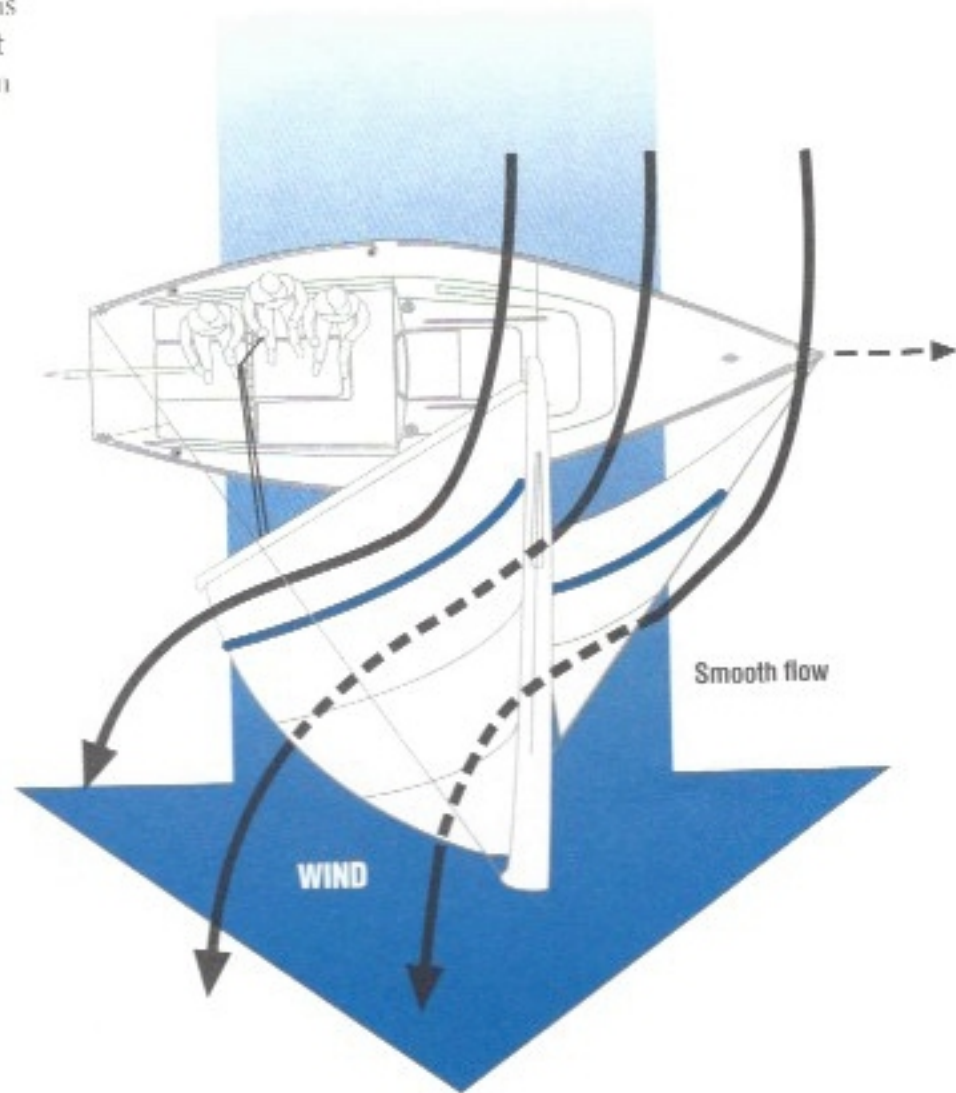


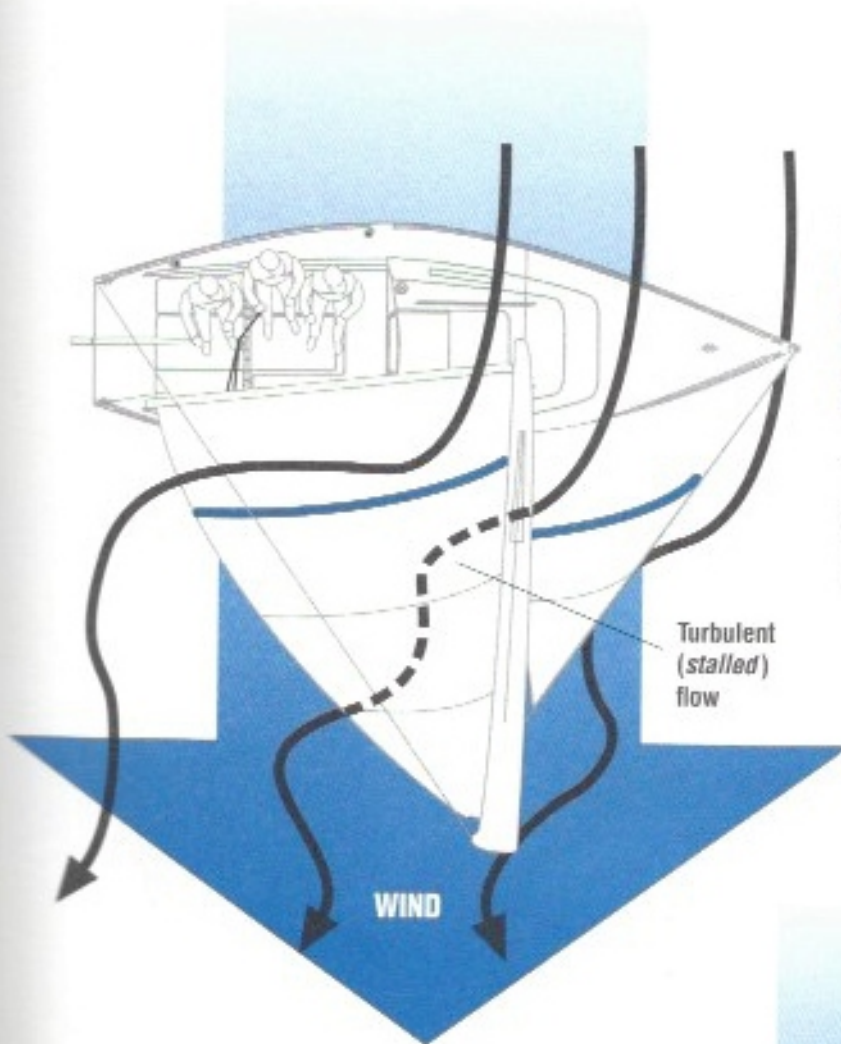
Trimming a Sail

Many sailors view a boat's mainsheet and jib sheet as they would the accelerator on a car...the more they sheet in (*trim*), the faster they go. This is true to a certain extent, but not completely. As we described on the previous spread, a sail creates power (*lift*) by redirecting wind *flow*. If the wind flows smoothly past the sails, optimum power will be achieved as well as maximum boat speed. If the sails are sheeted in or out too much, turbulent flow will result, reducing power and slowing the boat.



