o4 Rounding marks & overlaps

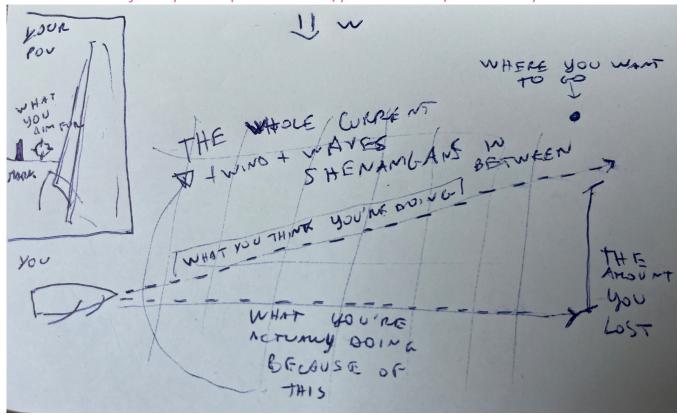
Just like getting to it, rounding the mark requires precision and awareness of the immediate surroundings, as well as the whole race course. Every time there is a change of direction, you need to know where you want to go next (it doesn't matter if it's not the right direction or if your thought process went wrong, it's better to have the wrong plan than to have no plan).

While during a normal navigation we would leave a good amount of space between us and an obstacle, when racing we try to do the opposite and get as close as we can to the mark. The simple reason is: we don't want another boat to pass us and gain a position by sneaking in the space we left between our boat and the mark.

There is no specific rule as to how to round a mark, apart from trying to do it as quick as possible, so we will be looking at some details in the techniques used during the most frequent scenarios. These manoeuvres require good crew coordination and clear intentions stated by either the helm or the navigator/tactician. For example, if the helm says "at the leeward mark I want to tack right away", as we approach the mark we need to:

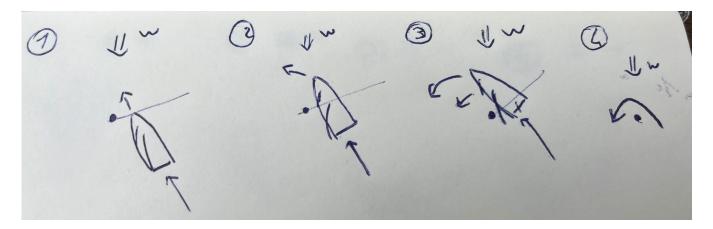
- prepare the jib sheet on the other winch
- · prepare to tighten the kicker
- prepare to get the main sheet in

Key point: as you approach the mark, POINT AT IT. Don't point at the side of it, point at the thing as if you were to bomb it. This is not a joke: if you don't point at the mark, you won't reach it, and here's why



Windward mark - Approach on a starboard tack

Here, we will need to bear away, release the kicker, open the main and the jib. When do we need to do it? Remember that, especially with strong winds, if the sails are not trimmed properly, the tiller will feel very hard, which means that bearing away will be close to impossible if you don't release the kicker and the main. Also, remember that the boat rotates around an imaginary point that sits somewhere between the main sheet and the helm.

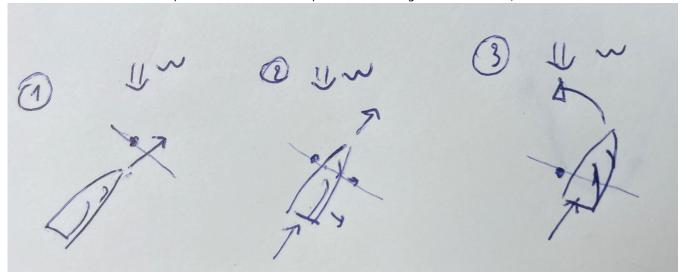


- 1. Mark on the bow: everyone ready
- 2. Mark at the stays: start to bear away, sails start to go out.
- 3. Mark at the sheet: from this point you have clearance, kicker off, BEAR AWAY FAST and get on a broad reach.
- 4. Ideal trajectory: constant distance between the boat and the mark throughout the entire rounding.

On the fast sail trimming topic, a little story from experience: I used to race on a keelboat class called Este24, close to a J7o. It's quite fast and agile, a big dinghy. Windward mark: I'm usually bowman because I'm light and short, so my role is to help the gennaker reach the tack behind the jib and to hoist it fast as soon as we have the angle to do it. My micro role above 12 kts: kicker off 20 cm before anything else. If I forgot that, the boat would simply not turn away from the wind and keep broaching. But since I can't feel the tiller, the helm would usually shout KICKER, just in case I was too focused on the hoist.

Windward mark - Approach on a portside tack

The main difference from the previous scenario is that you will be tacking around the mark; the rest is the exact same.



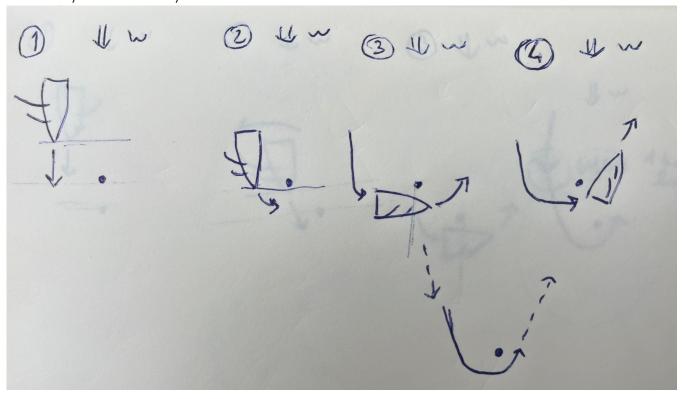
- 1. Mark on the bow: all crew ready to tack
- 2. Mark at the stays: you don't have clearance to tack, but you can start to head up. If you tack here, you'll hit the mark.
- 3. Mark on the main sheet: tack. After the tack, sails out etc.

