



SHIPPING COLLISION RULES 1979

RULES MADE BY THE COOK ISLANDS MARINE BOARD

At Rarotonga this 8th day of November 1979

Present:

Richard Charles Chapman - Chairman
 Archibald John Pickering - Member
 Apoo Tangatutai - Member

FURSUANT to the provisions of the Cook Islands Shipping Ordinance 1963 the Cook Islands Marine Board hereby prescribes the following rules with regard to the prevention of collisions and safety at sea of all vessels:

ANALYSIS

Title	
1.	Title
2.	Interpretation
	<u>PART I - CONDUCT OF VESSELS</u>
	<u>IN ANY CONDITION OF VISIBILITY</u>
3.	Application
4.	Look-out
5.	Safespeed
6.	Risk of collision
7.	Action to avoid collision
8.	Narrow channels
	<u>PART II - CONDUCT OF VESSELS</u>
	<u>IN SIGHT OF ONE ANOTHER</u>
9.	Application
10.	Sailing vessels
11.	Overtaking
12.	Head-on situation
13.	Crossing situation
14.	Action by give-way vessel
15.	Action by stand-on vessel
16.	Responsibilities between vessels
19.	Definitions
20.	Visibility of lights
21.	Power-driven vessel underway
22.	Towing and pushing
23.	Sailing vessels underway
24.	Fishing vessels
25.	Vessels not under command or restricted in their ability to manoeuvre
26.	Vessels constrained by their draught
27.	Anchored vessels
28.	Equipment for sound signals
29.	Manoeuvring and warning signals
30.	Sound signals in restricted visibility
31.	Signals to attract attention

PART III - CONDUCT OF VESSELS
IN RESTRICTED VISIBILITY

- | | | | |
|-----|---|-----|------------------|
| 17. | Conduct of vessels in restricted visibility | 32. | Distress signals |
| 18. | <u>PART IV - LIGHTS AND SHAPES</u>
Application | | ANNEXES |

1. Title - These rules may be cited as the Shipping Collision Rules 1979.

2. Interpretation - In these rules, unless the context otherwise requires -

"Vessel" means any ship or vessel including yachts, boats, barges, lighters and like vessels to which the provisions of the Cook Islands Shipping Ordinance 1963 apply.

PART I - CONDUCT OF VESSELS IN ANY
CONDITION OF VISIBILITY

3. Application - Rules in this part apply in any condition of visibility.

4. Look-out - Every vessel shall at all times maintain a proper look-out by sight and hearing as well as by all available means appropriate in the prevailing circumstances and conditions so as to make a full appraisal of the situation and of the risk of collision.

5. Safespeed - Every vessel shall at all times proceed at a safe speed so that she can take proper and effective action to avoid collision and be stopped within a distance appropriate to the prevailing circumstances and conditions.

In determining a safe speed the following factors shall be among those taken into account:

- (a) By all vessels:
- (i) The state of visibility;
 - (ii) The traffic density including concentrations of fishing vessels or any other vessels;
 - (iii) The manoeuvrability of the vessel with special reference to stopping distance and turning ability in the prevailing conditions;
 - (iv) At night the presence of background light, such as from shore lights or from back scatter of her own lights;
 - (v) The state of wind, sea, and current, and the proximity of navigational hazards;
 - (vi) The draught in relation to the available depth of water.
- (b) Additionally, by vessels with operational radar:
- (1) The characteristics, efficiency, and limitations of the radar equipment;
 - (11) Any constraints imposed by the radar range scale in use;
 - (111) The effect on radar detection of the sea state, weather, and other sources of interference;

- (iv) The possibility that small vessels, ice, and other floating objects may not be detected by radar at an adequate range;
- (v) The number, location, and movement of vessels detected by radar;
- (vi) The more exact assessment of the visibility that may be possible when radar is used to determine the range of vessels or other objects in the vicinity.

6. Risk of collision - (1) Every vessel shall use all available means appropriate to the prevailing circumstances and conditions to determine if risk of collision exists. If there is any doubt, such risk shall be deemed to exist.

(2) Proper use shall be made of radar equipment if fitted and operational, including long-range scanning to obtain early warning of risk of collision and radar plotting or equivalent systematic observation of detected objects.

(3) Assumptions shall not be made on the basis of scanty information, especially scanty radar information.

(4) In determining if risk of collision exists, the following considerations shall be among those taken into account:

- (a) Such risk shall be deemed to exist if the compass bearing of an approaching vessel does not appreciably change;
- (b) Such risk may sometimes exist even when an appreciable bearing change is evident, particularly when approaching a very large vessel or a tow or when approaching a vessel at close range.

7. Action to avoid collision - (1) Any action taken to avoid collision shall, if the circumstances of the case admit, be positive, made in ample time and with due regard to the observance of good seamanship.

(2) Any alteration of course and/or speed to avoid collision shall, if the circumstances of the case admit, be large enough to be readily apparent to another vessel observing visually or by radar; a succession of small alterations of course and/or speed should be avoided.

(3) If there is sufficient sea room, alteration of course alone may be the most effective action to avoid a close-quarters situation, provided it is made in good time, is substantial, and does not result in another close-quarters situation.

(4) Action taken to avoid collision with another vessel shall be such as to result in passing at a safe distance. The effectiveness of the action shall be carefully checked until the other vessel is finally past and clear.

(5) If necessary to avoid collision or allow more time to assess the situation, a vessel shall slacken her speed or take all way off by stopping or reversing her means of propulsion.

8. Narrow channels - (1) A vessel proceeding along the course of a narrow channel or fairway shall keep as near to the outer limit of the channel or fairway which lies on her starboard side as is safe and practicable.