Trimmed Just Right

- ▶ Smooth flow around sail
- ▶ Optimum power
- ▶ Optimum boat speed
- ▶ Easy steering
- ▶ Well balanced



Trimmed Too Tight

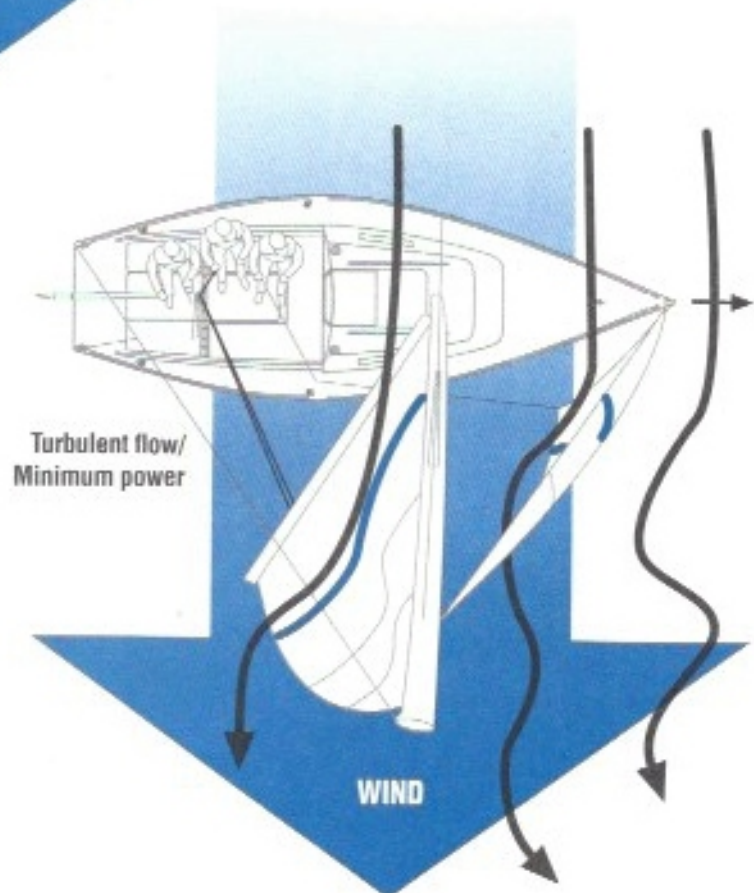
- ▶ Turbulent flow around sail
- ▶ Reduced power
- ▶ Boat slows down
- ▶ Difficult steering
- ▶ Excessive lipping (*heeling*)

If you lose wind flow around your sails, your boat will begin to feel sluggish. To get smooth flow going again, simply let out the sails until you feel the boat pick up speed.

