

# PROCEEDINGS OF THE MERCHANT MARINE COUNCIL UNITED STATES COAST GUARD

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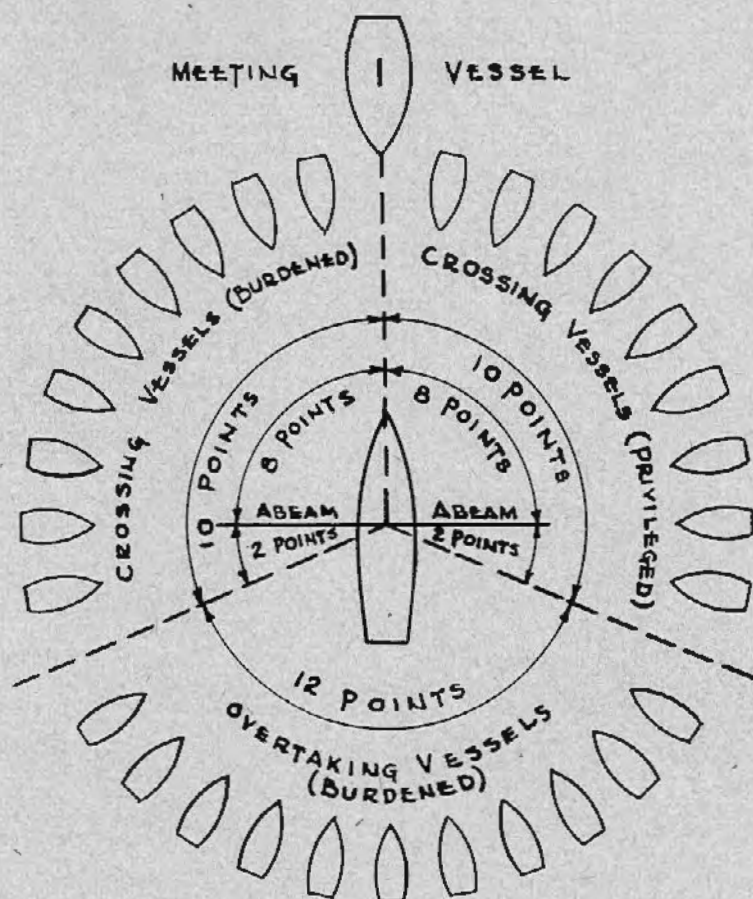


Vol. 10

April, May, June 1953

Nos. 4, 5, and 6

YOU NEVER HAVE THE RIGHT OF WAY THROUGH ANOTHER VESSEL—



# MERCHANT MARINE COUNCIL

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and three Marine Inspection Officers are  
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## EDITORIAL NOTICE

Please Note Change in Publishing Schedule  
Also Note Annual Revision of Mailing List

Due to budgetary limitations it has been necessary to combine the April-May-June 1953 issues of the PROCEEDINGS OF THE MERCHANT MARINE COUNCIL into one issue. Therefore, there will be no separate May or June issues as has been the practice.

The regular monthly schedule will be resumed with the July 1953, issue, and it is hoped it will be possible to continue publishing a monthly issue of the PROCEEDINGS thereafter.

We regret the need to take this step, for the Coast Guard is of the opinion that the PROCEEDINGS has been increasingly successful in its attempt to promote safety of life and property at sea and to give notice of pertinent changes affecting the maritime public. However, developments throughout the fiscal year make it necessary to do so.

Similarly, it will be necessary to limit the distribution of the PROCEEDINGS to those directly related to the maritime field or engaged in endeavors under the cognizance of the Coast Guard regulations, in order to continue to make it available to those with the greatest need.

Since the regulations of the Joint Committee on Printing, dated July 1, 1951, require that the mailing list for the PROCEEDINGS OF THE MERCHANT MARINE COUNCIL be circularized annually to determine whether this publication is still desired by the persons to whom it is addressed, the above limitations will be imposed during the forthcoming revision of the mailing list. As usual, all addressees on the mailing list for the PROCEEDINGS will receive a card requesting an affirmative reply, to be returned to the Commandant (CMC), U. S. Coast Guard, Washington 25, D. C., by no later than July 1, 1953. This card will, in addition to the reg-

ular format, contain space to indicate the nature of the profession or business of the person or activity requesting to be put on the mailing list.

It is suggested that those who desire to continue to receive the PROCEEDINGS, but do not receive a card by June 1, 1953, send a card to the Commandant (CMC), U. S. Coast Guard, Washington 25, D. C., setting forth the following information:

- Quantity desired.
- Quantity now received.
- Name and address to which the PROCEEDINGS are now sent.
- The new postal address if different from that to which the PROCEEDINGS are now sent.
- Name of firm, company, corporation, or individual requesting the PROCEEDINGS.
- Nature of profession or business.

In order to reduce the size of the mailing list it is most advantageous to have copies of the PROCEEDINGS, when several are involved, mailed under the same cover to the same address. Unless there is some reason to make this impractical in a certain case, future multiple addressees of this type will be grouped in this manner.

Note if no affirmative reply requesting continuance is received by July 1, 1953, the addressee's name will be removed from the mailing list.

Through these steps it is hoped to keep the PROCEEDINGS at its maximum effectiveness in the most economical manner. Comments as to the effectiveness of the PROCEEDINGS over the past year are especially invited at this time. Those wishing to express their opinion are invited to address their comments to the Commandant (CMC), U. S. Coast Guard, Washington 25, D. C.



# NEW INTERNATIONAL RULES OF THE ROAD EFFECTIVE JANUARY 1, 1954

Mariners sailing the high seas on and after January 1, 1954, will undoubtedly be sailing under the revised International Rules of the Road which were drawn up at the 1948 International Safety of Life at Sea Conference at London. The new Rules will apply to seaplanes on the water as well as to watercraft. Though they have not been revised to the extent that mariners will have to face entirely new Rules, the revised Rules are sufficiently different from the present International Rules of the Road that oceangoing mariners will have to study the revised version.

Among other changes, mariners will find that:

(1) The presently optional second white masthead light (i. e., range-light) will be mandatory, except for vessels less than 150 feet in length and for vessels engaged in towing.

(2) The lighting requirements for pilot vessels, fishing vessels, and vessels engaged in towing operations have been revised.

(3) The presently optional fixed stern light has been made mandatory, and its range of visibility has been increased to 2 miles.

(4) The range of visibility of anchor lights has been increased for all vessels under 150 feet in length from 1 to 2 miles; for vessels over that length from 1 to 3 miles.

(5) Fog signals for certain vessels at anchor in fog have been revised.

(6) A bend signal of one prolonged blast has been made mandatory for vessels navigating channels.

(7) A danger signal of five or more short blasts has been authorized for the use of privileged vessels in doubt as to the burdened vessel's intentions and/or actions.

(8) Distress signals have been regrouped, and a new signal has been provided.

The revised International Rules of the Road follow further in the article, with comments pointing out how they differ. But, first, a little background data on the present and the revised International Rules of the Road.