(2) A vessel of less than 20 metres in length or a sailing vessel shall not impede the passage of a vessel which can safely navigate only within a narrow channel or fairway.

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

(4) A vessel shall not cross a narrow channel or fairway if such crossing impedes the passage of a vessel which can safely navigate only within such channel or fairway. The latter vessel may use the sound signal prescribed in rule 29 (4) if in doubt as to the intention of the crossing vessel.

(5) (a) In a narrow channel or fairway when overtaking can take place only if the vessel to be overtaken has to take action to permit safe passing, the vessel intending to overtake shall indicate her intention by sounding the appropriate signal prescribed in rule 29 (3)(i). The vessel to be overtaken shall, if in agreement, sound the appropriate signal prescribed in rule 29(3)(ii) and take steps to permit safe passing. If in doubt, she may sound the signals prescribed in rule 29 (4).

(b) This rule does not relieve the overtaking vessel of her obligation under rule 11.

(c) A vessel nearing a bend or an area of a narrow channel or fairway where other vessels may be obscured by an intervening obstruction shall navigate with particular alertness and caution and shall sound the appropriate signal prescribed in rule 29 (5).

(d) Any vessel shall, if the circumstances of the case admit, avoid anchoring in a narrow channel.

PART II - CONDUCT OF VESSELS IN SIGHT OF ONE ANOTHER

9. Application - Rules in this Part apply to vessels in sight of one another.

10. Sailing vessels - (1) When 2 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:

- (a) 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;
- (b) 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;
- (c) 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.

(2) 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.

11. Overtaking - (1) Notwithstanding anything contained in the rules of this part, any vessel overtaking any other shall keep out of the way of the vessel being overtaken.

(2) 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 sternlight of that vessel but neither of her sidelights.

(3) 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.

(4) 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.

12. Head-on situation - (1) 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.

(2) 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.

(3) When a vessel is in any doubt as to whether such a situation exists, she shall assume that it does exist and act accordingly.

13. 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.

14. 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.

15. Action by stand-on vessel - (1) (a) Where one of two vessels is to keep out of the way, the other shall keep her course and speed.

(b) 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.

(2) 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.

(3) A power-driven vessel which takes action in a crossing situation in accordance with paragraph (a) of clause (1) 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.

(4) This rule does not relieve the give-way vessel of her obligation to keep out of the way.

16. Responsibilities between vessels - Except where rules 8 and 11 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 26.

- (ii) A vessel constrained by her draught shall navigate with particular caution having full regard to her special condition.

PART III - CONDUCT OF VESSELS IN RESTRICTED VISIBILITY

17. Conduct of vessels in restricted visibility - (1) This rule applies to vessels not in sight of one another when navigating in or near an area of restricted visibility.

(2) Every vessel shall proceed at a safe speed adapted to the prevailing circumstances and conditions of restricted visibility. A power-driven vessel shall have her engines ready for immediate manoeuvre.

(3) Every vessel shall have due regard to the prevailing circumstances and conditions of restricted visibility when complying with the rules of Section I of this Part.

(4) A vessel which detects by radar alone the presence of another vessel shall determine if a close-quarters situation is developing and/or a risk of collision exists. If so, she shall take avoiding action in ample time, provided that when such action consists of an alteration of course, so far as possible the following shall be avoided:

(i) An alteration of course to port for a vessel forward of the beam, other than for a vessel being overtaken;

(ii) An alteration of course towards a vessel abeam or abaft the beam.

(5) Except where it has been determined that a risk of collision does not exist, every vessel which hears apparently forward of her beam the fog signal of another vessel, or which cannot avoid a close-quarters situation with another vessel forward of her beam, shall reduce her speed to the minimum at which she can be kept on her course. She shall if necessary take all her way off and in any event navigate with extreme caution until danger of collision is over.

PART IV - LIGHTS AND SHAPES

18. Application - (1) Rules in this Part shall be complied with in all weathers.

(2) The rules concerning lights shall be complied with from sunset to sunrise, and during such times no other lights shall be exhibited, except such lights as cannot be mistaken for the lights specified in these rules or do not impair their visibility or distinct character, or interfere with the keeping of a proper look-out.

(3) The lights prescribed by these rules shall, if carried, also be exhibited from sunrise to sunset in restricted visibility and may be exhibited in all other circumstances when it is deemed necessary.

(4) The rules concerning shapes shall be complied with by day.

(5) The lights and shapes specified in these rules shall comply with the provisions of Annex I to these rules.

19. Definitions - In this Part of these rules, unless the context otherwise requires:

(a) "All round light" means a light showing an unbroken light over an arc of the horizon of 360 degrees.

(b) "Flashing light" means a light flashing at regular intervals at a frequency of 120 flashes or more per minute.

(c) "Masthead light" means a white light placed over the fore and aft centreline of the vessel showing an unbroken light over an arc of the horizon of 225 degrees and so fixed as to show the light from right ahead to 22.5 degrees abaft the beam on either side of the vessel.

(d) "Sidelights" means a green light on the starboard side and a red light on the port side, each showing an unbroken light over an arc of the horizon of 112.5 degrees and so fixed as to show the light from right ahead to 22.5 degrees abaft the beam on its respective side. In a vessel of less than 20 metres in length the sidelights may be combined in one lantern carried on the fore and aft centreline of the vessel.

(e) "Sternlight" means a white light placed as nearly as practicable at the stern showing an unbroken light over an arc of the horizon of 135 degrees and so fixed as to show the light 67.5 degrees from right aft on each side of the vessel.

