

## CORRECT AIR FLOW OVER SAILS

### The wind on your face and head

The correct air flow is when the sails are neither pulled in too much or let out too much. Here they are pulled in too much. The wind is on your nose and so is the sailing !! You feel out of control especially in strong wind conditions.



With a high pressure on one side and low pressure on the other, and smooth flow over the sails they are '*lifted*' and the yacht goes with them. In an glider aeroplane the pressure is under the wings and the plane stays in the air and is moved forward on air currents, just as does a soaring eagle



Sailing towards the wind (*beating*) the sails must be pulled all the way in, but not too hard, and the yacht steered to keep the correct pressure in them. The wind is felt on your left or right eye.



Here the skippers are trying to sail as close to the wind as they dare without causing the sails to flutter ( Called '*luffing*' )



Sailing across the wind (*reaching*) the sails must be let out to halfway from the centreline and the yacht steered to maintain the airflow. The wind is felt on your left or right ear.





To sail away with the wind behind (*running*) the sails must be let out as far as they will go, and it is best not to go exactly downwind but at a bit of an angle.

The wind is felt on the back of your head

Directly downwind you can hold the jib out with your hand so the air flows in the back (*Leach*) of the sail and exits at the front (*luff*)



The wind direction changes from time to time and you have to change the steered direction and or adjust the sail angles slightly to keep maximum efficiency and therefore speed. Here the skipper should either steer closer to the wind or let the main out enough to ensure correct airflow.



**When in doubt, let them out. If they flutter near their masts, pull them in.**

**The rest is experience and practise practise, sail sail sail.**

**The principles are the same, Sydney Hobart yachts, Musto Skiffs , the big and small yachts in the Blairgowrie Marina and elsewhere**

