a tactical position for a future backer on the other tack. Or *do we cross/duck and tack the other side* slightly more freedom and if there is a lift expected on the other tack this may be the optimum position to gain advantage.

*Will the boats approaching on the other tack cross or duck..*especially important when they are on starboard. A crash tack or even a close tack on an opponents lee-bow early on could ruin your race. Being so close to a competitor means you have lost freedom to keep in sync with the wind. You end up focusing on the close opponent not the fleet as a whole and you are also probably interfering with each other's wind.

The way to determine if the opponent is ducking or crossing is by their relative position to you. Pick a reference point, usually the mid point of the window, from far out see if the boat on the opposite tack is gaining or losing, these indicate lift or backer but also will they cross, or duck. This is important information as it determines:

- is there any need to avoid the other boat, inline with the racing rules
- if the boats are crossing and are on a lift, you may want to tack ahead and to leeward. This will give you tactical advantage, if you are expecting a backer on the other tack later up the beat. When the backer occurs you cross the opponent you tacked in front of.
- Keep the helm informed of any ducking boats so that you don't tack into them

Are we on the edge of the racecourse? This is a subtler question, as I am not just talking about banging a corner. *Where are we in relation to the fleet?* Unless 100% certain of success there isn't any point in going beyond the extreme boat in the fleet (this could be narrowed down later in the race to the extreme contender or threat to your position) anything more is risk or greed. The risk is that you are on the wrong side of a wind shift and with large separation in the fleet you could lose a lot of places and distance. Best to be more conservative and pick off individual contenders.

- **Windward mark**

A really accurate picture of the position of boats is required on the approach to the windward mark. Because there is less distance to go until the end of the beat small shifts and backers are taken to tack on and also track position is required to ensure you have right of way at the windward mark.

Are the boats approaching the mark on starboard actually on the layline i.e. can we tack under them or do we need to duck/cross them. Places up for grabs here. Lots of description is required about boats on the starboard layline. You are looking for a safe gap, not being greedy.

Are we losing or gaining on the mark... Tide is very important at the windward mark and knowledge of whether you can undercut the normal layline or can overstand it

because of the tide can gain you places. When on or near the layline from some distance out it is good to sort out whether you are gaining or losing on the mark as it helps with tactics later on. To do this you need to pick a transit behind the mark (difficult when looking out to sea, a rescue boat or another buoy may help here). Say you are on the starboard layline, if the transit moves to the left you are losing on the mark and will have to put another tack in later on up the beat. If it moves to the right you are gaining and may be able to afford to foot-off. This is easy for the crew to do while the helm concentrates on speed and pointing.

- **General Reminders**

What is the tide doing, how will it affect the direction and speed of the boat
How many laps
Has the course been shortened, is this the last beat?
Tidal effects?

Downwind

The helm and crew roles are somewhat reversed going downwind as the crew needs to spend 90% of the time trimming sails and balancing the boat. The roles to be kept by the crew might be mark finding, general reminders, looking out for other boats coming upwind and tidal effects.

When looking out for boats coming upwind also give a direction to move, i.e. head up or bear away, rather than just a panic message of "BOAT".

Pressure and shifts are also spotted by the crew but in a different way to upwind, the crew feels pressure through the kite sheet (it's a big sail with 1-1 purchase therefore there can be more "feel" than the main sail), and the helm may choose to change direction or weight position with this information. This is more valuable in the lighter non-planing conditions.

The crew notices a wind shift quickly as the kite needs sheeting in or letting out to keep the curl in the front of the spinnaker. Again the helm will need to change direction to take advantage of the shift.

Motivation

If there are any bad vibes between the team in the boat it will affect the self-confidence of the sailors and the communication will drop. This obviously has an effect on the results achieved. If, for example, a helm or crew slips during a tack or flogs a sail then there isn't any point in shouting, the sailor knows they have done wrong and need to sharpen up. If the problem is consistently happening, it needs to be dealt with in a practice session. You have to make the best of it during the race, it is a minor mistake, forget it and move on, try not to let it happen again.

Neither helm nor crew should be using any point scoring comments or general bitching. It does nothing for the speed of the boat and just makes the sailing experience miserable. Only a few people can win a race over a weekend of racing, and only one person can win an event. The other competitors must cope with losing; therefore the racing (and social) experience must be enjoyable otherwise it makes for a bad weekend.

In summary

All of this may be hard to implement in one go and the lines between helm's role and crew's role can change depending on the people sailing the boat. A balance needs to be struck between how much information can be handled and who provides it.

Good Sailing

Ed Nicklin