(f) "Towing light" means a yellow light having the same characteristics as the "sternlight" defined in paragraph (e) of this rule.

20. Visibility of lights - The lights prescribed in these rules shall have an intensity as specified in clause 8 of Annex I to these rules so as to be visible at the following minimum range:

(i) In vessels of 50 metres or more in length -

A masthead light, 6 miles;
A sidelight, 3 miles;
A sternlight, 3 miles;
A towing light, 3 miles;
A white, red, green, or yellow all-round light, 3 miles;

(ii) In vessels of 12 metres or more in length but less than 50 metres in length -

A masthead light, 5 miles; except that where the length of the vessel is less than 20 metres, 3 miles;
A sidelight, 2 miles;
A sternlight, 2 miles;
A towing light, 2 miles;
A white, red, green, or yellow all-round light, 2 miles.

(iii) In vessels of less than 12 metres in length -

A masthead light, 2 miles;
A sidelight, 1 mile;
A sternlight, 2 miles;
A towing light, 2 miles;
A white, red, green, or yellow all-round light, 2 miles.

21. Power-driven vessels underway - (1) A power-driven vessel underway shall exhibit -

- (i) A masthead light forward;
- (ii) A second masthead light abaft of and higher than the forward one; except that a vessel of less than 50 metres in length shall not be obliged to exhibit such light but may do so;
- (iii) Sidelights;
- (iv) A sternlight.

(2) A power-driven vessel of less than 7 metres in length and whose maximum speed does not exceed 7 knots may, in lieu of the lights prescribed in clause 1 of this rule, exhibit an all-round white light. Such vessel shall, if practicable, also exhibit sidelights.

22. Towing and pushing - (1) A power-driven vessel when towing shall exhibit -

- (i) Instead of the light prescribed in rule 21 (1) (i), two masthead lights forward in a vertical line. When the length of the tow, measuring from the stern of the towing vessel to the after end of the tow exceeds 200 metres, 3 such lights in a vertical line;
- (ii) Sidelights;
- (iii) A sternlight;
- (iv) A towing light in a vertical line above the sternlight;
- (v) When the length of the tow exceeds 200 metres, a diamond shape where it can best be seen.

(2) When a pushing vessel and a vessel being pushed ahead are rigidly connected in a composite unit, they shall be regarded as a power-driven vessel and exhibit the lights prescribed in rule 21.

(3) A power-driven vessel when pushing ahead or towing alongside except in the case of a composite unit, shall exhibit -

- (i) Instead of the light prescribed in rule 21 (1) (i), 2 masthead lights forward in a vertical line;
- (ii) Sidelights;
- (iii) A sternlight.

(4) A power-driven vessel to which clauses (1) and (3) of this rule apply shall also comply with rule 21 (1) (ii).

(5) A vessel or object being towed shall exhibit -

- (i) Sidelights;
- (ii) A sternlight;
- (iii) When the length of the tow exceeds 200 metres, a diamond shape where it can best be seen.

(6) Provided that any number of vessels being towed alongside or pushed in a group shall be lighted as one vessel -

- (i) A vessel being pushed ahead, not being part of a composite unit, shall exhibit, at the forward end, sidelights;
- (ii) A vessel being towed alongside shall exhibit a sternlight and, at the forward end, sidelights.

(7) Where from any sufficient cause it is impracticable for a vessel or object being towed to exhibit the lights prescribed in clause (5) of this rule, all possible measures shall be taken to light the vessel or object towed or at least to indicate the presence of the unlighted vessel or object.

23. Sailing vessels underway - (1) A sailing vessel under way shall exhibit -

- (i) Sidelights;
- (ii) A sternlight.

(2) In a sailing vessel of less than 12 metres in length the lights prescribed in clause (1) of this rule may be combined in one lantern carried at or near the top of the mast where it can best be seen.

(3) A sailing vessel underway may, in addition to the lights prescribed in clause (1) of this rule, exhibit at or near the top of the mast, where they can best be seen, two all-round lights in a vertical line, the upper being red and the lower green, but these lights shall not be exhibited in conjunction with the combined lantern permitted by paragraph (b) of this rule.

(4) A sailing vessel of less than 7 metres in length shall, if practicable, exhibit the lights prescribed in clauses (1) or (2) of this rule, but, if she does not, she shall have ready at hand an electric torch or lighted lantern showing a white light which shall be exhibited in sufficient time to prevent collision.

(5) A vessel proceeding under sail when also being propelled by machinery shall exhibit forward where it can best be seen a conical shape, apex downwards.

24. Fishing vessels - (1) A vessel engaged in fishing, whether underway or at anchor, shall exhibit only the lights and shapes prescribed in this rule.

(2) A vessel when engaged in trawling, by which is meant the dragging through the water of a dredge net or other apparatus used as a fishing appliance, shall exhibit -

- (1) Two all-round lights in a vertical line, the upper being green and the lower white or a shape consisting of two cones with their apexes together in a vertical line one above the other; a vessel of less than 20 metres in length may instead of this shape exhibit a basket;

- (ii) A masthead light abaft of and higher than the all-round green light; a vessel less than 50 metres in length shall not be obliged to exhibit such a light but may do so;
- (iii) When making way through the water, in addition to the lights prescribed in this paragraph, sidelights and a sternlight.