Trimmed Too Loose

- ▶ Turbulent flow around sail
- ▶ Minimum power
- ▶ Reduced boat speed

Sailing with your sails trimmed too far out is not necessarily bad. There are times when you will want to sail along slowly (at less than maximum speed) and will trim in your sails only part way.

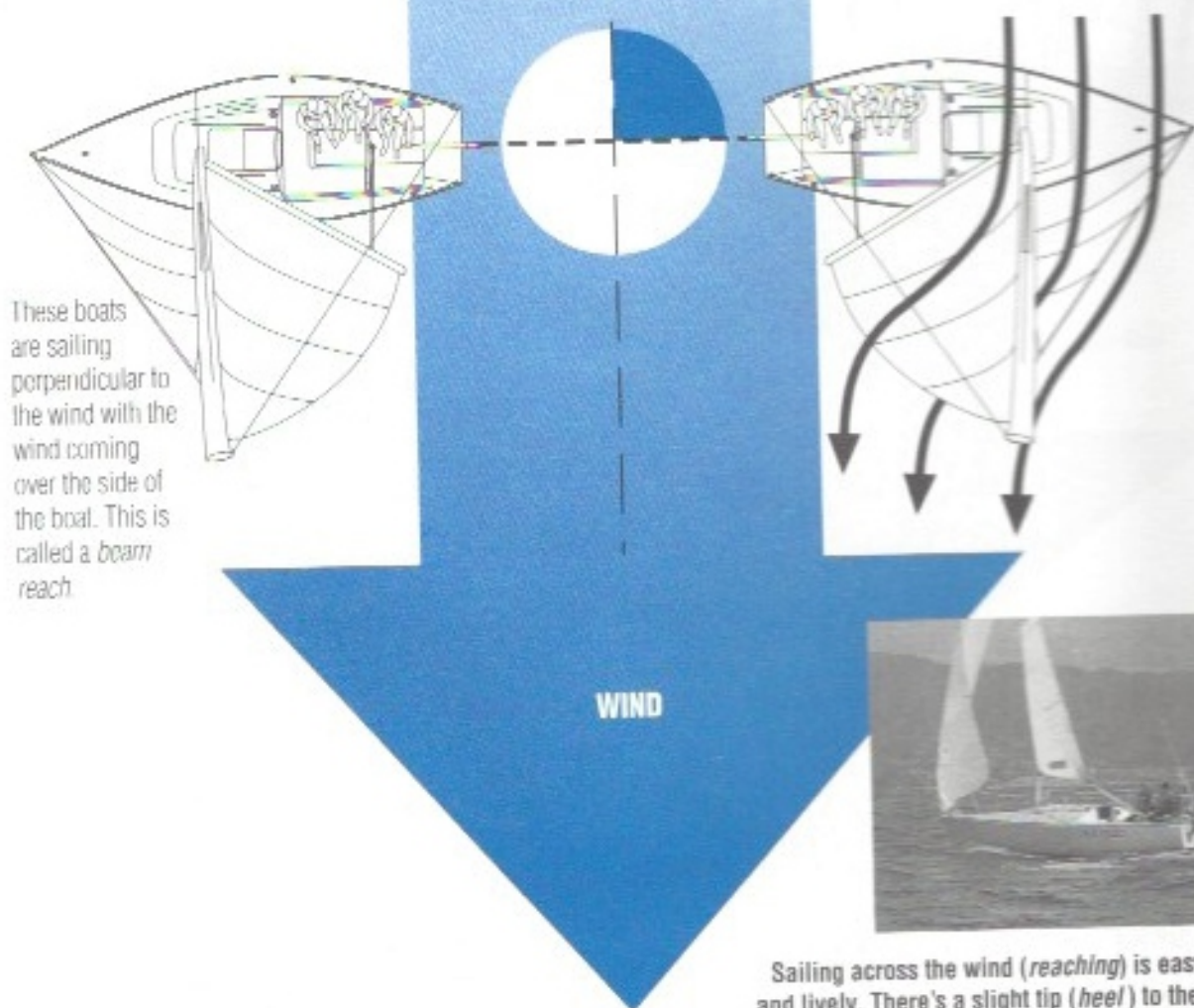


Sailing Across the Wind

Sailing across the wind, with the wind perpendicular to the side of the boat, is a fast and easy way to sail — certainly easier than sailing upwind. In your first lesson, you will spend a lot of time sailing across the wind, learning how to steer and trim the sails.