The International Conference on Safety of Life at Sea, 1948, in addition to drawing up a Convention to replace the International Convention for the Safety of Life at Sea, 1929, proposed a revision of the present International Regulations for Preventing Collisions at Sea, which are commonly known as the International Rules of the

Road. The Conference did not, however, annex the revised Regulations to the International Convention for the Safety of Life at Sea, 1948, which became effective November 19, 1952. Rather, it reported the revised Regulations separately as Annex B to the Final Act. This then established the two revisions as separate entities which had to be accepted separately by the participating Governments.

The Conference, in its Final Act, explained and provided:

"The Conference also had before it and used as a basis for discussion the present International Regulations for Preventing Collisions at Sea. The Conference considered it desirable to revise these Regulations and accordingly approved the International Regulations for Preventing Collisions at Sea, 1948, but decided not to annex the revised Regulations to the International Convention for the Safety of Life at Sea, 1948. The Conference invites the Government of the United Kingdom to forward the International Regulations for Preventing Collisions at Sea, 1948, to the other Governments which have accepted the present International Regulations for Preventing Collisions at Sea, and also invites the Government of the United Kingdom, when substantial unanimity has been reached as to the acceptance of the International Regulations for Preventing Collisions at Sea, 1948, to fix the date on and after which the International Regulations for Preventing Collisions at Sea, 1948, shall be applied by the Governments which have agreed to accept them. The Conference requests the Government of the United Kingdom to give not less than one year's notice of this date to the Governments of all States."

Later, the United States enacted legislation accepting the revised International Regulations for Preventing Collisions at Sea adopted by the 1948 Conference. By Public Law 172, the 82d Congress adopted the revised Regulations and authorized the President to fix their effective date by Presidential proclamation. Similar legislative steps were taken by the other Governments participating in the 1948 Safety Conference.

Finally, on December 19, 1952, the United Kingdom, in accordance with the above provisions of the Final Act of the International Conference on Safety of Life at Sea, 1948, announced that "substantial unanimity"

had been reached and fixed January 1, 1954, as the date on and after which the International Regulations for Preventing Collisions at Sea, 1948, would be in force and effect.

At that time, the following countries had agreed to accept the revised Regulations:

|           |                    |
|-----------|--------------------|
| Australia | Italy              |
| Belgium   | Mexico             |
| Brazil    | The Netherlands    |
| Burma     | New Zealand        |
| Canada    | Nicaragua          |
| Chile     | Norway             |
| Colombia  | Pakistan           |
| Denmark   | Peru               |
| Dominica  | Poland             |
| Ecuador   | Roumania           |
| Egypt     | South Africa       |
| Finland   | Spain              |
| France    | Sweden             |
| Greece    | Turkey             |
| Hungary   | The United Kingdom |
| Iceland   | U. S. A.           |
| India     | U. S. S. R.        |
| Iraq      | Yugoslavia         |
| Ireland   |                    |

Thus, the first revision of the International Rules of the Road in several decades was, at last, an accomplished fact.

In this respect it is interesting to note the present International Rules stem from rules proposed at a maritime conference of 26 nations in 1889, which were finally put into effect in 1897. Congress authorized the President in 1890 to make the rules agreed upon at the 1889 Conference effective upon a date fixed by Presidential proclamation, but this bill was subsequently amended several times, until agreement was reached as to certain provisions in the proposed rules which were objected to by a leading maritime nation. It was not until July 1897 that the rules became effective. Hence the reason why the rules adopted by the 1889 Conference have become known as the "International Rules of 1897" and the apparent conflict in the statutes.

The 1897 Rules were subsequently somewhat revised in 1910, and attempts were made to revise them further in 1913-1914 and 1929. So, to 1948.

As was stated earlier, the revised International Rules are reprinted herein in their entirety. Note that the following pages are divided into two columns. The left-hand column of each page contains the revised International Rules. The right-hand

columns contain brief notes to draw attention to and explain the reasons for the principal changes in the revision agreed upon by the delegates of the Governments represented at the 1948 Safety Conference. These notes do not refer to all the alterations which were agreed upon by the Conference, for many of them were mere changes in wording intended to make the Rules clearer. However, reference is made to the changes which are of a substantial character.

In considering the revised Rules

in detail, the reader should bear in mind the general applicability of the following modifications; for they pertain throughout:

(1) The revised regulations will be applicable to seaplanes on the water, which, subject to the special provisions applicable to them only, are to be regarded in all other respects as subject to the rules and procedures applicable to vessels (see Rules 1, 2, 3, 4, 5, 10, 11, 12, 13, 15, 16, 18-29, 30, and 31).

(2) Some rearrangement of the

substance of the regulations has been made. For example, all definitions have been brought into Rule 1. The numbering of the regulations has not, however, been changed (i. e., Rule 9 is still the fishing vessel article, Rule 16 still refers to speed of vessels in fog, etc.).

(3) Reference is made to "Rules" instead of "Articles" throughout.

(4) In order to accord with present-day practice references to degrees have been added wherever the Rules refer to points of the compass.

## REGULATIONS FOR PREVENTING COLLISIONS AT SEA, 1948

### PART A—PRELIMINARY AND DEFINITIONS

#### Rule 1

(a) These Rules shall be followed by all vessels and seaplanes upon the high seas and in all waters connected therewith navigable by seagoing vessels, except as provided in Rule 30. Where, as a result of their special construction, it is not possible for seaplanes to comply fully with the provisions of Rules specifying the carrying of lights and shapes, these provisions shall be followed as closely as circumstances permit.

(b) The Rules concerning lights shall be complied with in all weathers from sunset to sunrise, and during such times no other lights shall be exhibited, except such lights as cannot be mistaken for the prescribed lights or impair their visibility or distinctive character, or interfere with the keeping of a proper lookout.

(c) In the following Rules, except where the context otherwise requires—

- (i) the word "vessel" includes every description of watercraft, other than a seaplane on the water, used or capable of being used as a means of transportation on water;
- (ii) the word "seaplane" includes a flying boat and any other aircraft designed to maneuver on the water;
- (iii) the term "power-driven vessel" means any vessel propelled by machinery;
- (iv) every power-driven vessel which is under sail and not under power is to be considered a sailing vessel, and every vessel under power, whether under sail or not, is to be considered a power-driven vessel;
- (v) a vessel or seaplane on the water is "under way" when she is not at anchor, or made fast to the shore, or aground;
- (vi) the term "height above the hull" means height above the uppermost continuous deck;
- (vii) the length and breadth of a vessel shall be deemed to be the length and breadth appearing in her certificate of registry;
- (viii) the length and span of a seaplane shall be its maximum length and span as shown in its certificate of airworthiness, or as determined by measurement in the absence of such certificate;
- (ix) the word "visible," when applied to lights, means visible on a dark night with a clear atmosphere;
- (x) the term "short blast" means a blast of about 1 second's duration;
- (xi) the term "prolonged blast" means a blast of from 4 to 6 second's duration;
- (xii) the word "whistle" means whistle or siren;
- (xiii) the word "tons" means gross tons.