(3) A vessel engaged in fishing, other than trawling, shall exhibit -

- (i) Two all-round lights in a vertical line, the upper being red and the lower white or a shape consisting of two cones with apexes together in a vertical line one above the other; a vessel less than 20 metres in length may instead of this shape exhibit a basket;
- (ii) When there is outlying gear extending more than 150 metres horizontally from the vessel, an all-round white light or a cone apex upwards in the direction of the gear;
- (iii) When making way through the water, in addition to the lights prescribed in this paragraph, sidelights and a sternlight.

(4) A vessel engaged in fishing in close proximity to other vessels engaged in fishing may exhibit the additional signals described in Annex II of these rules.

(5) A vessel when not engaged in fishing shall not exhibit the lights or shapes prescribed in this rule, but only those prescribed for a vessel of her length.

25. Vessels not under command or restricted in their ability to manoeuvre -

- (1) A vessel not under command shall exhibit -
 - (i) Two all-round red lights in a vertical line where they can best be seen;
 - (ii) Two balls or similar shapes in a vertical line where they can best be seen;
 - (iii) When making way through the water, in addition to the lights prescribed in this paragraph, sidelights and a sternlight.
- (2) A vessel restricted in her ability to manoeuvre, except a vessel engaged in minesweeping operations, shall exhibit -
 - (i) Three all-round lights in a vertical line where they can be red and seen. The highest and lowest of these lights shall be red and the middle light shall be white;
 - (ii) Three shapes in a vertical line where they can best be seen. The highest and lowest of these shapes shall be balls and the middle one a diamond;
 - (iii) When making way through the water, masthead lights, sidelights, and a sternlight in addition to the lights prescribed in subparagraph (i);
 - (iv) When at anchor, in addition to the lights or shapes prescribed in subparagraphs (i) and (ii) of this paragraph, the light, lights, or shapes prescribed in rule 27.
- (3) A vessel engaged in a towing operation such as renders her unable to deviate from her course shall, in addition to the lights or shapes prescribed in paragraphs (1) and (ii) of clause (2) of this rule exhibit the lights or shape prescribed by rule 22 (1).
- (4) A vessel engaged in dredging or underwater operations, when restricted in her ability to manoeuvre, shall exhibit the lights and shapes prescribed in clause (2) of this rule and shall in addition, when an obstruction exists, exhibit -

- (i) Two all-round red lights or two balls in a vertical line to indicate the side on which the obstruction exists;
- (ii) Two all-round green lights or two diamonds in a vertical line to indicate the side on which another vessel may pass;
- (iii) When making way through the water, in addition to the lights prescribed in this paragraph, masthead lights, sidelights, and a stern-light;
- (iv) A vessel to which this paragraph applies when at anchor shall exhibit the lights or shapes prescribed in subparagraphs (i) and (ii) instead of the lights or shape prescribed in rule 27.

(5) Whenever the size of a vessel engaged in diving operations makes it impracticable to exhibit the shapes prescribed in paragraph (4) of this rule, a rigid replica of the International Code flag "A" not less than 1 metre in height shall be exhibited. Measures shall be taken to ensure all-round visibility.

(6) A vessel engaged in minesweeping operations shall, in addition to the lights prescribed for a power-driven vessel in rule 21 exhibit three all-round green lights or three balls. One of these lights or shapes shall be exhibited at or near the foremast head and one at each end of the fore yard. These lights or shapes indicate that it is dangerous for another vessel to approach closer than 1,000 metres astern or 500 metres on either side of the minesweeper.

(7) Vessels of less than 7 metres in length shall not be required to exhibit the lights prescribed in this rule.

(8) The signals prescribed in this rule are not signals of vessels in distress and requiring assistance. Such signals are contained in Annex IV to these rules.

26. Vessels constrained by their draught - A vessel constrained by her draught may, in addition to the lights prescribed for power-driven vessels in rule 21, exhibit where they can best be seen three all-round red lights in a vertical line, or a cylinder.

27. Anchored vessels - (1) A vessel at anchor shall exhibit where it can be best seen:

- (i) In the fore part, an all-round white light or one ball;
- (ii) At or near the stern and at a lower level than the light prescribed in paragraph (i), an all-round white light.

(2) A vessel less than 50 metres in length may exhibit an all-round white light where it can be best seen instead of the lights prescribed in clause (1) of this rule.

(3) A vessel at anchor may, and a vessel of 100 metres and more in length shall, also use the available working or equivalent light to illuminate her decks.

(4) A vessel of less than 7 metres in length, when at anchor, not in or near a narrow channel, fairway, or anchorage, or where other vessels normally navigate, shall not be required to exhibit the lights or shapes prescribed in clauses (1) and (2) of this rule.

28. Equipment for sound signals - (1) A vessel 12 metres or more in length shall be provided with a whistle and a bell, and a vessel of 100 metres or more in length shall, in addition, be provided with a gong, the tone and sound of which cannot be confused with that of the bell. The whistle, bell, and gong shall comply with the specifications in Annex III to these rules. The bell or gong or both may be replaced by other equipment having the same respective sound characteristics, provided that manual sounding of the required signals shall always be possible.

(2) A vessel less than 12 metres in length shall not be obliged to carry the sound signalling appliances prescribed in clause (1) of this rule, but, if she does not, she shall be provided with some other means of making an efficient sound signal.

29. Manoeuvring and warning signals. - (1) When vessels are in sight of one another, a power-driven vessel underway, when manoeuvring as authorised or required by these rules, shall indicate that manoeuvre by the following signals on her whistle:

One short blast to mean "I am altering my course to starboard";
Two short blasts to mean "I am altering my course to port";
Three short blasts to mean "I am operating astern propulsion".