Checklist

- ▶ Feel the wind coming across the boat.
- ▶ Sheet the sails about halfway out.
- ▶ Steer toward an objective or landmark. Adjust the sails to changes in the boat's direction or changes in wind direction.



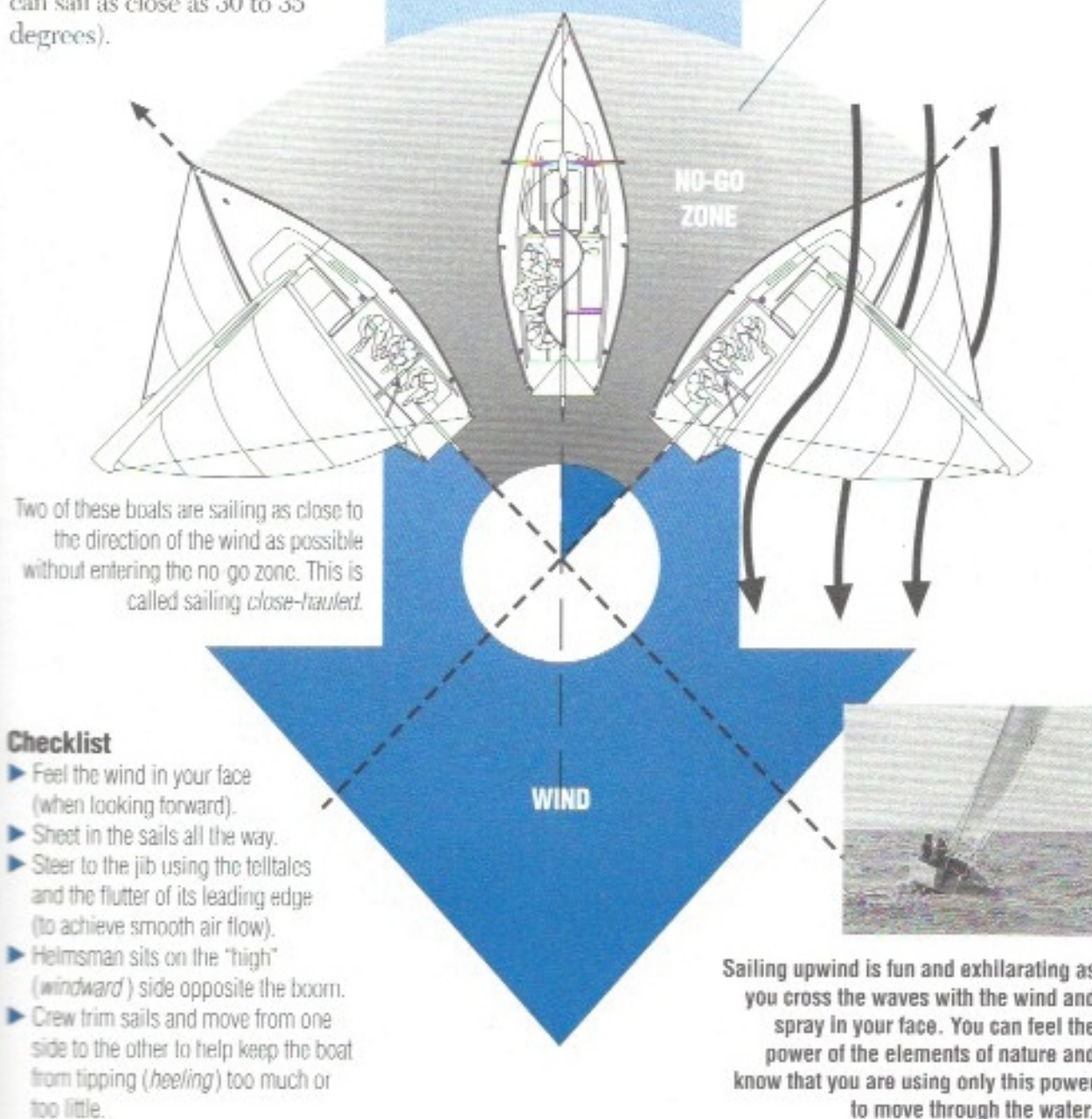
These boats are sailing perpendicular to the wind with the wind coming over the side of the boat. This is called a *beam reach*.