## EXPLANATORY NOTES

#### Rule 1

The revised rules will apply to seaplanes on the water. Accordingly, in this rule reference to seaplanes is found in paragraph (a), where provision is also made for seaplanes of special construction which are not able to comply fully with the prescriptions in regard to the carriage of lights and shapes. References to seaplanes will also be found in paragraph (c) (i), (ii), (v), (viii).

Rule 1 (b) is an expansion of part of the former Article 1 and has been extended in its scope to include the prohibition against the carriage of any lights which might impair the visibility or distinctive character of the prescribed lights, or would interfere with the keeping of a proper lookout.

A new definition of "vessel" has been added and the phrase "steam vessel" has been replaced here and throughout the Rules by "power-driven vessel."

A definition of "height above the hull" has been added. (See Rules 2, 3, and 11.)

To avoid unnecessary repetition throughout the Rules "whistle" has been defined as meaning "whistle or siren," and "tons" as meaning "gross tons."



(a) A power-driven vessel when under way shall carry—

- (i) On or in front of the foremast, or if a vessel without a foremast then in the forepart of the vessel, a bright white light so constructed as to show an unbroken light over an arc of the horizon of 20 points of the compass ( $22\frac{1}{2}^{\circ}$ ), so fixed as to show the light 10 points ( $11\frac{1}{2}^{\circ}$ ) on each side of the vessel; that is, from right ahead to 2 points ( $22\frac{1}{2}^{\circ}$ ) abaft the beam on either side, and of such a character as to be visible at a distance of at least 5 miles.
- (ii) Either forward of or abaft the white light mentioned in subsection (i) a second white light similar in construction and character to that light. Vessels of less than 150 feet in length, and vessels engaged in towing, shall not be required to carry this second white light but may do so.
- (iii) These 2 white lights shall be so placed in a line with and over the keel that 1 shall be at least 15 feet higher than the other and in such a position that the lower light shall be forward of the upper 1. The horizontal distance between the 2 white lights shall be at least 3 times the vertical distance. The lower of these 2 white lights or, if only 1 is carried, then that light, shall be placed at a height above the hull of not less than 20 feet, and, if the breadth of the vessel exceeds 20 feet, 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 40 feet. In all circumstances the light or lights, as the case may be, shall be so placed as to be clear of and above all other lights and obstructing superstructures.
- (iv) On the starboard side a green light so constructed as to show an unbroken light over an arc of the horizon of 10 points of the compass ( $11\frac{1}{2}^{\circ}$ ), so fixed as to show the light from right ahead to 2 points ( $22\frac{1}{2}^{\circ}$ ) abaft the beam on the starboard side, and of such a character as to be visible at a distance of at least 2 miles.
- (v) On the port side a red light so constructed as to show an unbroken light over an arc of the horizon of 10 points of the compass ( $11\frac{1}{2}^{\circ}$ ), so fixed as to show the light from right ahead to 2 points ( $22\frac{1}{2}^{\circ}$ ) abaft the beam on the port side, and of such a character as to be visible at a distance of at least 2 miles.
- (vi) The said green and red sidelights shall be fitted with inboard screens projecting at least 3 feet forward from the light, so as to prevent these lights from being seen across the bows.

(b) A seaplane under way on the water shall carry—

- (i) In the forepart amidships where it can best be seen a bright white light, so constructed as to show an unbroken light over an arc of the horizon of  $220^{\circ}$  of the compass, so fixed as to show the light  $110^{\circ}$  on each side of the seaplane; namely, from right ahead to  $20^{\circ}$  abaft the beam on either side, and of such a character as to be visible at a distance of at least 3 miles.
- (ii) On the right or starboard wing tip a green light, so constructed as to show an unbroken light over an arc of the horizon of  $110^{\circ}$  of the compass, so fixed as to show the light from right ahead to  $20^{\circ}$  abaft the beam on the starboard side, and of such a character as to be visible at a distance of at least 2 miles.
- (iii) On the left or port wingtip a red light, so constructed as to show an unbroken light over an arc of the horizon of  $110^{\circ}$  of the compass, so fixed as to show the light from right ahead to  $20^{\circ}$  abaft the beam on the port side, and of such a character as to be visible at a distance of at least 2 miles.

The former Article 2 has been re-drafted so as to make the second masthead light mandatory for all vessels of 150 feet or more in length. Vessels of less than 150 feet and vessels engaged in towing will not be required to carry a second masthead light but may do so. Rule 2 (a) (iii) makes more precise the positioning of the two masthead lights inasmuch as it specifies that they shall be placed in a line with and over the keel. The height of 1 light above the other (15 feet) remains the same, but the horizontal distance between the lights will have to be at least 3 times the vertical distance. In all circumstances the light or lights will have to be so placed as to be clear of and above all other lights and superstructures. The provision in regard to seaplane lights (Rule 2 (b)) should be noted.

(a) A power-driven vessel when towing or pushing another vessel shall, in addition to her sidelights, carry 2 bright white lights in a vertical line 1 over the other, not less than 6 feet apart, and when towing more than 1 vessel shall carry an additional bright white light 6 feet above or below such lights, if the length of the tow, measuring from the stern of the towing vessel to the stern of the last vessel towed, exceeds 600 feet. Each of these lights shall be of the same construction and character and one of them shall be carried in the same position as the white light mentioned in Rule 2 (a) (i), except the additional light, which shall be carried at a height of not less than 14 feet above the hull. In a vessel with a single mast, such lights may be carried on the mast.

(b) The towing vessel shall also show either the stern light specified in Rule 10 or in lieu of that light a small white light abaft the funnel or aftermast for the tow to steer by; such a light, however, must not be visible forward of the beam. The carriage of the white light specified in Rule 2 (a) (ii) is optional.

(c) A seaplane on the water, when towing one or more seaplanes or vessels, shall carry the lights prescribed in Rule 2 (b) (i), (ii) and (iii); and, in addition, she shall carry a second white light of the same construction and character as the white light mentioned in Rule 2 (b) (i), and in a vertical line at least 6 feet above or below such

This Rule is unchanged except that the towing vessel will also have to show either the stern light specified in Rule 10 or in lieu of that light a small white light abaft the funnel or aftermast for the tow to steer by; such a light, however, must not be visible forward of the beam. The carriage of the second masthead light prescribed in Rule 2 (a) (ii) will be optional.

The application of the Rule to seaplanes (Rule 3 (c)) should be noted.

## Rule 4

(a) A vessel which is not under command shall carry, where they can best be seen, and, if a power-driven vessel, in lieu of the lights required by Rule 2 (a) (i) and (ii), 2 red lights in a vertical line 1 over the other not less than 6 feet apart, and of such a character as to be visible all round the horizon at a distance of at least 2 miles. By day, she shall carry in a vertical line 1 over the other not less than 6 feet apart, where they can best be seen, 2 black balls or shapes each not less than 2 feet in diameter.