(2) Any vessel may supplement the whistle signals prescribed in clause (1) of this rule by light signals, repeated as appropriate, while the manoeuvre is being carried out:

(i) These light signals shall have the following significance;

One flash to mean "I am altering my course to starboard";
Two flashes to mean "I am altering my course to port";
Three flashes to mean "I am operating astern propulsion";

(ii) The duration of each flash shall be about one second, the interval between flashes shall be about one second, and the interval between successive signals shall be not less than 10 seconds;

(iii) The light used for this signal shall, if fitted, be an all-round white light, visible at a minimum range of 5 miles, and shall comply with the provisions of Annex I to these regulations.

(3) When in sight of one another in a narrow channel or fairway -

(i) A vessel intending to overtake another shall in compliance with rule 8 (5) (a) indicate her intention by the following signals on her whistle:

Two prolonged blasts followed by one short blast to mean -
"I intend to overtake you on your starboard side";
Two prolonged blasts followed by two short blasts to mean -
"I intend to overtake you on your port side".

(ii) The vessel about to be overtaken when acting in accordance with rule 8 (5) (a) shall indicate her agreement by the following signal on her whistle:

One prolonged, one short, one prolonged, and one short blast in that order.

(4) When vessels in sight of one another are approaching each other and from any cause either vessel fails to understand the intentions or actions of the other, or is in doubt whether sufficient action is being taken by the other to avoid collision, the vessel in doubt shall immediately indicate such doubt by giving at least 5 short and rapid blasts on the whistle. Such signal may be supplemented by a light signal of at least 5 short and rapid flashes.

(5) A vessel nearing a bend or an area of a channel or fairway where other vessels may be obscured by an intervening obstruction shall sound one prolonged blast. Such signal shall be answered with a prolonged blast by any approaching vessel that may be within hearing around the bend or behind the intervening obstruction.

(6) If whistles are fitted on a vessel at a distance apart of more than 100 metres, one whistle only shall be used for giving manoeuvring and warning signals.

30. Sound signals in restricted visibility - In or near an area of restricted visibility, whether by day or night, the signals prescribed in this rule shall be used as follows:

- (a) A power-driven vessel making way through the water shall sound at intervals of not more than 2 minutes one prolonged blast;
- (b) A power-driven vessel underway but stopped and making no way through the water shall sound at intervals of not more than 2 minutes 2 prolonged blasts in succession with an interval of about 2 seconds between them;
- (c) A vessel not under command, a vessel restricted in her ability to manoeuvre, a vessel constrained by her draught, a sailing vessel, a vessel engaged in fishing, and a vessel engaged in towing or pushing another vessel shall, instead of the signals prescribed in paragraphs (a) or (b) of this rule, sound at intervals of not more than 2 minutes 3 blasts in succession, namely one prolonged followed by two short blasts;
- (d) A vessel towed, or, if more than one vessel is towed the last vessel of the tow, if manned, shall at intervals of not more than 2 minutes sound four blasts in succession, namely one prolonged followed by three short blasts. When practicable, this signal shall be made immediately after the signal made by the towing vessel;
- (e) When a pushing vessel and a vessel being pushed ahead are rigidly connected in a composite unit, they shall be regarded as a power-driven vessel and shall give the signals prescribed in paragraphs (a) or (b) of this rule;
- (f) A vessel at anchor shall at intervals of not more than one minute ring the bell rapidly for about five seconds. In a vessel of 100 metres or more in length, the bell shall be sounded in the forepart of the vessel, and immediately after the ringing of the bell the gong shall be sounded rapidly about five seconds in the after part of the vessel. A vessel at anchor may in addition sound three blasts in succession, namely, one short, one prolonged, and one short blast, to give warning of her position and of the possibility of collision to an approaching vessel;
- (g) A vessel aground shall give the bell signal and if required the gong signal prescribed in paragraph (f) of this rule, and shall, in addition, give three separate and distinct strokes on the bell immediately before and after the rapid ringing of the bell. A vessel aground may in addition sound an appropriate whistle signal;
- (h) A vessel less than 12 metres in length shall not be obliged to give the above-mentioned signals but, if she does not, shall make some other efficient sound signal at intervals of not more than two minutes;
- (i) A pilot vessel when engaged on pilotage duty may, in addition to the signals prescribed in paragraphs (a), (b), or (f) of this rule, sound an identity signal consisting of 4 short blasts.

31. Signals to attract attention - If necessary to attract the attention of another vessel, any vessel may make light or sound signals that cannot be mistaken for any signal authorised elsewhere in these rules, or may direct the beam of her searchlight in the direction of the danger, in such a way as not to embarrass any vessel.

32. Distress signals - When a vessel is in distress and requires assistance, she shall use or exhibit the signals prescribed in Annex IV to these rules.

PART V - EXEMPTIONS

33. Exemptions - Any vessel (or class of vessels), provided that she complies with the requirements of the International Regulations for Preventing Collisions at Sea 1960, the keel of which is laid or which is at a corresponding stage of construction before the 15th July 1977 may be exempted from compliance therewith as follows:

- (a) The installation of lights with ranges prescribed in rule 20, until the 15th July 1981;
- (b) The installation of lights with colour specifications as prescribed in section 7 of Annex I to these regulations, until the 15th July 1981;
- (c) The repositioning of lights as a result of conversion from Imperial to metric units and rounding off measurement figures, permanent exemption;
- (d)
 - (i) The repositioning of masthead lights on vessels of less than 150 metres in length, resulting from the prescriptions of Section 3(1) of Annex I to these regulations, permanent exemption;
 - (ii) The repositioning of masthead lights on vessels, 150 metres or more in length, resulting from the prescriptions of Section 3(1) of Annex I, until the 15th July 1986;
- (e) The repositioning of masthead lights resulting from the prescriptions of Section 2(2) of Annex I until the 15th July 1986;
- (f) The repositioning of sidelights resulting from the prescriptions of sections 2(7) and 3(2) of Annex I, until the 15th July 1986;
- (g) The requirements for sound signal appliances prescribed in Annex III, until the 15th July 1986.