Sailing across the wind (*reaching*) is easy, fun, and lively. There's a slight tip (*heel*) to the boat, the sails are about half-way out, and it's easy to steer straight ahead or to the left or right.

Sailing Upwind

Although a boat cannot sail directly into the wind, it can sail *upwind*, or close to where the wind is coming from. Sailing about 45 degrees from the direction of the wind is about the closest a boat can sail to the wind (although some high performance boats can sail as close as 30 to 35 degrees).

If you try to sail too close to the wind, your sails will flutter (*luff*) and lose power, and the boat will come to a stop. This 90 degree area is called the No-Go Zone for obvious reasons.

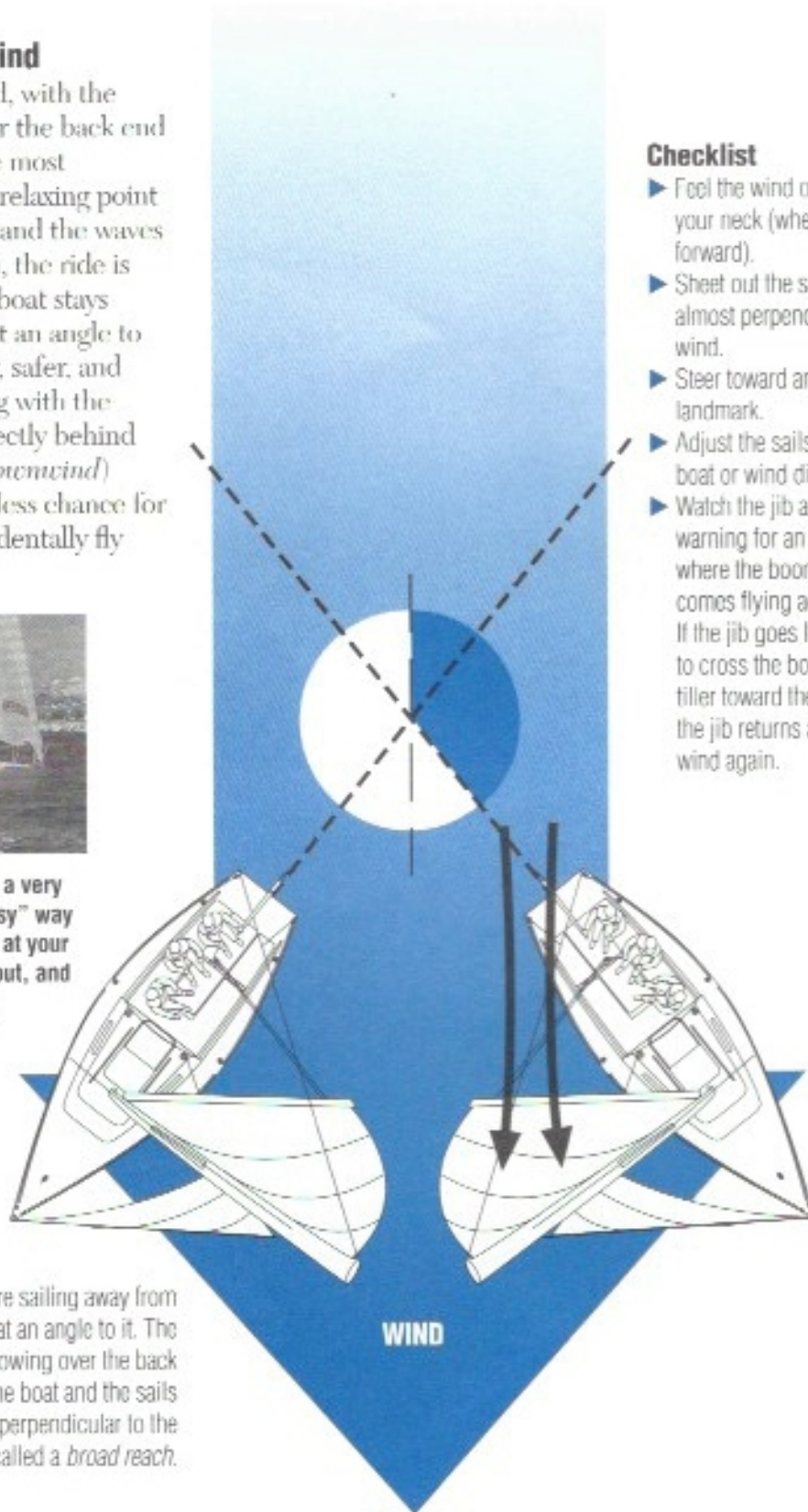


Sailing Downwind

Sailing downwind, with the wind coming over the back end of the boat, is the most comfortable and relaxing point of sail. The wind and the waves are following you, the ride is smooth, and the boat stays upright. Sailing at an angle to the wind is faster, safer, and easier than sailing with the wind coming directly behind the boat (*dead downwind*) because there is less chance for the boom to accidentally fly across the boat.