(b) A seaplane on the water which is not under command may carry, where they can best be seen, 2 red lights in a vertical line, 1 over the other, not less than 3 feet apart, and of such a character as to be visible all round the horizon at a distance of at least 2 miles, and may by day carry in a vertical line 1 over the other not less than 3 feet apart, where they can best be seen, 2 black balls or shapes, each not less than 2 feet in diameter.

(c) A vessel engaged in laying or in picking up a submarine cable or navigation mark, or a vessel engaged in surveying or underwater operations when from the nature of her work she is unable to get out of the way of approaching vessels, shall carry, in lieu of the lights specified in Rule 2 (a) (i) and (ii), 3 lights in a vertical line 1 over the other not less than 6 feet apart. The highest and lowest of these lights shall be red, and the middle light shall be white, and they shall be of such a character as to be visible all round the horizon at a distance of at least 2 miles. By day, she shall carry in a vertical line 1 over the other not less than 6 feet apart, where they can best be seen, 3 shapes each not less than 2 feet in diameter, of which the highest and lowest shall be globular in shape and red in color, and the middle 1 diamond in shape and white.

(d) The vessels and seaplanes referred to in this Rule, when not making way through the water, shall not carry the colored sidelights, but when making way they shall carry them.

(e) The lights and shapes required to be shown by this Rule are to be taken by other vessels and seaplanes as signals that the vessel or seaplane showing them is not under command and cannot therefore get out of the way.

(f) These signals are not signals of vessels in distress and requiring assistance. Such signals are contained in Rule 31.

## Rule 4

No important changes have been introduced into this Rule, but the provisions of Rule 4 (c) should be noted, where the exhibition of working lights and signals for vessels engaged in certain types of surface or underwater work will under the revised Regulations be extended to cover, in addition to the submarine cable of the old Article 4, "Navigation marks and surveying and underwater operations." The application of the Rule to seaplanes (Rule 4 (b)) should be noted.

(a) A sailing vessel under way and any vessel or seaplane being towed shall carry the same lights as are prescribed by Rule 2 for a power-driven vessel or a seaplane under way, respectively, with the exception of the white lights specified therein, which they shall never carry. They shall also carry stern lights as specified in Rule 10, provided that vessels towed, except the last vessel of a tow, may carry, in lieu of such stern light, a small white light as specified in Rule 3 (b).

(b) A vessel being pushed ahead shall carry, at the forward end, on the starboard side a green light and on the port side a red light, which shall have the same characteristics as the lights described in Rule 2 (a) (iv) and (v) and shall be screened as provided in Rule 2 (a) (vi), provided that any number of vessels pushed ahead in a group shall be lighted as one vessel.

## Rule 6

(a) In small vessels, when it is not possible on account of bad weather or other sufficient cause to fix the green and red sidelights, these lights shall be kept at hand lighted and ready for immediate use, and shall, on the approach of or to other vessels, be exhibited on their respective sides in sufficient time to prevent collision, in such manner as to make them most visible, and so that the green light shall not be seen on the port side nor the red light on the starboard side, nor, if practicable, more than 2 points ( $22\frac{1}{2}^\circ$ ) abaft the beam on their respective sides.

(b) To make the use of these portable lights more certain and easy, the lanterns containing them shall each be painted outside with the color of the lights they respectively contain, and shall be provided with proper screens.

## Rule 7

Power-driven vessels of less than 40 tons, vessels under oars or sails of less than 20 tons, and rowing boats, when under way shall not be required to carry the lights mentioned in Rule 2, but if they do not carry them they shall be provided with the following lights—

(a) Power-driven vessels of less than 40 tons, except as provided in section (b), shall carry—

(i) In the forepart of the vessel, where it can best be seen, and at a height above the gunwale of not less than 9 feet, a bright white light constructed and fixed as prescribed in Rule 2 (a) (i) and of such a character as to be visible at a distance of at least 3 miles.

(ii) Green and red sidelights constructed and fixed as prescribed in Rule 2 (a) (iv) and (v), and of such a character as to be visible at a distance of at least 1 mile, or a combined lantern showing a green light and a red light from right ahead to 2 points ( $22\frac{1}{2}^\circ$ ) abaft the beam on their respective sides. Such lantern shall be carried not less than 3 feet below the white light.

(b) Small power-driven boats, such as are carried by seagoing vessels, may carry the white light at a less height than 9 feet above the gunwale, but it shall be carried above the sidelights or the combined lantern mentioned in subsection (a) (ii).

(c) Vessels of less than 20 tons, under oars or sails, except as provided in section (d), shall, if they do not carry the sidelights, carry where it can best be seen a lantern showing a green light on one side and a red light on the other, of such a character as to be visible at a distance of at least 1 mile, and so fixed that the green light shall not be seen on the port side, nor the red light on the starboard side. Where it is not possible to fix this light, it shall be kept ready for immediate use and shall be exhibited in sufficient time to prevent collision and so that the green light shall not be seen on the port side nor the red light on the starboard side.

Sailing vessels under way and any vessel or seaplane being towed will be required to carry stern lights as specified in Rule 10; but the proviso allows vessels towed, except the last vessel of the tow, to carry in lieu of a stern light a small white light as specified in Rule 3 (b). The second part of the new Rule makes special provision for the lighting of vessels being pushed ahead.

## Rule 6

The only change in this Rule is one of drafting; the opening words have been altered so as to bring them into conformity with the corresponding provisions in Rule 10 (b).

## Rule 7

The range of visibility of the masthead light on power-driven vessels of less than 40 tons will be increased from 2 to 3 miles. Vessels of less than 20 tons under oars or sails will have to carry where it can best be seen a lantern showing a green light on one side and a red light on the other, and the intention of the provision is that this lantern should, where possible, be fixed.



(d) Small rowing boats, whether under oars or sail, shall only be required to have ready at hand an electric torch or a lighted lantern showing a white light, which shall be exhibited in sufficient time to prevent collision.

(e) The vessels and boats referred to in this Rule shall not be required to carry the lights or shapes prescribed in Rules 4 (a) and 11 (e).

#### Rule 8

(a) (i) Sailing pilot vessels, when engaged on their station or pilotage duty and not at anchor, shall not show the lights prescribed for other vessels, but shall carry a white light at the masthead visible all round the horizon at a distance of at least 3 miles, and shall also exhibit a flare-up light or flare-up lights at short intervals, which shall never exceed 10 minutes.

(ii) On the near approach of or to other vessels they shall have their sidelights lighted ready for use and shall flash or show them at short intervals, to indicate the direction in which they are heading, but the green light shall not be shown on the port side, nor the red light on the starboard side.

(iii) A sailing pilot vessel of such a class as to be obliged to go alongside of a vessel to put a pilot on board may show the white light instead of carrying it at the masthead and may, instead of the sidelights above mentioned, have at hand ready for use a lantern with a green glass on the one side and a red glass on the other to be used as prescribed above.

