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International Collision Regulations – Part B - Steering and Sailing Rules

Section II Conduct of vessels in sight of one another

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Rule 11 Application

Rules in this section apply to vessels in sight of one another.

Rule 12 Sailing vessels

- (a) When two sailing vessels are approaching one another, so as to involve risk of collision, one of them shall keep out of the way of the other as follows:
- (i) when each has the wind on a different side, the vessel which has the wind on the port side shall keep out of the way of the other;
- (ii) when both have the wind on the same side, the vessel which is to windward shall keep out of the way of the vessel which is to leeward;
- (iii) if a vessel with the wind on the port side sees a vessel to windward and cannot determine with certainty whether the other vessel has the wind on the port or on the starboard side, she shall keep out of the way of the other.
- (b) For the purposes of this Rule the windward side shall be deemed to be the side opposite to that on which the mainsail is carried or, in the case of a square rigged vessel, the side opposite to that on which the largest fore and aft sail is carried.





Vessel A (port tack) gives way to both vessel B and C Which are on starboard tack.

Vessel C (windward vessel) must keep out of the way of vessel B

Rule 13 Overtaking

(a) Notwithstanding anything contained in the Rules of Part B, sections I and II, **any** vessel overtaking any other shall keep out of the way of the vessel being overtaken.

Note that the focus is on ANY vessel overtaking another.

That means that regardless that you might be sailing a yacht you must still keep out of the way of a power driven vessel if you are overtaking them.

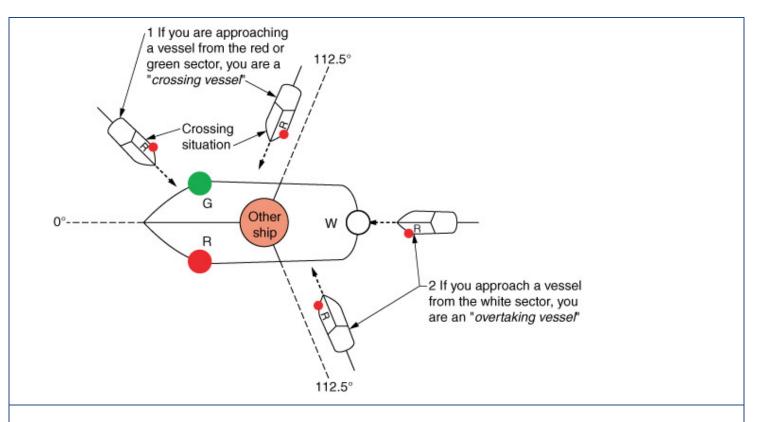
- (b) A vessel shall be deemed to be overtaking when coming up with another vessel from a direction more than 22.5 degrees abaft her beam, that is, in such a position with reference to the vessel she is overtaking, that at night she would be able to see only the stern light of that vessel but neither of her sidelights.
- (c) When a vessel is in any doubt as to whether she is overtaking another, she shall assume that this is the case and act accordingly.

Doubt about whether you are overtaking is more likely to happen during the day.

For example if you were approaching from green 110° you would be crossing, but from green 115° you would be overtaking.

At night a stern light would clearly indicate the difference, but in daytime it is less easy to determine accurately.

(d) Any subsequent alteration of the bearing between the two vessels shall not make the overtaking vessel a crossing vessel within the meaning of these Rules or relieve her of the duty of keeping clear of the overtaken vessel until she is finally past and clear.



Note that when overtaking another vessel you should allow sufficient room before crossing their bow.

If possible it may be a better idea to allow the other vessel to pass ahead and go behind their stern instead of crossing their bow.

Overtaking can be a dangerous manoeuvre because all moving vessels are surrounded by a pressure wave.

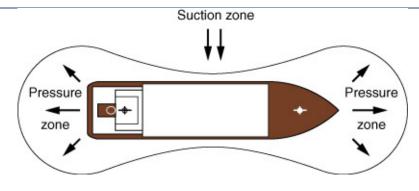
High pressure at the ends and low pressure (suction) at the sides.

The diagram below shows this effect, which can be very pronounced in a narrow channel or in shallow waters.

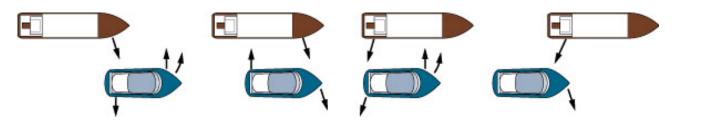
The pressure wave from a large overtaking vessel can easily cause a smaller one to swing uncontrollably.

As the large vessel approaches, its pressure wave pushes the stern of the other vessel further away, causing the bow to swing in and bring the smaller vessel directly to collision, or close enough so that she can be sucked in to collide with the side as the big ship passes.