ANNEX IPOSITIONING AND TECHNICAL DETAILS OF LIGHTS AND SIGALS

1. Definition - The term "height above the hull" means height above the uppermost continuous deck.

2. Vertical positioning and spacing of lights - (1) On a power-driven vessel of 20 metres or more in length the masthead lights shall be placed as follows:

- (i) The forward masthead light, or if only one masthead light is carried, then that light, at a height above the hull of not less than 6 metres, and, if the breadth of the vessel exceeds 6 metres, then at a height above the hull not less than such breadth, so however that the light need not be placed at a greater height above the hull than 12 metres;
- (ii) When 2 masthead lights are carried, the after one shall be at least 4.5 metres vertically higher than the forward one.

(2) The vertical separation of masthead lights of power-driven vessels shall be such that in all normal conditions of trim the after light will be seen over and separate from the forward light at a distance of 1,000 metres from the stem when viewed from sea level.

(3) The masthead light of a power-driven vessel of 12 metres but less than 20 metres in length shall be placed at a height above the gunwale of not less than 2.5 metres.

(4) A power-driven vessel of less than 12 metres in length may carry the uppermost light at height of less than 2.5 metres above the gunwale. When, however, a masthead light is carried in addition to sidelights and sternlight, then such masthead light shall be carried at least 1 metre higher than the sidelights.

(5) One of the 2 or 3 masthead lights prescribed for a power-driven vessel when engaged in the towing or pushing another vessel shall be placed in the same position as the forward masthead light of a power-driven vessel.

(6) In all circumstances the masthead light or lights shall be so placed as to be above and clear of all other lights and obstructions.

(7) The sidelights of a power-driven vessel shall be placed at a height above the hull not greater than three-quarters of that of the forward masthead light. They shall not be so low as to be interfered with by deck lights.

(8) The sidelights, if in a combined lantern and carried on a power-driven vessel of less than 20 metres in length, shall be placed not less than 1 metre below the masthead light.

- (i) On a vessel of 20 metres in length or more, shall be such lights shall be spaced not less than 2 metres apart, and the lowest of these lights shall, except where a towing light is required, not be less than 4 metres above the hull;
- (ii) On a vessel of less than 20 metres in length, such lights shall be spaced not less than 1 metre apart and the lowest of these lights shall, except where a towing light is required, not be less than 2 metres above the gunwale;
- (iii) When 3 lights are carried, they shall be equally spaced.

(9) The lower of the 2 all-round lights prescribed for a fishing vessel when engaged in fishing shall be at a height above the side-lights not less than twice the distance between the 2 vertical lights.

(10) The forward anchor light, when 2 are carried, shall not be less than 4.5 metres above the after one. On a vessel of 50 metres or more in length, this forward anchor light shall not be less than 6 metres above the hull.

3. Horizontal Positioning and Spacing of Lights - (1) When 2 masthead lights are prescribed for a power-driven vessel, the horizontal distance between them shall not be less than one-half of the length of the vessel, but need not be more than 100 metres. The forward light shall be placed not more than one-quarter of the length of the vessel from the stem.

(2) On a vessel of 20 metres or more in length, the side-lights shall not be placed in front of the forward masthead lights. They shall be placed at or near the side of the vessel.

4. Details of location of direction-indication lights for fishing vessels, dredgers, and vessels engaged in underwater operations

(1) The light indicating the direction of the outlying gear from a vessel engaged in fishing as prescribed in rule 24 (3)(i) shall be placed at a horizontal distance of not less than 2 metres and not more than 6 metres away from the 2 all-round white light prescribed in rule 24 (3)(i) and not lower than the sidelights.

(2) The lights and shapes on a vessel engaged in dredging or underwater operations to indicate the obstructed side and/or the side on which it is safe to pass as prescribed in rule 25 (d)(i) and (ii), shall be placed at the maximum practical horizontal distance, but in no case less than 2 metres, from the lights or shapes prescribed in rule 25 (2)(i) and (ii). In no case shall the upper of these lights or shapes be at a greater height than the lower of the 3 lights or shapes prescribed in rule 25 (2)(i) and (ii).

5. Screens for Sidelights - The sidelights shall be fitted with inboard screens painted matt black, and meeting the requirements of Section 9 of this Annex. With a combined lantern, using a single vertical filament and a very narrow division between the green and red sections, external screens need not be fitted.

6. Shapes - (1) Shapes shall be black and of the following sizes;

- (i) A ball shall have a diameter of not less than 0.5 metre;
- (ii) A cone shall have a base diameter of not less than 0.6 metre and a height equal to its diameter;
- (iii) A cylinder shall have a diameter of at least 0.6 metre and a height of twice its diameter;
- (iv) A diamond shape shall consist of 2 cones as defined in (ii) above having a common base.

(2) The vertical distance between shapes shall be at least 1.5 metres.

(3) In a vessel less than 20 metres in length shapes of lesser dimensions, but commensurate with the size of the vessel, may be used and the distance apart may be correspondingly reduced.

7. Colour Specification of Lights The chromaticity of all navigation lights shall conform to the following standards, which lie within the boundaries of the area of the diagram specified for each colour by the International Commission on Illumination (CIE).

