



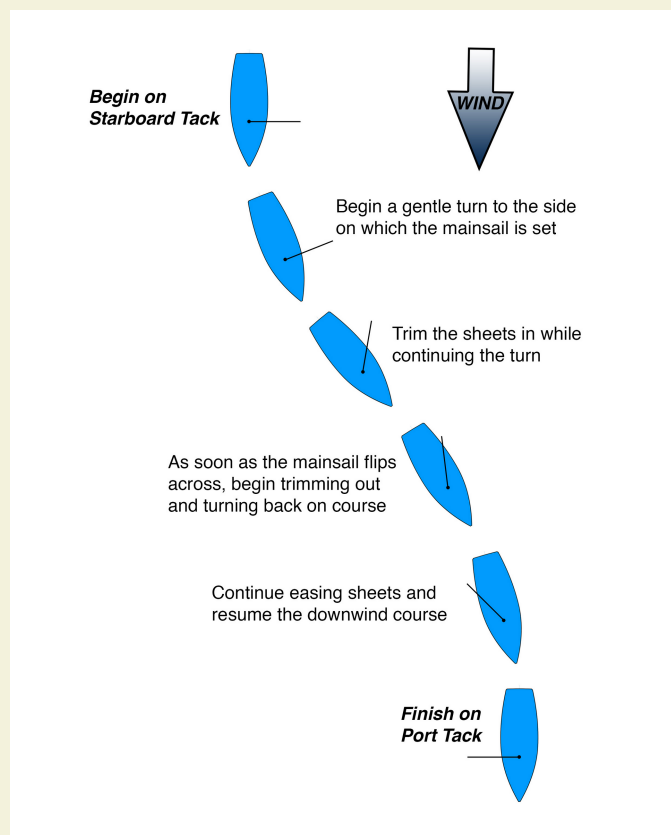
## Gybing

A gybe is a sailing maneuver whereby a yacht turns its stern through the wind, such that the wind direction changes from one side of the boat to the other and the mainsail crosses the centerline.

Gybing is a less common technique than tacking, since a sailboat can sail straight downwind, not needing to sail a zig-zag course as when beating to windward.

### *The Gybe Manoeuvre*

Gybes can be executed by sailing a gentle "S" bend combined with some coordinated sail trimming.



### *The gybing manoeuvre*

To start the gybe, begin a smooth turn in the direction of the main boom. Don't push the rudder hard over at the start of the gybe, as this will cause you to sail a wild zig-zag and cover more distance than you need to.

As the boat begins to turn, trim sheets in. The instant the main flips to the other side, ease sheets and turn the boat onto the new course. Trim sails for best speed.

The jib will look after itself during the gybe, so concentrate only on the mainsail.

As with tacking, a well executed gybe requires coordinated control of sheet and rudder. The objectives are to carry as much speed through the manoeuvre as possible and to minimise deviations in the course sailed.

In light conditions, you can get away with very small changes in direction and more sail trimming. In heavier conditions you will need more turning and less trimming.

### ***Choose to Gybe With Caution***

The gybe manoeuvre will slow the boat down. The rudder input needed for the gybe increases drag and trimming in the sails reduces drive. The small speed penalty during the manoeuvre may pay off in a subsequent speed increase or allow a course change, but executing unnecessary gybes on the way to the leeward mark is seldom a winning tactic.

### ***Picking the Right Gybe***

It can often be difficult to pick the right gybe for the downwind leg of the course. Most skippers will head into the windward mark (or separation mark) on starboard, ease sheets as they round the mark and head off on the starboard gybe in the general direction of downwind. But are they on the most efficient gybe so that sails are generating the greatest possible drive?

Think about what's happening on that last starboard tack before rounding the windward mark (assuming a port hand rounding). Were you lifted or being headed? If your next rounding is the bottom mark directly downwind (mostly that's the case):

- Lifted would imply the wind has gone clockwise at the top mark, so the port gybe would be favoured.
- Headed would imply the wind has gone anticlockwise at the top mark, so the starboard gybe is preferred.

Further down the course, with no reference, it can be difficult to determine whether a wind shift has occurred and in which direction. We have to take our cue from the sails.

If the jib is not filling, it could mean that it is being blanketed by the main and a gybe is in order.

### ***Sailing by the Lee***

Any time the wind direction crosses the centerline to the leeward quarter, the boat is said to be sailing "by the lee". When sailing "by the lee" the leach of the mainsail is facing slightly into the wind and with the wind moving across the sail, it begins to generate a little bit of lift (similar to close hauled). This can be a fast mode, but takes some practice to maintain. Beware any wind shifts that can cause an unexpected, sudden gybe and forcefully flip the mainsail to the opposite side of the boat.