Therefore an overtaking vessel should keep well clear and the vessel being overtaken should, if possible, slow down so that it takes less time to complete the manoeuvre.



Pressure zone around a vessel as it moves through the water



Interaction between vessels as one vessel passes the other

Rule 14 Head-on situation

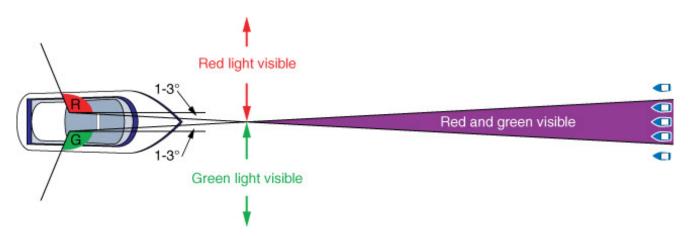
- (a) When two power-driven vessels are meeting on reciprocal or nearly reciprocal courses so as to involve risk of collision each shall alter her course to starboard so that each shall pass on the port side of the other.
- (b) Such a situation shall be deemed to exist when a vessel sees the other ahead or nearly ahead and by night she could see the masthead lights of the other in a line or nearly in a line and/or both sidelights and by day she observes the corresponding aspect of the other vessel.
- (c) When a vessel is in any doubt as to whether such a situation exists she shall assume that it does exist and act accordingly.



2 vessels approaching each other on reciprocal or almost reciprocal courses should both alter to Starboard and pass 'Port to Port'.

When we come to study the technical details of navigation lights, we will see that the sidelight beams must not cut off until 1 to 3 degrees beyond the 'dead ahead' line.

This is shown exaggerated in the illustration below.



Note that If you have a ship right ahead and you can see only one sidelight, she is a 'crossing vessel'.

If she remains right ahead, she must be travelling towards you and somewhat sideways, but she remains a crossing vessel.

As in all situations, it is the doubtful ones which present the most difficulty.

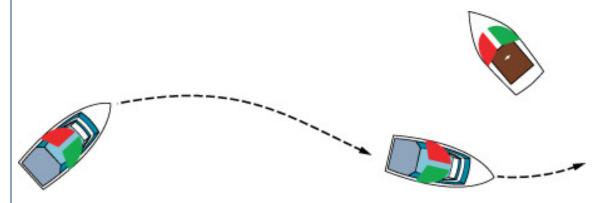
Imagine that you can see both lights of an oncoming vessel right ahead, but the red one keeps disappearing, so you can see mostly her green light.

The other vessel is probably yawing because of the green light, it looks as though she will probably pass to starboard, but the continual re-appearance of the red light suggests that it might be a bit close for comfort.

This is a doubtful case, so you should turn to starboard in plenty of time and show the other vessel a solid red light.

Rule 15 Crossing situation

When two power-driven vessels are crossing so as to involve risk of collision, the vessel which has the other on her own starboard side shall keep out of the way and shall, if the circumstances of the case admit, avoid crossing ahead of the other vessel



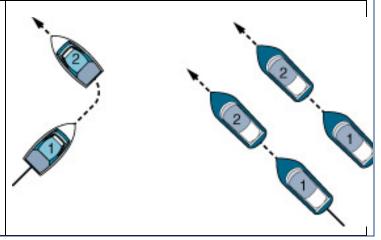
The reason for altering to starboard is so that you avoid crossing ahead of the other vessel, as shown above.

If a starboard alteration is simply not practicable (because of other ships or hazards), to avoid crossing ahead, it might be better to simply slow down, as long as the change in speed is (if circumstances permit) readily apparent to the other vessel both visually and by radar as required by Rule 8.

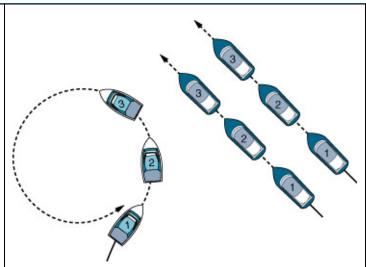
If altering to port to avoid a collision you should certainly do it early, and make the alteration large, as we have already learnt.

If the alteration is large enough, the other vessel would finish up astern of you.

By continuing on a similar course to the other vessel, the rate of approach would be reduced, and it would turn the other vessel into an overtaking vessel and she would have to keep clear.



We could take this idea further and keep the helm hard over so that we simply go round in a big circle, by which time the other vessel will probably be out of the way.



You have probably noticed that the Rules always refer to a situation between TWO vessels, not three or four.

So what happens if four similar vessels are heading for a collision at the same spot?

Simple, really.

They all turn to starboard. Look at the diagram opposite.

The Rules only apply to two ships at a time, so let's look at each pair in turn, starting with vessel A.

Colour the sidelight sectors yourself for clarity.

Between vessels A and B, B should turn to starboard (pass astern of A).

