



Tacking

Tacking, or going about, is a sailing manoeuvre mostly used when the yacht is close hauled and beating to windward. The yacht turns its bow towards the wind and uses its forward momentum to take it through the no-go zone until the wind is filling the sails on the other side. This is the manoeuvre that enables the yacht to zig-zag up the course to the windward mark.

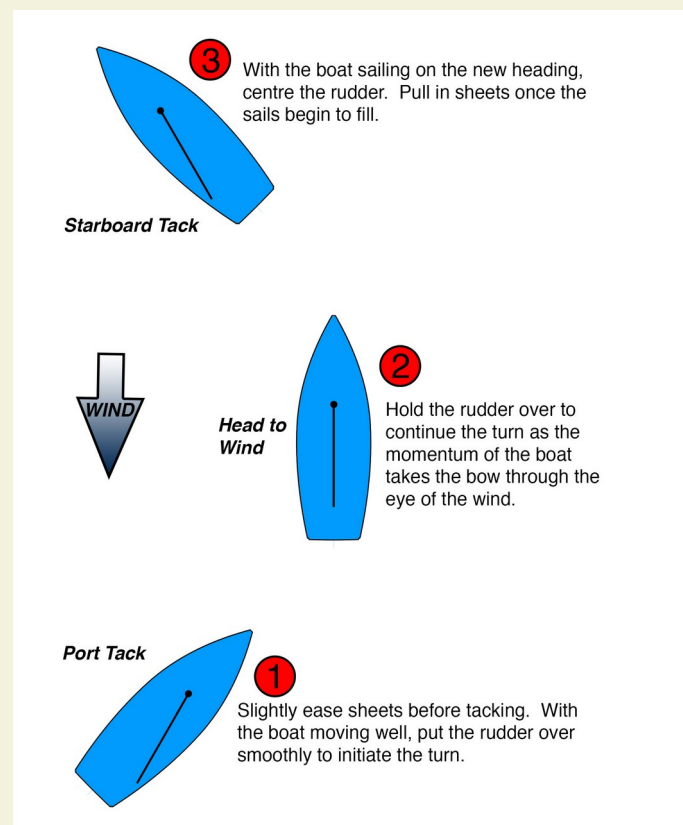
Good tacks are essential to good racing. There are a lot of them during a race and the better executed each one is, the more you will gain against your opposition.

The Tack Manoeuvre

Tacks can be divided into three parts:

- The turn
- Transition through the no-go zone.
- The acceleration.

Surprisingly, after the turn you are ahead in VMG of where you would have been had you not tacked. All the losses due to tacking accrue during the critical acceleration stage. The following diagram breaks down the tacking manoeuvre into its three stages.



The tacking manoeuvre

Before you begin, try to visualise the heading the boat will be sailing after the tack is complete.

To start the tack, ease sheets a little. The boom should drop only about 10mm which corresponds to a very small movement of your left transmitter paddle. You should practice this small change off the water, with the boat heeled over on the stand.

The reasons for easing sheets are:

- It reduces the likelihood of the boat getting stuck in irons in the middle of the manoeuvre.
- It helps the boat accelerate after the tack as you pull the sheets back in.

Immediately you ease the sheet, begin a smooth turn with the rudder. Don't push the rudder hard over at the start of the tack, as this will only slow the boat down. As the boat begins to turn, feed in more rudder. The intent is to make the turn very smooth and maintain as much boat-speed as possible. When sailing in flat water, turns can be a little wider (using less rudder), but if sailing in a chop, you will need to get the boat turned a little more quickly to avoid a wave stopping the boat while it's in the no-go zone.

You want to finish the turn a few degrees below your ultimate close hauled course. The lighter the breeze the lower you want to come out of the tack – perhaps five degrees below course in light air; less in heavier air. Once the sails are filling on the new heading, and the boat gets up to speed, trim the sheets in. You should see the boat accelerate and point a little higher.

A well executed tack requires coordinated control of sheet and rudder and requires a fair bit of practice. The idea is NOT to get from one tack to the other as quickly as possible, but to carry as much speed from tack to tack as possible. Too fast a turn and you throw off speed; too slow and you lose momentum. Start with a slow, smooth turn and for a brief moment you will be going at nearly full speed straight upwind – perfect.