(b) A power-driven pilot vessel when engaged on her station on pilotage duty and not at anchor shall, in addition to the lights and flares required for sailing pilot vessels, carry at a distance of 8 feet below her white masthead light a red light visible all round the horizon at a distance of at least 3 miles, and also the sidelights required to be carried by vessels when under way. A bright intermittent all round white light may be used in place of a flare.

(c) All pilot vessels, when engaged on their stations on pilotage duty and at anchor, shall carry the lights and show the flares prescribed in sections (a) and (b), except that the sidelights shall not be shown. They shall also carry the anchor light or lights prescribed in Rule 11.

(d) All pilot vessels, whether at anchor or not at anchor, shall, when not engaged on their stations on pilotage duty, carry the same lights as other vessels of their class and tonnage.

#### Rule 9

(a) Fishing vessels when not fishing shall show the lights or shapes prescribed for similar vessels of their tonnage. When fishing they shall show only the lights or shapes prescribed by this Rule, which lights or shapes, except as otherwise provided, shall be visible at a distance of at least 2 miles.

(b) Vessels fishing with trolling (towing) lines, shall show only the lights prescribed for a power-driven or sailing vessel under way as may be appropriate.

(c) Vessels fishing with nets or lines, except trolling (towing) lines, extending from the vessel not more than 500 feet horizontally into the seaway shall show, where it can best be seen, 1 all round white light and in addition, on approaching or being approached by another vessel, shall show a second white light at least 6 feet below the first light and at a horizontal distance of at least 10 feet away from it (6 feet in small open boats) in the direction in which the outlying gear is attached. By day such vessels shall indicate their occupation by displaying a basket where it can best be seen; and if they have their gear out while at anchor, they shall, on the approach of other vessels, show the same signal in the direction from the anchor ball toward the net or gear.

(d) Vessels fishing with nets or lines, except trolling (towing) lines, extending from the vessel more than 500 feet horizontally into the seaway shall show, where they can best be seen, 3 white lights at least 3 feet apart in a vertical triangle visible all round the horizon. When

#### Rule 8

The range of visibility of the masthead light of sailing pilot vessels is prescribed as 3 miles, and that of the red light for power-driven pilot vessels is increased from 2 to 3 miles. The interval between the exhibition of flare-up lights is reduced from 15 minutes to 10 minutes, and in the case of power-driven pilot vessels a bright intermittent all round white light may be used in place of a flare. Anchor lights will have to be exhibited by all pilot vessels when at anchor.

#### Rule 9

The former Article 9 has been considerably condensed and certain of its provisions have been altered. The following changes should be noted—

The range of lights for fishing vessels, except where otherwise stated, will be 2 miles. For fishing vessels at anchor the range of lights is increased from 1 to 2 miles for vessels under 150 feet in length and from 1 to 3 miles for vessels of 150 feet in length and upward.

Vessels engaged in line fishing or fishing with drift nets are provided for in two classes, i. e.:

Vessels engaged in line fishing or drift net fishing whose nets or lines extend less than 500 feet into the seaway will have to show 1 all round white light, and on the approach of another vessel a second white light in the direction of the fishing gear; by day a basket will be exhibited.

Vessels engaged in line fishing or drift net fishing whose lines or nets extend for more than 500 feet into the seaway will have to exhibit 3 white lights in a vertical triangle; by day they will exhibit a basket in the forepart of the vessel, and in addition a black conical shape apex upward where it can best be seen.

Both classes of vessel, when at anchor in daytime with gear extended, will have to exhibit the basket in the direction in which the gear is extended.



making way through the water, such vessels shall show the proper colored sidelights but when not making way they shall not show them. By day they shall show a basket in the forepart of the vessel as near the stem as possible not less than 10 feet above the rail; and, in addition, where it can best be seen, 1 black conical shape, apex upward. If they have their gear out while at anchor they shall, on the approach of other vessels, show the basket in the direction from the anchor ball toward the net or gear.

(e) Vessels when engaged in trawling, by which is meant the dragging of a dredge net or other apparatus along or near the bottom of the sea, and not at anchor—

(i) If power-driven vessels, shall show in the same position as the white light mentioned in Rule 2 (a) (i) a tricolored lantern, so constructed and fixed as to show a white light from right ahead to 2 points ( $22\frac{1}{2}^\circ$ ) on each bow, and a green light and a red light over an arc of the horizon from 2 points ( $22\frac{1}{2}^\circ$ ) on each bow to 2 points ( $22\frac{1}{2}^\circ$ ) abaft the beam on the starboard and port sides, respectively; and not less than 6 nor more than 12 feet below the tricolored lantern a white light in a lantern, so constructed as to show a clear, uniform, and unbroken light all round the horizon. They shall also show the stern light specified in Rule 10 (a).

(ii) If sailing vessels, shall carry a white light in a lantern so constructed as to show a clear, uniform, and unbroken light all round the horizon, and shall also, on the approach of or to other vessels show, where it can best be seen, a white flare-up light in sufficient time to prevent collision.

(iii) By day, each of the foregoing vessels shall show, where it can best be seen, a basket.

(f) In addition to the lights which they are by this Rule required to show vessels fishing may, if necessary in order to attract attention of approaching vessels, show a flare-up light. They may also use working lights.

(g) Every vessel fishing, when at anchor, shall show the lights or shape specified in Rule 11 (a), (b) or (c); and shall, on the approach of another vessel or vessels, show an additional white light at least 6 feet below the forward anchor light and at a horizontal distance of at least 10 feet away from it in the direction of the outlying gear.

(h) If a vessel when fishing becomes fast by her gear to a rock or other obstruction she shall in daytime haul down the basket required by sections (c), (d) or (e) and show the signal specified in Rule 11 (c). By night she shall show the light or lights specified in Rule 11 (a) or (b). In fog, mist, falling snow, heavy rainstorms or any other condition similarly restricting visibility, whether by day or by night, she shall sound the signal prescribed by Rule 15 (c) (v), which signal shall also be used, on the near approach of another vessel, in good visibility.

NOTE.—For fog signals for fishing vessels, see Rule 15 (c) (ix).

#### Rule 10

(a) A vessel when under way shall carry at her stern a white light, so constructed that it shall show an unbroken light over an arc of the horizon of 12 points of the compass ( $135^\circ$ ), so fixed as to show the light 6 points ( $67\frac{1}{2}^\circ$ ) from right aft on each side of the vessel, and of such a character as to be visible at a distance of at least 2 miles. Such light shall be carried as nearly as practicable on the same level as the sidelights.

NOTE.—For vessels engaged in towing or being towed, see Rules 3 (b) and 5.

(b) In a small vessel, if it is not possible on account of bad weather or other sufficient cause for this light to be fixed, an electric torch or a lighted lantern shall be kept at hand ready for use and shall, on the approach of an overtaking vessel, be shown in sufficient time to prevent collision.