The boundaries of the area for each colour are given by indicating the corner co-ordinates which are as follows:

(i) White

x 0.525 0.525 0.452 0.310 0.310 0.443
y 0.382 0.440 0.440 0.348 0.283 0.382

(ii) Green

x 0.028 0.009 0.300 0.203
y 0.385 0.723 0.511 0.356

(iii) Red

x 0.680 0.660 0.735 0.721
y 0.320 0.320 0.265 0.259

(iv) Yellow

x 0.612 0.618 0.575 0.575
y 0.382 0.382 0.425 0.406

8. Intensity of Lights - (1) The minimum luminous intensity of lights shall be calculated by using the formula:

$$I = 3.43 \times 10^6 \times T \times D^2 \times K^{-D}$$

where -

I is luminous intensity in candelas under service conditions;

T is threshold factor 2×10^{-7} lux;

D is range of visibility (luminous range) of the light in nautical miles;

K is atmospheric transmissivity.

For prescribed lights the value of K shall be 0.8, corresponding to a meteorological visibility of approximately 13 nautical miles.

(2) A selection of figures derived from the formula is given in the following table:

Range of Visibility (Luminous Range) of Light in Nautical Miles	Luminous Intensity of Light in Candelas for K=0.8
D	I
1	0.9
2	4.3
3	12
4	27
5	52
6	94

NOTE: The maximum luminous intensity of navigation lights should be limited to avoid undue glare.

9. Horizontal Sectors - (1) (i) In the forward direction, sidelights as fitted on the vessel must show the minimum required intensities. The intensities must decrease to reach practical cut-off between 1° and 3° outside the prescribed sectors.

(ii) For sternlights and masthead lights and at 22.5° abaft the beam for sidelights, the minimum required intensities shall be maintained over the arc of the horizon up to 5° within the limits of the sectors prescribed in rule 19. From 5° within the prescribed sectors the intensity may decrease by 50 percent up to the prescribed limits; it shall decrease steadily to reach practical cut-off at not more than 5° outside the prescribed limits.

(2) All-round lights shall be so located as not to be obscured by masts, topmasts, or structures within angular sectors of more than 6° , except anchor lights, which need not be placed at an impracticable height above the hull.

10. Vertical Sectors - (1) The vertical sectors of electric lights, with the exception of lights on sailing vessels, shall ensure that -

- (i) At least the required minimum intensity is maintained at all angles from 5° below the horizontal; and
- (ii) At least 60 percent of the required minimum intensity is maintained from 7.5° above to 7.5° below the horizontal.

(2) In the case of sailing vessels, the vertical sectors of electric lights shall ensure that -

- (i) At least the required minimum intensity is maintained at all angles from 5° above to 5° below the horizontal.
- (ii) at least 50 percent of the required minimum intensity is maintained from 25° above to 25° below the horizontal.

(3) In the case of lights other than electric, these specifications shall be met as closely as possible.

11. Intensity of Non-electric lights - Non-electric lights shall so far as practicable comply with the minimum intensities, as specified in the table given in section 8 of this Annex.

12. Manoeuvring Light - Notwithstanding the provisions of paragraph (2) (f) of this Annex, the manoeuvring light described in rule 29 (2) shall be placed in the same fore and aft vertical plane as the masthead light or lights and, where practicable, at a minimum height of 2 metres vertically above the forward masthead light, provided that it shall be carried not less than 2 metres vertically above or below the after masthead light. On a vessel where only one masthead light is carried, the manoeuvring light, if fitted, shall be carried where it can best be seen, not less than 2 metres vertically apart from the masthead light.

13. Approval - The construction of lanterns and shapes and the installation of lanterns on board the vessel shall be to the satisfaction of the appropriate authority of the State where the vessel is registered.

ANNEX II

ADDITIONAL SIGNALS FOR FISHING VESSELS FISHING IN CLOSE PROXIMITY

1. General - The lights mentioned herein shall, if exhibited in pursuance of rule 24(4), be placed where they can best be seen. They shall be at least 0.9 metre apart but at a lower level than lights prescribed in rule 24(2)(i) and (3)(i). The lights shall be visible all round the horizon at a distance of at least 1 mile but at a lesser distance than the lights prescribed by these rules for fishing vessels.

2. Signals for Trawlers - (1) Vessels, when engaged in trawling, whether using demersal or pelagic gear, may exhibit -

- (i) When shooting their nets -
Two white lights in a vertical line;
- (ii) When hauling their nets -
One white light over one red light in a vertical line;
- (iii) When the net has come fast upon an obstruction -
Two red lights in a vertical line.

(2) Each vessel engaged in pair trawling may exhibit -

- (i) By night, a searchlight directed forward and in the direction of the other vessel of the pair;
- (ii) When shooting or hauling their nets or when their nets have come fast upon an obstruction, the lights prescribed in (a) above.

3. Signals for purse seiners - Vessels engaged in fishing with purse seine gear may exhibit 2 yellow lights, in a vertical line. These lights shall flash alternately every second and with equal light and occultation duration. These lights may be exhibited only when the vessel is hampered by its fishing gear.

ANNEX III

TECHNICAL DETAILS OF SOUND-SIGNAL APPLIANCES

1. Whistles -

- (a) Frequencies and Range of Audibility - The fundamental frequency of the signal shall lie within the range 70-700 Hz. The range of audibility of the signal from a whistle shall be determined by those frequencies, which may include the fundamental frequency and/or one or more higher frequencies which lie within the range 180-700 Hz (= 1%) and which provide the sound pressure levels specified in paragraph (c) below.

