

CYA Cruising Instructor

Collision Regulations Study Aid



Sailing to Win  *Sailing for Life*
La voile pour la victoire *La voile pour la vie*



1. Table of Contents for the Collision Regulations

One of the problems most students and instructors encounter while studying the Canadian Government's publication *Collision Regulations*, is trying to see a logical flow or order to the rules. Close review of this table of contents will help with that problem.

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Reference: “Collision Regulations – International Regulations for Preventing Collisions at Sea, 1972 with Canadian Modifications”, Publication No. TP 10739B, June 2004 Edition.

2. A Memory Aid for the Collision Regulation

Have you found it difficult to remember the order of priority between vessels? Try to develop your own memory aid from the following examples.

When two vessels approach one another, one shall be the **stand-on** vessel, the other shall be the **give-way** vessel. We have rules between two power-driven vessels:

1. Meeting head on
2. Overtaking
3. Crossing paths

For approaches between two sailing vessels, we have rules for:

1. Starboard and Port tacks
2. Windward and leeward when vessels are on the same tack.
3. Overtaking

There are two other rules (Rule 13 and Rule 18) that further define what must be done between vessels of different classifications.

- “O” - stands for a vessel being overtaken
- “N” - stands for a vessel not under command
- “R” - stands for a vessel restricted in her manoeuvrability
- “C” - stands for a vessel constrained by draft
- “F” - stands for a vessel engaged in fishing
- “S” - stands for a vessel under sail
- “P” - stands for a power-driven vessel
- “W” - stands for Wing in Ground vessel
- “O” - stands for an overtaking vessel

The vessel highest on the list will be the stand-on vessel. For example, if a fishing vessel approaches a vessel restricted in her manoeuvrability, the fishing vessel shall give way. Between power and sailing vessels; the sailing vessel shall stand-on. Large commercial vessels and a towing vessel with a tow are considered to be restricted in manoeuvrability. A sea plane is considered a power-driven vessel. Remember to respect traffic separation schemes.

Make up a word association to help remember the above order of priority similar to these in the following table. “**Only New Racers Can Fear Spinnaker Poles While Overtaking**”, “**One Never Really Can Feel Safe Pretending When Operating**”, etc.

	Vessel Classification	Example 1	Example 2	Your Memory Aid
O	Vessel Being Overtaken	Only	One	
N	Vessel Not Under Command	New	Never	
R	Restricted in Ability to Manoeuvre	Racers	Really	
C	Constrained by Draft	Can	Can	
F	Vessel Engaged in Fishing	Fear	Feel	
S	Vessel Under Sail	Spinnaker	Safe	
P	Power-Driven Vessel	Poles	Pretending	
W	Wing in Ground	While	When	
O	Overtaking	Overtaking	Operating	

3. Briefing Notes on Collision Regulations

The following information is supplied in a logical, summarized format to help identify and remember the various lights, shapes and sound signals from the Collision Regulations. Please cross-reference these tables with the official publication to ensure you understand the abbreviations and that the following information is correct and conforms to the Rules. As Skipper of your teaching vessel, you are obliged to fully understand and obey the Collision Regulations. There are many good illustrated publications available. Perhaps this summary will be a refresher or will help clarify any points of confusion. Your suggestions are always welcome.

Lights and Shapes

Rule 23 - Power-driven, Underway (excludes towing and pushing)

Sidelights: (Port, red, 112½° - Starboard, green, 112½°). Stern, white, 135°. Masthead, white, 225°
 >50 metres: 2nd Masthead mandatory - abaft of and higher than 1st above
 <12 metres: Stern light and Masthead may be combined in an all-round white, 360° light
 <7 metres and 7 knots: all-round white light plus side lights if practicable (not in Canada)
 Air-cushion vessels in the non-displacement mode: all above plus an all-round flashing yellow.
 Shapes: None.

Rule 24 - Power-driven, Towing and Pushing

Lights of Rule 23 above plus a Tow light (yellow, 135°) in a vertical line above the Stern light; and if tow:
 <200 metres, an additional Masthead light in a vertical line above the first
 >200 metres, two additional Masthead lights in a vertical line above the first
 Note: When pushing and rigidly connected, regard as a power-driven vessel, Rule 23 only.
 (On Great Lakes, when pushing or towing alongside, 2 tow lights in a vertical line instead of a stern light)
 Shapes: a diamond shape when tow >200 metres
 Note: Length of tow is measured from the stern of the vessel to the aft end of the tow.

Vessel being towed:

Side lights and Stern Light; diamond shape >200 metres
 Groups towed alongside or pushed are lighted as one vessel.

Inconspicuous or partly submerged objects:

<25 metres breadth, on all-round white light at each end
 >25 metres breadth, two all-round white lights at extremities of breadth
 Shapes: a diamond at or near the aftermost extremity of the last vessel, and if
 >200 metres, a second diamond shape as far forward as possible.

Rule 25 - Sailing Vessels Underway (and vessels under oars)

Sidelights: (Port, red, 112½° - Starboard, green, 112½°) Stern, white, 135° and
may, in addition, exhibit 2 all-round lights in a vertical line at or near top of the mast, red over green

If <20 metres, lights may be combined in one light (tri-light) at or near top of the mast.

If <7 metres, should have above, but may just have a white torch available - see Rule 25(d)

Note: When the vessel is propelled by machinery, it is a power-driven vessel under Rule 23.

