



## Rounding Up

Rounding-up is a manoeuvre where a boat that is pointing away from the wind is turned so that its bow points closer to the direction of the wind. You may round up the boat to change from a running, or reaching course to a close hauled course.

We mostly use a rounding up manoeuvre to rotate the boat around the leeward mark. In this case, we want to change direction smoothly and accelerate away from the mark, coming up to our best on-the-wind performance in the shortest possible time.

### ***Sail Trim***

Sail trim is key to this manoeuvre being smooth and fast. A flapping mainsail will kill boat momentum through the turn and have the boat coming out of the turn more slowly than the competition. In the ideal turn the mainsail is trimmed slightly harder, or ahead of the turn. This has the effect of moving the apparent wind angle further aft and this in turn moves the CE aft (check out the discussion on balancing the boat). Now our sail trim is trying to rotate the boat up into the wind and we need less rudder input to complete the turn.

### ***Rudder***

Sail trim should be enough to encourage the turn, but not so much as to stall the sails or cause the boat to over-rotate. We still want to control the turn with the rudder, but avoid the need for large rudder deflections to execute the turn.

If we can execute the turn with less load on the rudder, we will create less drag. Less drag will keep the boat moving more quickly.

The objective, as with most manoeuvres, is to coordinate sheet and rudder so that the boat turns smoothly and maintains maximum boat speed.