If you want to gybe immediately after the rounding, wait until the boat get gybed before letting the main out, it's just easier. This is not likely to happen, but it might; if it does, be careful not to lose control of the boat's direction, otherwise you'll spin like a record, very entertaining to watch but annoying to experience. So the helm needs completely focused on their actions and have full awareness of the surroundings.

Leeward mark - Approach on a portside tack

This mark is a bit trickier than the windward one, because the boat is never really slowing down and because to harden up the sails requires more time that to simply let them out, so the crew needs to act faster. Because of this, the arc

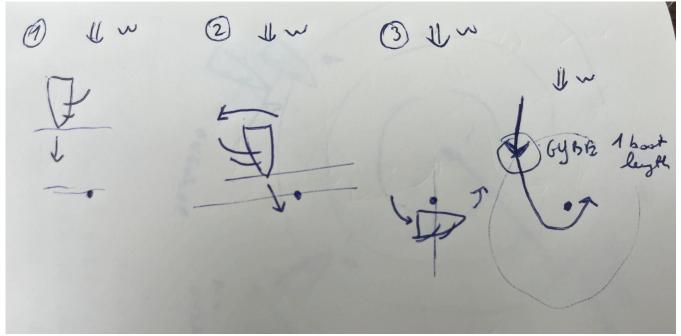
described by the boat is usually wider than the one around the windward mark.



- 1. Two/three boat lengths from the mark: give yourself a bit of margin, point to the mark's right side, because you know you'll lose some space.
- 2. One boat length: start to harden up, sails on beam reach.
- 3. Mark on the bow: Kicker on.
- 4. Mark on the stays: you have clearance, head up around the mark. Sails in fast. The boat will tilt, that's normal, you're simply changing the angle with which the wind force acts on the boat centre of balance.
- 5. Top coordination for the crew: as soon as you get the sails in and the boat tilts, the crew moves together on the windward side of the boat and flattens the tilt. That's called pumping and there are rules around it because it accelerates the boat. It still works on keelboats but the J8o seems to me at the limit in terms of dimensions.

Leeward mark - Approach on a starboard tack

The main difference with the previous scenario is that you will need to gybe around the mark, so it could be considered the most difficult mark rounding because of all the things going on, as well as the speed and coordination needed.

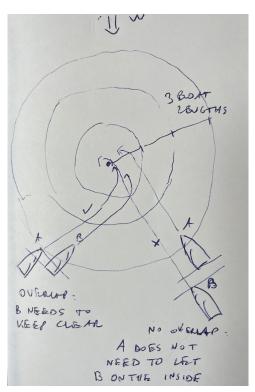


- 1. Three boat lengths from the mark: everyone ready to gybe and boat pointing to the mark's right side. Again the idea is to give yourself some margin to close in on the mark and not let other boats sneak in the space you leave.
- 2. One boat length: get on a perfect runner and gybe the boat by literally moving the boom to the side you want it to be. Helm: keep perfect control of the angle otherwise the boat will broach and you're in for a spin. If you're on a runner, you only need 10° to gybe.
- 3. Mark on the bow: you should now be in the same situation as point 3 from the previous section, the rest is the same.

Priorities around marks

There is one rule that is important to remember, apart from the usual starboard/portside. If more than one boat finds herself within three lengths from the mark, and there is overlap between the boats, the inside boat has right of way and the outside boat needs to keep clear.

Overlap means that the continuation line from a boat's stern crosses another boat's hull, regardless of the tack the boats are on. You could be on a portside tack and get priority, but it's very unlikely that you'll have an overlap with a starboard tack boat the moment you enter the three lengths, so this scenario doesn't occur. If the overlap is broken within the three lengths, it doesn't matter, the inside boat still has priority and the outside boat needs to round the mark in a way that lets the other one go on the inside. If you're in front and you want to be sure no chaos will happen, when you enter the three lengths you can shout "no overlap" and close in on the mark (this is relatively harmless to yell). However, a golden rule of racing is: don't randomly claim things first, unless you're 250% sure and you can articulate it in words, because you'll risk a penalty. If in doubt, shut up. Or, as my mother very affectionately educated my freedom of expression as a child "Words are made of silver but silence is golden".



Conclusions

None of these four scenarios are rigid and perfect, every mark rounding will have peculiarities and it will depend on conditions and other boats, therefore everyone in the crew needs to know what's happening and there needs to be a clear plan. This is a moment in which sails are trimmed to the touch and the feeling, not by looking at telltails or winches: you need to feel the sail power in your hands as you keep your eyes on the mark and the boat direction. After that, adjusting can be done by looking at the sail.

If it's a mark that I have placed with the rib, don't be scared to get too close and touch it, nothing will happen apart from maybe you getting stuck and dragging the mark around. If it's one of the big buoys (pun intended), do your best to round it closely but careful.

Exercise 04.1

Specifically for one person, usually the helm, but you can take turns. With every manoeuvre, give clear instructions and make sure that everyone has something to do when you round the mark. Go over the procedure in your head and out loud. Everyone else: silence and wait until everyone has been called out. If the helm missed you, or if you have been given unclear or partial instructions, execute only what you have been told. There will be a mistake somewhere, it's normal, but next time you will not forget.