Shapes: When propelled by machinery, a cone, apex downwards. (Not required in Canada for vessels <12 metres)

Rule - 26 Fishing Vessels

Note: A Fishing Vessel must be engaged in fishing or else Rule 23 applies. There are two categories of fishing vessels: trawlers (dragging through the water of a dredge net or other apparatus used as a fishing appliance), and all other vessels engaged in fishing.

When making way through the water, the vessel shall display Sidelights, Masthead and Stern light.

When engaged in fishing, the following additional lights shall be displayed:

Trawlers

Lights: two all-round lights in a vertical line, upper being green and lower white, and if >50 metres exhibit a Masthead light abaft of and higher than the all-round green

Shapes: two cones with apexes together in a vertical line; if <20 metres, a basket is permitted.

Other than Trawling:

Lights: two all-round lights in a vertical line, upper being red and lower white, and if gear extended >150 metres from vessel, an all-round white light in direction of the gear

Shapes: two cones with apexes together in a vertical line; if <20 metres, a basket is permitted.

If gear extended >150 metres from vessel, a cone, apex upwards in direction of the gear.

Rule 27 - Not Under Command / Restricted in Ability to Manoeuvre

This rule does not apply to vessels under 12 metres (except in diving operations).

Not Under Command:

Lights: Two all-round red lights in a vertical line (plus Sidelights, Masthead and Stern light while underway)

Shapes: Two balls in a vertical line

Restricted in her ability to manoeuvre:

Lights: Three all-round lights in a vertical line (red-white-red) (plus Sidelights, Masthead and Stern light while underway)

Shapes: Three shapes in a vertical line (ball-diamond-ball)

Towing operations:

Lights A yellow light above the stern light

If the vessel is severely restricted in her ability to manoeuvre, the above shall apply.

Rule 27 - (Continued)

Dredging operations:

Lights: Two all-round red lights on the side of the obstruction; two all-round green lights on passing side
Shapes: Two balls on side of obstruction; two diamonds on side which another vessel may pass

Diving operations:

Lights: Three all-round lights in a vertical line (red-white-red).

Mine clearance operations:

Lights: Three all-round green lights in a vertical line near the foremast head and one at each end of the fore-yard (Stand clear by 1,000 metres) plus Masthead, Sidelights and stern light while underway.

Rule 28 - Vessels Constrained by their Draught

Lights: Three all-round red lights in a vertical line
Shapes: A cylinder

Rule 29 - Pilotage Vessels

Lights: Two all-round lights in a vertical line, white over red.
Shapes: None. (Side of vessel has the word "PILOT" in large letters).

Rule 30 - Anchored Vessels and Vessels Aground

Vessels at anchor:

Lights: An all-round white light, and if
>50 metres, a second all-round white light near the stern, lower than the first light.
>100 metres shall use the available working or equivalent lights to illuminate her decks
Shapes: One ball on the fore-part of the vessel
Note: Vessels <7 metres are exempt from lights and shapes if not in or near a narrow channel, fairway or anchorage where other vessels normally navigate.

Canadian vessels are exempt from anchor lights while located within a recognized mooring, other than a narrow channel or fairway where other vessels normally navigate.

Vessels aground:

Lights: As for a vessel at anchor above and in addition
two all-round red lights in a vertical line (same as Not Under Command)
Shapes: Three balls in a vertical line
Note: Vessels <12 metres are exempt from lights and shapes when aground.

Sound Signals

Rule 33 - Equipment for Sound Signals

Vessels <12 metres require a means of making an efficient sound signal (except tow boats Rule 33c)

Vessels >12 metres require a whistle and a bell

Vessels >100 metres require the above plus a gong

Rule 34 - Manoeuvring and Warning Signals (Vessels In Sight)

Radio may be used to reach agreement in meeting, crossing and overtaking situations: Rule 34(f).

Whistle Signal	Reason for Signal
1 Short	I am altering to starboard (or overtake on starboard in Great Lakes)
2 Short	I am altering to port (or overtake on port side in Great Lakes)
3 Short	I am operating astern propulsion
5 Short	I do not understand or in doubt of sufficient action is being taken
2 Long - 1 Short	I intend to overtake you on your starboard side
2 Long - 2 Short	I intend to overtake you on your port side
1 Long - 1 Short - 1 Long - 1 Short	Vessel being overtaken agrees with action
1 Long	Caution approaching a bend or obstruction Must be answered by same signal if you are relative traffic. Leaving a dock or berth

Rule 35 - Restricted Visibility

Whistle Signal	Vessel Type	Intervals
1 Long	Power-driven making way	Not more than 2 minutes between successive blasts. Always respond with your signal immediately to alert the other vessel of your presence.
2 Long	Power-driven, no way on	
1 Long - 2 Short	Sailboat Not under command Restricted in ability to manoeuvre Boat engaged in fishing Boat engaged in towing	
1 Long - 3 Short	A manned tow	
4 Short	A pilot vessel	
1 Short - 1 Long - 1 Short Plus bell for 5 sec Plus gong for 5 sec	Vessel at anchor or aground Vessel 12 metres and greater Vessel 100 metres or greater	Not more than 1 minute between successive signals
3 bell strokes (before and after bell signals above)	Vessel aground	

