



6. Navigation

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The navigation rules of the sea are as important to your boating safety as our road rules are to your driving safety—if you're going to sail a boat, you need to learn about them. In this chapter are the rules that are recognised by boaties the world over.

It also covers guidelines for navigating in low visibility and the responsibilities of sharing the sea with big ships, which can't swerve or stop quickly to avoid you. If you'd like to learn more, a number of volunteer groups and other organisations run coastal navigation courses.

Give way rules at a glance

Give way to the right and stay to the right.

Port

If a power-driven vessel approaches on your port (left) side, you have right-of-way.

Maintain your speed and course, with caution. If it becomes obvious that the other vessel is not going to give way, then you should take the necessary steps to avoid a collision. Unless there's no alternative, don't turn to port to avoid a collision if you have right-of-way; that's the most likely direction the other vessel will turn and you might cause a collision in trying to avoid one.

Starboard

If a power-driven vessel approaches on your starboard (right) side, they have right-of-way.

Stop, slow down or change course to keep out of their way.

Stern

If any vessel approaches your stern, maintain your speed and course and proceed with caution so they can overtake you safely.

The international rules

This section outlines the rules that are recognised worldwide for safe navigation.

Most collisions between vessels are a result of carelessness. To be a good skipper you need to:

- observe and follow the rules
- maintain a proper lookout
- travel at a safe speed
- know the limits of your vessel
- be aware of potential hazards
- allow for the actions of others, both reasonable and unreasonable.

There are significant penalties if you fail to observe the navigation rules. It's also an offence to cause real or potential danger through reckless or negligent behaviour, and to cause nuisance or undue annoyance to other water users.

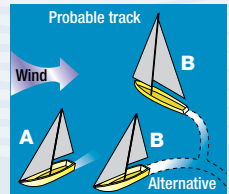
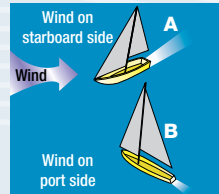
Be aware that navigation rules in a particular location can change, either permanently or temporarily. Notices to Mariners are issued to advise and warn of changed conditions, including restrictions placed on some or all boating activities in an area for a limited time. An example is the exclusion zone placed around the desalination plant construction site at Port Stanvac in Adelaide during 2009-10.

DTEI also publicises legislative and other changes at www.sa.gov.au/boatingmarine and through *On Deck*. You should also regularly check the *Harbors and Navigation Act 1993* and associated regulations (refer chapter 13).

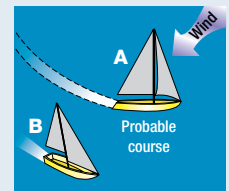
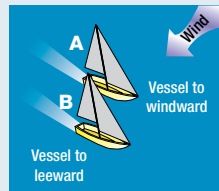
Vessels approaching one another

Two sailing vessels

When each has the wind on a different side, the vessel that has the wind on their port side (B) shall keep out of the way of the other (A).

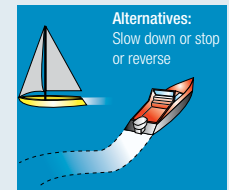
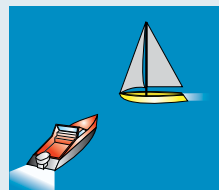


When each has the wind on the same side, the vessel that is to windward (A) shall keep out of the way of the vessel that is leeward (B).



When a sailing vessel with the wind on its port side encounters another sailing vessel to windward and cannot be certain whether that sailing vessel has the wind on its port or its starboard, it shall keep out of the way of that other sailing vessel.

Power-driven and sailing vessels

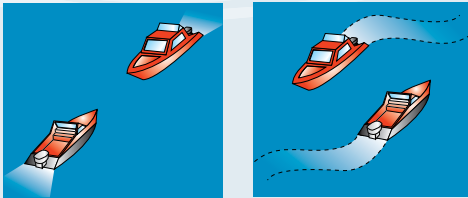


Power-driven vessels normally give way to sail; however, in harbours and channels and other areas where a larger vessel may be restricted in its movement, small sailing vessels must give way to large power-driven vessels that cannot easily manoeuvre.

Sailing vessels in a marked channel are required to operate on the starboard side of the channel; you can use more of the channel on the tack, provided it's safe to do so and you won't impede the passage of other vessels in the channel.