- (b) Limits of Fundamental Frequencies - To ensure a wide variety of whistle characteristics, the fundamental frequency of a whistle shall be between the following limits:
- (i) 70-200 Hz, for a vessel 200 metres or more in length;
 - (ii) 130-350 Hz, for a vessel 75 metres but less than 200 metres in length;
 - (iii) 250-700 Hz, for a vessel less than 75 metres in length.
- (c) Sound-signal intensity and Range of audibility - A whistle fitted in a vessel shall provide, in the direction of maximum intensity of the whistle and at a distance of 1 metre from it, a sound pressure level in at least one $\frac{1}{3}$ rd-octave band within the range of frequencies 180-700 Hz (= 1%) of not less than the appropriate figure given in the table below.

Length of Vessel in Metres	$\frac{1}{3}$ rd-octave Band Level at 1 Metre in dB Referred to $2 \times 10^{-5} \text{ N/m}^2$	Audibility Range in Nautical Mile
200 or more ...	143	2
75 but less than 200 ...	138	1.5
20 but less than 75 ...	130	1
Less than 20 ...	120	0.5

The range of audibility in the table above is for information and is approximately the range at which a whistle may be heard on its forward axis with 90 percent probability in conditions of still air on board a vessel having average background noise level at the listening posts (taken to be 68 dB in the octave band centred on 250 Hz and 63 dB in the octave band centred on 500 Hz).

In practice, the range at which a whistle may be heard is extremely variable and depends critically on weather conditions; the values given can be regarded as typical but under conditions of strong wind or high ambient noise level at the listening post the range may be much reduced.

- (d) Directional properties - The sound pressure level of a directional whistle shall be not more than 4 dB below the sound pressure level on the axis at any direction in the horizontal plane within $\pm 45^\circ$ of the axis. The sound pressure level at any other direction in the horizontal plane shall be not more than 10 dB below the sound pressure level on the axis, so that the range in any direction will be at least half the range on the forward axis. The sound pressure level shall be measured in that $\frac{1}{3}$ rd-octave band which determines the audibility range.
- (e) Positioning of Whistles - When a directional whistle is to be used as the only whistle on a vessel, it shall be installed with its maximum intensity directed straight ahead.
- A whistle shall be placed as high as practicable on a vessel, in order to reduce interception of the emitted sound by obstructions and also to minimise hearing damage risk to personnel. The sound pressure level of the vessel's own signal at listening posts shall not exceed 110 dB (A) and so far as practicable should not exceed 100 dB (A).
- (f) Fitting of more than one Whistle - If whistles are fitted at a distance apart of more than 100 metres, it shall be so arranged that they are not sounded simultaneously.

- (g) Combined Whistle Systems - If due to the presence of obstructions the sound field of a single whistle or of one of the whistles referred to in paragraph 1 (f) above is likely to have a zone of greatly reduced signal level, it is recommended that a combined whistle system be fitted so as to overcome this reduction. For the purposes of the rules a combined whistle system is to be regarded as a single whistle. The whistles of a combined system shall be located at a distance apart of not more than 100 metres and arranged to be sounded simultaneously. The frequency of any one whistle shall differ from those of the others by at least 10Hz.

2. Bell or Gong -

- (a) Intensity of Signal - A bell or gong, or other device having similar sound characteristics, shall produce a sound pressure level of not less than 110 dB at 1 metre.
- (b) Construction - Bells and gongs shall be made of corrosion-resistant material and designed to give a clear tone. The diameter of the mouth of the bell shall be not less than 300 mm for vessels of more than 20 metres in length, and shall be not less than 200 mm for vessels of 12 to 20 metres in length. Where practicable, a power-driven bell striker is recommended to ensure constant force, but manual operation shall be possible. The mass of the striker shall be not less than 3 percent of the mass of the bell.

3. Approval - The construction of sound-signal appliances, their performance, and their installation on board the vessel shall be to the satisfaction of the Cook Islands Marine Board.

ANNEX IV

DISTRESS SIGNALS

1. The following signals, used or exhibited either together or separately, indicate distress and need of assistance:
- (a) A gun or other explosive signal fired at intervals of about a minute;
 - (b) A continuous sounding with any fog-signalling apparatus;
 - (c) Rockets or shells, throwing red stars fired one at a time at short intervals;
 - (d) A signal made by radiotelegraphy or by any other signalling method consisting of the group (SOS) in the Morse Code;
 - (e) A signal sent by radiotelephony consisting of the spoken word "Mayday";
 - (f) The International Code Signal of distress indicated by N.Z.;
 - (g) A signal consisting of a square flag having above or below it a ball or anything resembling a ball;
 - (h) Flames on the vessel (as from a burning tar barrel, oil barrel, etc.);

- (i) A rocket parachute flare or a hand flare showing a red light;
- (j) A smoke signal giving off orange-coloured smoke;
- (k) Slowly and repeatedly raising and lowering arms outstretched to each side;
- (l) The radiotelegraph alarm signal;
- (m) The radiotelephone alarm signal;
- (n) Signals transmitted by emergency position-indicating radio beacons.

2. The use or exhibition of any of the foregoing signals, except for the purpose of indicating distress and need of assistance, and the use of other signals which may be confused with any of the above signals is prohibited.

3. Attention is drawn to the relevant sections of the International Code of Signals and the following signals:

- (a) A piece of orange-coloured canvas with either a black square and circle or other appropriate symbol (for identification from the air);
- (b) A dye marker.

These rules are administered by the Cook Islands Marine Board

BY AUTHORITY:

T. KAPI, Government Printer, Rarotonga, Cook Islands - 1979