Between vessels A and C, both A and C should turn to starboard.

Between vessels A and D, A should turn to starboard (pass astern of D). Now let's look at vessel D, What does she have to do?

Between vessels D and A A should turn to starboard.

Between vessels D and B B should turn to starboard.

Between vessels D and C D should turn to starboard.

See that all vessels turn to starboard.

Check similarly for yourself with vessels B and C.

The above diagram is included to illustrate the concept of applying the Rules between TWO vessels at a time, and the effectiveness of turning to starboard. Coming back to the Rule, the purpose of the starboard turn is to avoid crossing ahead of the other vessel 'if the circumstances of the case admit'. It follows that in a crossing collision situation the Rule does allow a turn to port – in fact it demands it shall keep out of the way—if circumstances make it necessary to avoid collision. The variety of vessels and their differences in speed and manoeuvrability are today so large that an alteration to port (crossing ahead) could perhaps be more easily justified than in times past.

Rule 16 Action by give way vessel

Every vessel which is directed to keep out of the way of another vessel shall, so far as possible, take early and substantial action to keep well clear.

It is imperative that whatever action you take is immediately obvious to the Stand On vessel so as not to leave them in any doubt that you have taken action.

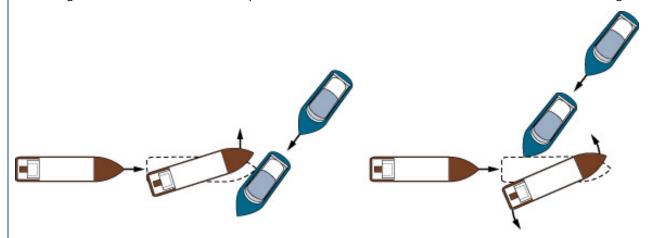
Rule 17 Action by stand-on vessel

- (a) (i) Where one of two vessels is to keep out of the way the other shall keep her course and speed.
- (ii) The latter vessel may however take action to avoid collision by her manoeuvre alone, as soon as it becomes apparent to her that the vessel required to keep out of the way is not taking appropriate action in compliance with these Rules.
- (b) When, from any cause, the vessel required to keep her course and speed finds herself so close that collision cannot be avoided by the action of the give-way vessel alone, she shall take such action as will best aid to avoid collision.
- (c) A power-driven vessel which takes action in a crossing situation in accordance with subparagraph
- (a) (ii) of this Rule to avoid collision with another power driven vessel shall, if the circumstances of the case admit, not alter course to port for a vessel on her own port side.
- (d) This Rule does not relieve the give-way vessel of her obligation to keep out of the way.

Once again the Rules use the word 'shall' in its imperative sense and once again it uses the proviso 'if the circumstances of the case admit'.

The Rule accepts that if, for some reason, it is dangerous to turn to starboard, it could be necessary to turn to port.

This diagram below illustrates two possible scenarios when a starboard turn could be dangerous.



Having read this far through the Rules, it would now be clear that if you are a stand-on vessel, altering to port is dangerous because the give-way vessel will very likely be on your port side; if she takes action of her own, she would probably turn to starboard, and the two vessels would turn into each other's path.



Assume you are on vessel B in the diagram above. A should have given way but has not done so. If she suddenly makes a late starboard turn, your own port turn would result in collision.

Rule 18 Responsibilities between vessels

Except where Rules 9, 10 and 13 otherwise require:

- (a) A power-driven vessel underway shall keep out of the way of:
 - (i) a vessel not under command;
 - (ii) a vessel restricted in her ability to manoeuvre;
 - (iii) a vessel engaged in fishing;
 - (iv) a sailing vessel.
- (b) A sailing vessel underway shall keep out of the way of:
 - (i) a vessel not under command;
 - (ii) a vessel restricted in her ability to manoeuvre;
 - (iii) a vessel engaged in fishing.
- (c) A vessel engaged in fishing when underway shall, so far as possible, keep out of the way of:
 - (i) a vessel not under command;
 - (ii) a vessel restricted in her ability to manoeuvre.

(d)

- (i) Any vessel other than a vessel not under command or a vessel restricted in her ability to manoeuvre shall, if the circumstances of the case admit, avoid impeding the safe passage of a vessel constrained by her draught, exhibiting the signals in Rule 28.
- (ii) A vessel constrained by her draught shall navigate with particular caution having full regard to her special condition.
- (e) A seaplane on the water shall, in general, keep well clear of all vessels and avoid impeding their navigation. In circumstances, however, where risk of collision exists, she shall comply with the Rules of this Part.
- (f) (i) A WIG craft shall, when taking off, landing and in flight near the surface, keep well clear of all other vessels and avoid impeding their navigation;
- (ii) a WIG craft operating on the water surface shall comply with the Rules of this Part as a power-driven vessel.