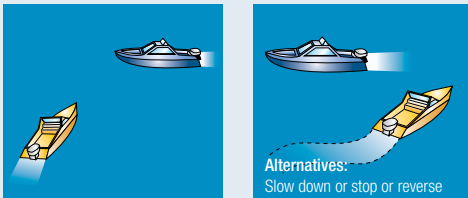
Power-driven vessels meeting head-on

Power-driven vessels meeting head-on or nearly head-on must each alter course to starboard so that the vessels will pass on each other's port side, as they would in a channel or river.



Power-driven vessels crossing

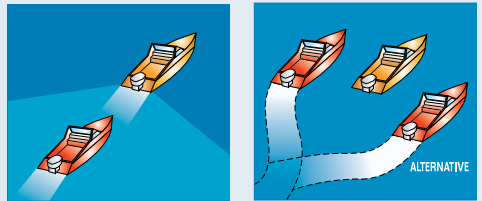
When two power-driven vessels are crossing, the vessel with the other on its starboard side (the 'give way' vessel) must keep out of the way and avoid crossing ahead of the other vessel, by stopping, slowing down or changing course.



The other vessel (the 'right-of-way' or 'stand on' vessel) must maintain its course and speed unless it appears that the 'give way' vessel is not taking appropriate action.

Overtaking

Any vessel overtaking another, whether sail or power, must keep out of the way of the vessel being overtaken. That is, if a vessel is coming up with another from any direction which is more than 22.5 degrees (in the shaded arc of the diagram) abaft her beam (i.e. from generally behind) it is considered to be the overtaking vessel until finally past and clear. You may overtake on either side only when it is safe, keeping well clear of the other vessel.



If in doubt, assume that you are the overtaking vessel and keep clear. If the other vessel alters course however, you still have a responsibility to keep clear.

If you are approaching or about to overtake a vessel that is engaged in waterskiing or otherwise towing people behind it, you must maintain a distance of 100 m from and directly behind the skier/s.

Giving way and right-of-way

The vessel giving way shall:

- take early and positive avoiding action
- make course/speed alterations obvious to the other vessel
- avoid crossing ahead of the vessel with right-of-way (stand on vessel)
- if necessary, stop or reverse.

The vessel with the right-of-way shall:

- keep its course and speed
- if insufficient action is being taken to avoid collision, give a series of five or more short and rapid blasts on a whistle or horn
- take avoiding action only if that taken by the giving way vessel is insufficient.

If a power-driven vessel is taking action to avoid a collision with another power-driven vessel, it must, if possible, avoid altering course to port.

Responsibilities between vessels

Recreational vessels must keep clear of fishing vessels with nets, lines, trawls or other gear set that restrict manoeuvrability. A professional fishing vessel is required to indicate its activity by displaying two black cones (points together), similar to a West Cardinal Mark ([refer chapter 7, Buoys, marks, beacons, signals & signs](#)) during the day and either of two light combinations at night:

- a red light over a white light; or
- a green light over a white light.

A vessel under power gives way to a vessel:

- not under command
- unable to manoeuvre easily, including large vessels navigating in or near a channel or fairway
- engaged in fishing, as per above
- under sail (for exceptions, refer below).

A sailing vessel must keep clear of a vessel:

- not under command
- unable to manoeuvre easily
- engaged in fishing, as per above.

Navigating in fairways and channels

Recreational vessel operators should take care and use common sense in channels and fairways, particularly in allowing unrestricted passage to larger ships.

All vessels in narrow channels must keep as far as practicable to the starboard side of the channel in the direction of travel.

A vessel engaged in fishing must not impede the passage of any other vessel navigating within a narrow channel or fairway.

Cross a channel or fairway only when safe to do so. Do not impede the passage of a vessel which can safely navigate only within a shipping channel. Always try to cross a channel at the shortest possible distance.

A sailing vessel, or a vessel under 20 m long, must not impede the passage of any vessel that can safely navigate only within a narrow channel or fairway.

Vessels required to give way in a channel must still observe general rules and keep to the starboard side of the channel.

Anchoring restrictions

As with parking a car, you're not allowed to just anchor wherever you like. It's an international law—not just South Australian—that vessels are not allowed to anchor in a shipping channel, as this can restrict the movements of large ships.

Under the *Harbors and Navigation Regulations 2009*, anchoring is also prohibited in certain areas of the Port Adelaide River, Spencer Gulf and Backstairs Passage.

Temporary anchoring restrictions may also be introduced from time to time, such as those applied in areas of the Port Adelaide River to manage the noxious weed, *Caulerpa taxifolia*. It's recommended that you regularly check the SA Government website or *Harbors and Navigation Regulations 2009* for updates (refer chapter 13).