Apart from the provision requiring power-driven trawlers to exhibit a stern light, the provisions in regard to lights and shapes for trawlers remain unaltered. A special provision has been introduced to cover the case of fishing vessels which become fast by their gear to a rock or other obstruction. If a vessel when fishing becomes fast by her gear to a rock or other obstruction she will in daytime have to haul down the basket required by sections (c), (d), or (e) of this Rule and show the signal specified in Rule 11 (c). By night she will show the light or lights specified in Rule 11 (a) or (b). In fog, mist, falling snow, heavy rainstorms, or any other condition similarly restricting visibility, whether by day or by night, she will sound the signal prescribed by Rule 15 (c) (v), which signal will also be used, on the near approach of another vessel, in good visibility.

Fog signals for fishing vessels have been transferred to Rule 15.

#### Rule 10

The new Rule makes the showing of a stern light mandatory for vessels and seaplanes, and its range of visibility has been increased from 1 to 2 miles.

(c) A seaplane on the water when under way shall carry on her tail a white light, so constructed as to show an unbroken light over an arc of the horizon of  $140^{\circ}$  of the compass, so fixed as to show the light  $70^{\circ}$  from right aft on each side of the seaplane, and of such a character as to be visible at a distance of at least 2 miles.

#### Rule 11

(a) A vessel under 150 feet in length, when at anchor, shall carry in the forepart of the vessel, where it can best be seen, a white light in a lantern so constructed as to show a clear, uniform, and unbroken light visible all round the horizon at a distance of at least 2 miles.

(b) A vessel of 150 feet or upward in length, when at anchor, shall carry in the forepart of the vessel, at a height of not less than 20 feet above the hull, 1 such light, and at or near the stern of the vessel and at such a height that it shall be not less than 15 feet lower than the forward light, another such light. Both these lights shall be visible all round the horizon at a distance of at least 3 miles.

(c) Between sunrise and sunset every vessel when at anchor shall carry in the forepart of the vessel, where it can best be seen, 1 black ball not less than 2 feet in diameter.

(d) A vessel engaged in laying or in picking up a submarine cable or navigation mark, or a vessel engaged in surveying or underwater operations, when at anchor, shall carry the lights or shapes prescribed in Rule 4 (c) in addition to those prescribed in the appropriate preceding sections of this Rule.

(e) A vessel aground shall carry by night the light or lights prescribed in sections (a) or (b) and the two red lights prescribed in Rule 4 (a). By day she shall carry, where they can best be seen, 3 black balls, each not less than 2 feet in diameter, placed in a vertical line 1 over the other, not less than 6 feet apart.

(f) A seaplane on the water under 150 feet in length, when at anchor, shall carry, where it can best be seen, a white light, visible all around the horizon at a distance of at least 2 miles.

(g) A seaplane on the water 150 feet or upward in length, when at anchor, shall carry, where they can best be seen, a white light forward and a white light aft, both lights visible all round the horizon at a distance of at least 3 miles; and, in addition, if the seaplane is more than 150 feet in span, a white light on each side to indicate the maximum span, and visible, so far as practicable, all round the horizon at a distance of 1 mile.

(h) A seaplane aground shall carry an anchor light or lights as prescribed in sections (f) (g), and in addition may carry 2 red lights in a vertical line, at least 3 feet apart, so placed as to be visible all round the horizon.

#### Rule 12

Every vessel or seaplane on the water may, if necessary in order to attract attention, in addition to the lights which she is by these Rules required to carry, show a flare-up light or use a detonating or other efficient sound signal that cannot be mistaken for any signal authorized elsewhere under these Rules.

#### Rule 11

The ranges of visibility of lights for vessels at anchor have been increased (a) for vessels of under 150 feet from 1 to 2 miles (b) for vessels of 150 feet and upward from 1 to 3 miles. The provision prescribing a daytime anchor signal (Rule 11 (c)) should be noted. Provision is also made for the carriage of "not under command" lights or shapes by vessels engaged in laying or picking up a submarine cable or navigation mark or a vessel engaged in surveying or underwater operations when at anchor (Rule 11 (d)), and for vessels aground (Rule 11 (e)), in addition to the lights and shapes prescribed in Rule 11 itself. The application of the Rule to seaplanes (Rule 11 (f), (g) and (h)) should be noted.

#### Rule 12

The substance of this Rule remains unaltered, but its scope has been extended to cover seaplanes on the water: the reference to "any signal authorized elsewhere under these Rules" has been inserted in order to preclude a vessel or seaplane wishing to attract attention to herself from giving in such circumstances the special signal now introduced into Rule 28 (see Rule 28 (b)).

(a) Nothing in these Rules shall interfere with the operation of any special rules made by the Government of any nation with respect to additional station and signal lights for ships of war, for vessels sailing under convoy, or for seaplanes on the water; or with the exhibition of recognition signals adopted by shipowners, which have been authorized by their respective Governments and duly registered and published.

(b) Whenever the Government concerned shall have determined that a naval or other military vessel or waterborne seaplane of special construction or purpose cannot comply fully with the provisions of any of these Rules with respect to the number, position, range, or arc of visibility of lights or shapes, without interfering with the military function of the vessel or seaplane, such vessel or seaplane shall comply with such other provisions in regard to the number, position, range, or arc of visibility of lights or shapes as her Government shall have determined to be the closest possible compliance with these Rules in respect of that vessel or seaplane.

## Rule 14

A vessel proceeding under sail, when also being propelled by machinery, shall carry in the daytime forward, where it can best be seen, 1 black conical shape, point upward, not less than 2 feet in diameter at its base.

## Rule 15

(a) A power-driven vessel shall be provided with an efficient whistle, sounded by steam or by some substitute for steam, so placed that the sound may not be intercepted by any obstruction, and with an efficient foghorn, to be sounded by mechanical means, and also with an efficient bell. A sailing vessel of 20 tons or upward shall be provided with a similar fog horn and bell.

(b) All signals prescribed by this Rule for vessels under way shall be given—

- (i) by power-driven vessels on the whistle;
- (ii) by sailing vessels on the foghorn;
- (iii) by vessels towed on the whistle or foghorn.

(c) In fog, mist, falling snow, heavy rainstorms, or any other condition similarly restricting visibility, whether by day or night, the signals prescribed in this Rule shall be used as follows—

(i) A power-driven vessel making way through the water, shall sound at intervals of not more than 2 minutes a prolonged blast.

(ii) A power-driven vessel under way, but stopped and making no way through the water, shall sound at intervals of not more than 2 minutes 2 prolonged blasts, with an interval of about 1 second between them.

(iii) A sailing vessel under way shall sound, at intervals of not more than 1 minute, when on the starboard tack 1 blast, when on the port tack 2 blasts in succession, and when with the wind abaft the beam 3 blasts in succession.