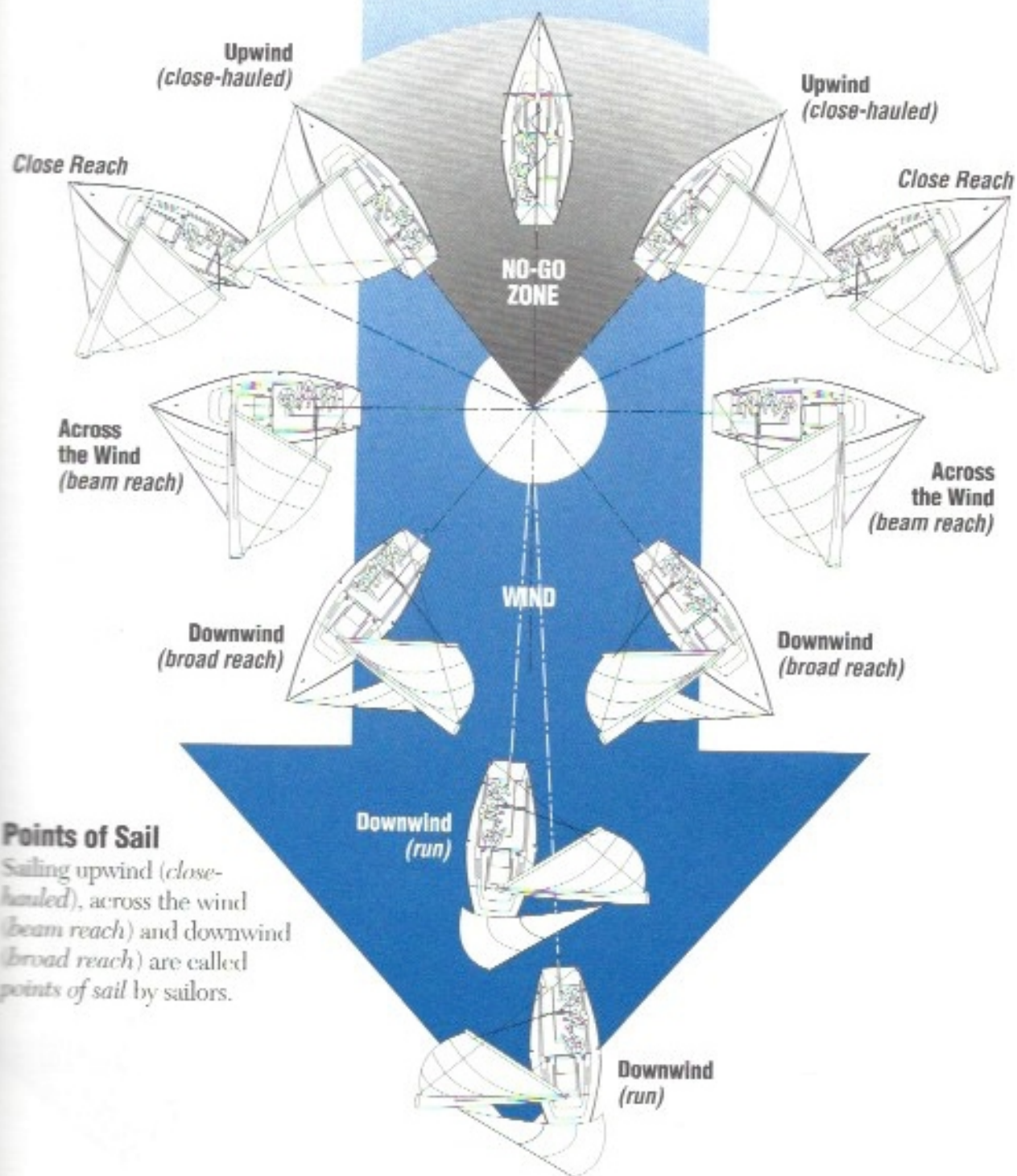
Sailing downwind is a very relaxing, "take it easy" way to sail with the wind at your back, your sails let out, and no spray to wet you.