Interacting with big ships

It can be highly dangerous for recreational vessels to be near large ships and tugs. Their size, the power of their engines, limited visibility from the bridge and inability to change course quickly can put small vessels at risk and change normal sea conditions.

In most cases, large ships have right-of-way. Large ships or tugs:

- often cannot see small craft from their bridge
- have limited radar ability to detect small craft
- can travel at deceptively high speeds (more than 20 knots)
- cause 'prop' or 'wheel' wash—a strong underwater current up to hundreds of metres behind them
- cause 'bow waves' that can swamp small craft hundreds of metres away
- cannot alter course or stop quickly
- have powerful engines and thrusters that can pull a smaller vessel in
- may be towing a barge or another object on a long submerged line.

To be safe, recreational vessels should avoid large vessels, even when they are moored. Vessels under sail, including windsurfers, should be aware that large ships can 'steal your wind', making it very difficult to manoeuvre.

As a general rule, you should:

- cross channels at the shortest distance and only when safe
- use safe anchorages—it's illegal and dangerous to anchor in channels and tie up to navigation aids such as buoys and channel marks
- display the correct navigation lights at night to identify your vessel type and activity
- watch for ship lighting—if you see both red and green sidelights, you're dead ahead
- keep clear of large vessels
- avoid shipping activity around wharves
- avoid moored vessels

- not rely on hearing large ships at night
- not assume you have been seen.

Ships, tugboats and port control use VHF radio to communicate (channels 6, 8 and 12). If you are unsure of your situation, contact them. Within port limits, as with most other areas, emergency communication is on VHF channel 16.

For further information, refer www.sa.gov.au/boatingmarine

Flinders Ports also publishes the *Port user guide*, which details operating guidelines, facilities and services at South Australian ports (refer chapter 13).



Avoid large vessels even when they are moored



Keep clear of large vessels

Navigating in restricted visibility

You must be particularly careful when boating at night, or at other times of low visibility; it's harder to judge speeds and distances and not all dangers are lit.

When on the water at night or in low visibility:

- keep a constant watch (look and listen) for hazards and other vessels
- if possible, travel with another vessel or vessels
- be aware that bright shore lights can obscure the lights of other vessels, buoys and marks
- when underway, show the specified navigation lights and make sure you know what different light combinations on other vessels mean (refer chapter 7, **Buoys, marks, beacons, signals & signs**)
- ensure that any other lights on board don't interfere with the navigation lights
- travel at a slow speed to increase your safety margin
- advise all crew and passengers to wear a PFD
- familiarise yourself with navigation hazards, lit and unlit—their position can occasionally change
- use spotlights and torches to assist, but be careful not to dazzle others on the water
- carry spare light bulbs and torch batteries.

If you hear another vessel's fog signal ahead, proceed with caution until the danger of collision is over or stop until you are fully aware of the danger.

Chapter 6.

Self-check questions

1) On which side of a river or channel must vessels operate?

- A. Only on the starboard (right) side.
- B. Only on the port (left) side.
- C. On any convenient side.

2) If you are overtaking another vessel, on which side can you pass?

- A. Only on the starboard (right) side.
- B. Only on the port (left) side.
- C. On either side, but keep well clear of the other vessel.

3) If a vessel approaches you on your starboard side so that a 'give way' situation exists, what must you do?

- A. Keep going—you have right-of-way; maintain speed and course, unless a collision appears likely.
- B. Give way; stop, slow down or change course to keep out of the way of the other vessel.
- C. Alter course to port (left).

4) If another small motorised vessel approaches you on your port side so that a 'give way' situation exists, what must you do?

- A. Keep going—you have right-of-way; maintain speed and course, unless a collision appears likely.
- B. Give way; stop, slow down or change course to keep out of the way of the other vessel.
- C. Alter course to port (left).

5) Why should you avoid large ships in a harbour or narrow channel?

- A. They often can't see smaller craft ahead or to the side of them.
- B. They can create a potentially dangerous bow wave.
- C. They can't easily manoeuvre to avoid a collision.
- D. All of the above.

6) If another vessel approaches you head-on while you're underway, what must you do to avoid collision?

- A. Alter course to port (left) so the other vessel will pass on your starboard (right) side.
- B. Alter course to starboard (right) so the other vessel will pass on your port (left) side.
- C. Slow down and wait for the other boat to pass.