(iv) A vessel when at anchor shall at intervals of not more than 1 minute ring the bell rapidly for about 5 seconds. In vessels of more than 350 feet in length the bell shall be sounded in the forepart of the vessel, and in addition there shall be sounded in the after part of the vessel, at intervals of not more than 1 minute for about 5 seconds, a gong or other instrument, the tone and sounding of which cannot be confused with that of the bell. Every vessel at anchor may in addition, in accordance with Rule 12, sound 3 blasts in succession; namely, 1 short, 1 prolonged, and 1 short blast, to give warning of her position and of the possibility of collision to an approaching vessel.

(v) A vessel when towing, a vessel engaged in laying or in picking up a submarine cable or navigation mark, and a vessel under way which is unable to get out of

Rule 13 (b) will give to Governments certain discretionary powers in regard to the number, position, range, or arc of visibility of lights or shapes insofar as naval or military vessels or waterborne seaplanes of special construction or purpose are concerned.

## Rule 14

The original Article 14 was replaced by a new Rule designed to meet the need for a signal denoting that a vessel under sail when also under power must, under the provisions of Rule 1 (c) (iv), obey the Rules for a power-driven vessel.

## Rule 15

Attention is drawn to the following points:

The paragraphs in this Rule have been rearranged in a more logical order; the definition of "prolonged blast" has been transferred to Rule 1. Vessels towed are permitted to give the signals prescribed by this Rule on the whistle or fog horn. Here and elsewhere in the Rules (see Rules 9 (h) and 16 (a)) the description of conditions of restricted visibility has been expanded (see Rule 15 (c)).

A new provision authorizes vessels when at anchor in fog to give, in addition to the usual bell signals, a sound signal of 3 blasts—1 short, 1 prolonged, 1 short—so as to give an approaching vessel more definite warning of its position and indicate the possibility of collision. This should be regarded as a special instance of the application of the provisions of Rule 12.

For vessels engaged in laying or picking up a submarine cable or navigation mark or vessels under way which are unable to get out of the way of an approaching vessel through not being under command or unable to maneuver as prescribed by the Rules, the interval between special fog signals has been reduced from 2 minutes to 1 minute (Rule 15 (c) (v)).

Special sound signals for use in fog have been prescribed for vessels towed and vessels aground (Rule 15 (c) (vi) and (vii)). Seaplanes on the water as well as small vessels will not be compelled to make the prescribed fog signals, but if they do not they will have to make some other efficient sound signal at intervals of not more than 1 minute (Rule 15 (c) (viii)).

The fog signal for fishing vessels, which was originally included in Article 9, has now been transferred to take its place with the other fog signals in Rule 15. Special attention is drawn to the provision which will enable a fishing vessel to use, in lieu of a blast followed by the ringing of the bell, a special signal consisting of a series of several alternate notes of higher and lower pitch; this two-note signal can easily be arranged by the installation of an additional whistle and lanyard.



the way of an approaching vessel through being not under command or unable to maneuver as required by these Rules shall, instead of the signals prescribed in subsections (i), (ii), and (iii) sound, at intervals of not more than 1 minute, 3 blasts in succession; namely, 1 prolonged blast followed by 2 short blasts.

- (vi) A vessel towed, or, if more than 1 vessel is towed, only the last vessel of the tow, if manned, shall, at intervals of not more than 1 minute, sound 4 blasts in succession; namely, 1 prolonged blast followed by 3 short blasts. When practicable, this signal shall be made immediately after the signal made by the towing vessel.
- (vii) A vessel aground shall give the signal prescribed in subsection (iv) and shall, in addition, give three separate and distinct strokes on the bell immediately before and after each such signal.
- (viii) A vessel of less than 20 tons, a rowing boat, or a seaplane on the water, shall not be obliged to give the above-mentioned signals, but if she does not, she shall make some other efficient sound signal at intervals of not more than 1 minute.
- (ix) A vessel when fishing, if of 20 tons or upward, shall at intervals of not more than 1 minute sound a blast, such blast to be followed by ringing the bell; or she may sound, in lieu of these signals, a blast consisting of a series of several alternate notes of higher and lower pitch.

#### Rule 16

#### SPEED TO BE MODERATE IN FOG, ETC.

(a) Every vessel, or seaplane when taxiing on the water, shall, in fog, mist, falling snow, heavy rainstorms, or any other condition similarly restricting visibility, go at a moderate speed, having careful regard to the existing circumstances and conditions.

(b) A power-driven vessel hearing, apparently forward of her beam, the fog signal of a vessel the position of which is not ascertained, shall, so far as the circumstances of the case admit, stop her engines, and then navigate with caution until danger of collision is over.

#### PART C—STEERING AND SAILING RULES

##### PRELIMINARY

1. In obeying and construing these Rules, any action taken should be positive, in ample time, and with due regard to the observance of good seamanship.

2. Risk of collision can, when circumstances permit, be ascertained by carefully watching the compass bearing of an approaching vessel. If the bearing does not appreciably change, such risk should be deemed to exist.

3. Mariners should bear in mind that seaplanes in the act of landing or taking off, or operating under adverse weather conditions, may be unable to change their intended action at the last moment.

#### Rule 17

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—

(a) A vessel which is running free shall keep out of the way of a vessel which is close-hauled.

(b) A vessel which is close-hauled on the port tack shall keep out of the way of a vessel which is close-hauled on the starboard tack.

(c) When both are running free, with the wind on different sides, the vessel which has the wind on the port side shall keep out of the way of the other.

(d) When both are running free, with 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.

(e) A vessel which has the wind aft shall keep out of the way of the other vessel.

#### Rule 16

No change has been made in the provisions of this Rule, except that its scope has been extended to cover seaplanes taxiing on the water.

#### STEERING AND SAILING RULES

Attention is drawn to paragraph 3 of the Preliminary Observations, which warns mariners of the relative lack of maneuverability of seaplanes in the act of landing or taking off.

#### Rule 17

Unchanged.

(a) When two power-driven vessels are meeting end on, or nearly end on, so as to involve risk of collision, each shall alter her course to starboard, so that each may pass on the port side of the other. This Rule only applies to cases where vessels are meeting end on, or nearly end on, in such a manner as to involve risk of collision, and does not apply to two vessels which must, if both keep on their respective courses, pass clear of each other. The only cases to which it does apply are when each of two vessels is end on, or nearly end on, to the other; in other words, to cases in which, by day, each vessel sees the masts of the other in a line, or nearly in a line, with her own; and by night, to cases in which each vessel is in such a position as to see both the sidelights of the other. It does not apply, by day, to cases in which a vessel sees another ahead crossing her own course; or, by night, to cases where the red light of one vessel is opposed to the red light of the other or where the green light of one vessel is opposed to the green light of the other or where a red light without a green light or a green light without a red light is seen ahead, or where both green and red lights are seen anywhere but ahead.

(b) For the purposes of this Rule and Rules 19 to 29, inclusive, except Rule 20 (b), a seaplane on the water shall be deemed to be a vessel, and the expression "power-driven vessel" shall be construed accordingly.

## Rule 19

When 2 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 of the other.