These boats are sailing away from the wind, but at an angle to it. The wind is blowing over the back corner of the boat and the sails are sheeted perpendicular to the wind. This is called a *broad reach*.

Checklist

- ▶ Feel the wind on the back of your neck (when facing forward).
- ▶ Sheet out the sails so they're almost perpendicular to the wind.
- ▶ Steer toward an objective or landmark.
- ▶ Adjust the sails to changes in boat or wind direction.
- ▶ Watch the jib as an early warning for an accidental jibe where the boom suddenly comes flying across the boat. If the jib goes limp and starts to cross the boat, push the tiller toward the boom until the jib returns and fills with wind again.



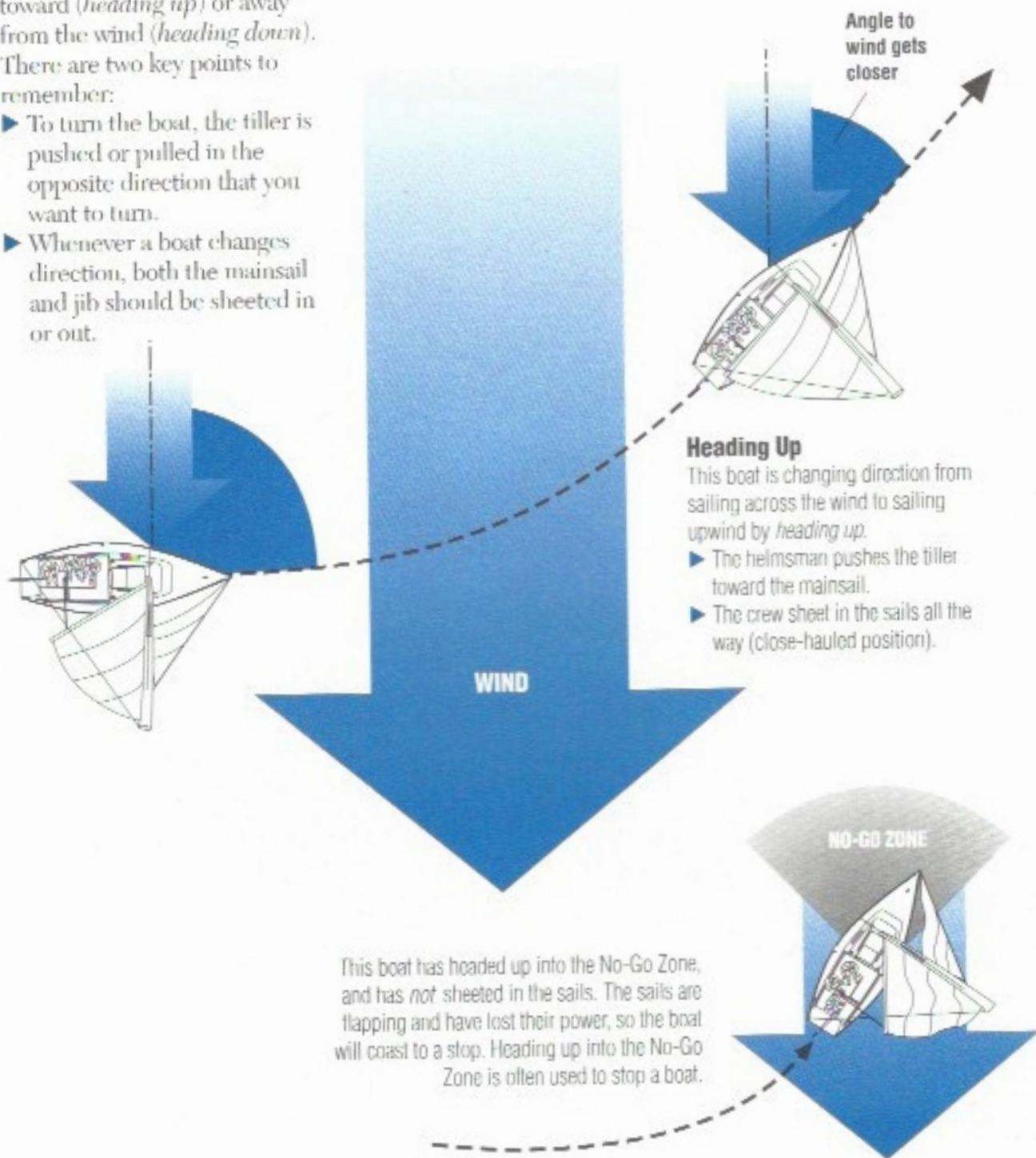
Points of Sail

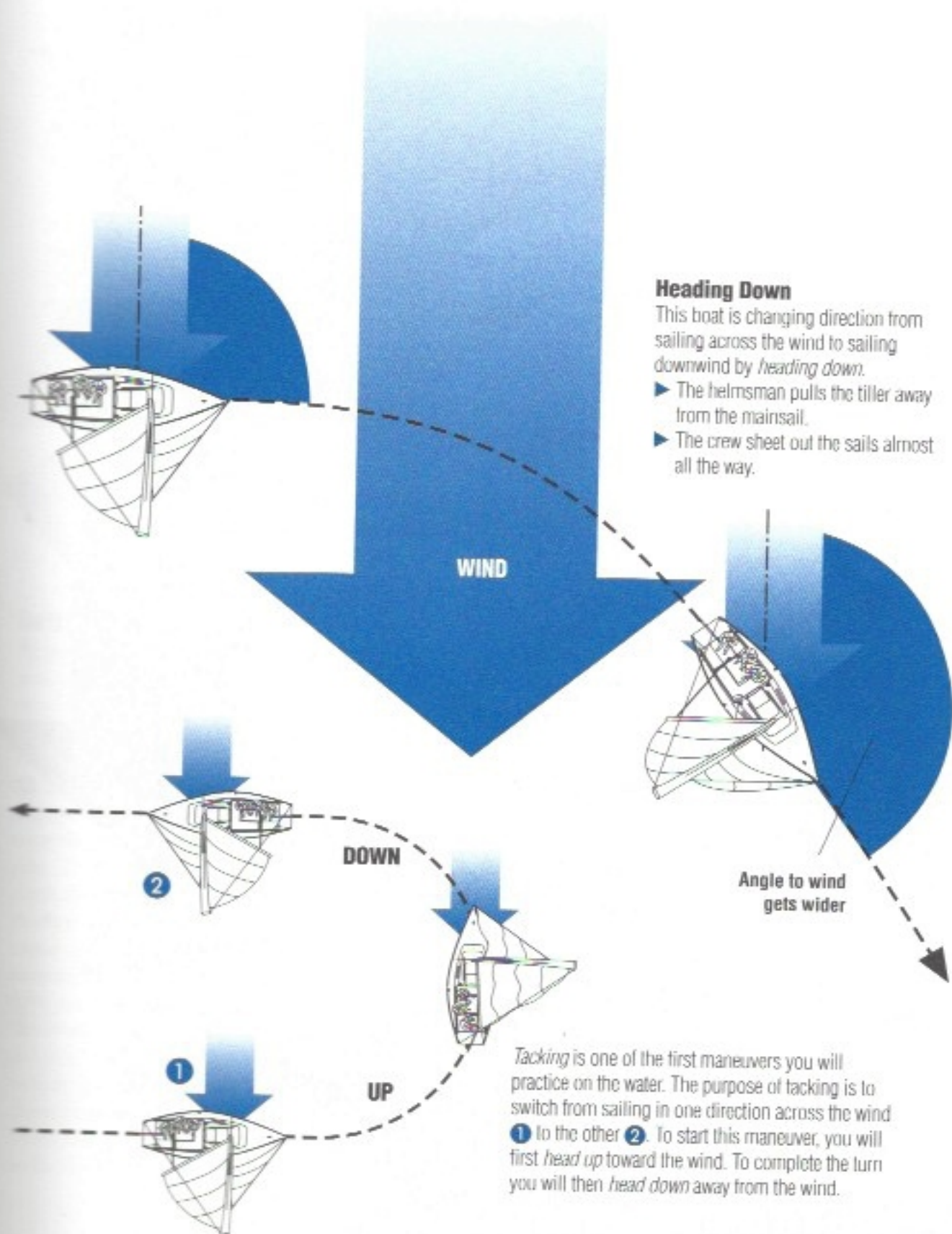
Sailing upwind (*close-hauled*), across the wind (*beam reach*) and downwind (*broad reach*) are called *points of sail* by sailors.

Heading Up and Down

Whenever a boat turns to change direction either to the left or right, it is also turning relative to the wind—either toward (*heading up*) or away from the wind (*heading down*). There are two key points to remember:

- ▶ To turn the boat, the tiller is pushed or pulled in the opposite direction that you want to turn.
- ▶ Whenever a boat changes direction, both the mainsail and jib should be sheeted in or out.





Tacking is one of the first maneuvers you will practice on the water. The purpose of tacking is to switch from sailing in one direction across the wind **1** to the other **2**. To start this maneuver, you will first head up toward the wind. To complete the turn you will then head down away from the wind.