## Rule 20

(a) When a power-driven vessel and a sailing vessel are proceeding in such directions as to involve risk of collision, except as provided in Rules 24 and 26, the power-driven vessel shall keep out of the way of the sailing vessel.

(b) 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 these Rules.

## Rule 21

Where by any of these Rules one of two vessels is to keep out of the way, the other shall keep her course and speed. When, from any cause, the latter vessel finds herself so close that collision cannot be avoided by the action of the giving-way vessel alone, she also shall take such action as will best aid to avert collision. (See Rules 27 and 29.)

## Rule 22

Every vessel which is directed by these Rules to keep out of the way of another vessel shall, if the circumstances of the case admit, avoid crossing ahead of the other.

## Rule 23

Every power-driven vessel which is directed by these Rules to keep out of the way of another vessel shall, on approaching her, if necessary, slacken her speed or stop or reverse.

## Rule 24

(a) Notwithstanding anything contained in these Rules, every vessel overtaking any other shall keep out of the way of the overtaken vessel.

(b) Every vessel coming up with another vessel from any direction more than 2 points ( $22\frac{1}{2}^\circ$ ) abaft her beam; i.e., in such a position, with reference to the vessel which she is overtaking, that at night she would be unable to see either of that vessel's sidelights, shall be deemed to be an overtaking vessel; and no subsequent alteration of

The substance and wording of this Rule remain unchanged; it should be noted that, in order to avoid frequent references in the Rules to seaplanes on the water, a subparagraph has been introduced (subpar. (b)), the effect of which is to apply Rules 18 to 29, both inclusive, except Rule 20 (b), to seaplanes on the water.

## Rule 19

Unchanged.

## Rule 20

The addition of the words "except as provided in Rules 24 and 26" should be noted. These words have been inserted in order to make the intention of the Rule clearer.

Under the provisions of subparagraph (b) a seaplane on the water will have to keep well clear of all vessels and must avoid impeding their navigation. Where, however, a risk of collision exists a seaplane will be required to comply with the Rules.

## Rule 21

The only change introduced into this Rule is that the second sentence, which originally constituted a note to the Rule, has been incorporated in the Rule itself.

## Rule 22

Unchanged.

## Rule 23

Unchanged.

## Rule 24

Unchanged.

the bearing between the two vessels shall 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.

(c) If the overtaking vessel cannot determine with certainty whether she is forward of or abaft this direction from the other vessel, she shall assume that she is an overtaking vessel and keep out of the way.

#### Rule 25

(a) In a narrow channel every power-driven vessel when proceeding along the course of the channel shall, when it is safe and practicable, keep to that side of the fairway or midchannel which lies on the starboard side of such vessel.

(b) Whenever a power-driven vessel is nearing a bend in a channel where a power-driven vessel approaching from the other direction cannot be seen, such vessel, when she shall have arrived within one-half mile of the bend, shall give a signal by one prolonged blast of her whistle, which signal shall be answered by a similar blast given by any approaching power-driven vessel that may be within hearing around the bend. Regardless of whether an approaching vessel on the farther side of the bend is heard, such bend shall be rounded with alertness and caution.

#### Rule 26

All vessels not engaged in fishing shall, when under way, keep out of the way of any vessels fishing with nets or lines or trawls. This Rule shall not give to any vessel engaged in fishing the right of obstructing a fairway used by vessels other than fishing vessels.

#### Rule 27

In obeying and construing these Rules due regard shall be had to all dangers of navigation and collision, and to any special circumstances, including the limitations of the craft involved, which may render a departure from the above Rules necessary in order to avoid immediate danger.

### PART D—MISCELLANEOUS

#### Rule 28

(a) When vessels are in sight of one another, a power-driven vessel under way, in taking any course authorized or required by these Rules, shall indicate that course by the following signals on her whistle, namely—

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 "My engines are going astern."

(b) Whenever a power-driven vessel which, under these Rules, is to keep her course and speed, is in sight of another vessel and is in doubt whether sufficient action is being taken by the other vessel to avert collision, she may indicate such doubt by giving at least five short and rapid blasts on the whistle. The giving of such a signal shall not relieve a vessel of her obligations under Rules 27 and 29 or any other Rule, or of her duty to indicate any action taken under these Rules by giving the appropriate sound signals laid down in this Rule.

(c) Nothing in these Rules shall interfere with the operation of any special rules made by the Government of any nation with respect to the use of additional whistle signals between ships of war or vessels sailing under convoy.

#### Rule 29

Nothing in these Rules shall exonerate any vessel, or the owner, master, or crew thereof, from the consequences of any neglect to carry lights or signals, or of any

#### Rule 25

Attention is drawn to subparagraph (b) of this Rule, which provides for a new signal to be given by a power-driven vessel nearing a bend in a channel where a power-driven vessel approaching from the other direction cannot be seen. A vessel in these circumstances will be required to signal by one prolonged blast on her whistle when she arrives within half a mile of the bend, and this signal will have to be answered by any approaching power-driven vessel which, though out of sight, is within hearing distance round the bend.

#### Rule 26

The former Article 26 provided that sailing vessels under way should keep out of the way of sailing vessels or boats fishing with nets, lines, or trawls. The new Rule provides, as will be seen, that all vessels not engaged in fishing will when under way have to keep out of the way of all vessels engaged in fishing.

#### Rule 27

Unchanged.

#### Rule 28

The definition of short blast has been transferred to Rule 1. The substance of the old Article 28 has been retained, but an important new provision has been introduced (subpar. (b)). This provides for a signal consisting of at least five short and rapid blasts on the whistle or siren, which may be given by a power-driven vessel which is required under the Rules to keep course and speed if, when she is in sight of another vessel, she is in doubt whether that other vessel is taking sufficient action to avert collision. This signal has been introduced to give the "stand-on" vessel the opportunity of calling the attention of the "give-way" vessel to its obligations under the Collision Regulations; numerous casualties have been due to reliance by the "stand-on" vessel on correct avoiding action being taken by the "give-way" vessel, and subsequent failure by the "give-way" vessel to take the necessary action.

#### Rule 29

Unchanged.



neglect to keep a proper lookout, or of the neglect of any precaution which may be required by the ordinary practice of seamen, or by the special circumstances of the case.

#### Rule 30

### RESERVATION OF RULES FOR HARBORS AND INLAND NAVIGATION

Nothing in these Rules shall interfere with the operation of a special rule duly made by local authority relative to the navigation of any harbor, river, lake, or inland water, including a reserved seaplane area.

#### Rule 31

### DISTRESS SIGNALS

When a vessel or seaplane on the water is in distress and requires assistance from other vessels or from the shore, the following shall be the signals to be used or displayed by her, either together or separately, namely—

(a) A gun or other explosive signal fired at intervals of about a minute.

(b) A continuous sounding with any fog-signal 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 ... — — — ... 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. C.

(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 showing a red light.

The use of any of the above signals, except for the purpose of indicating that a vessel or a seaplane is in distress, and the use of any signals which may be confused with any of the above signals, is prohibited.

**NOTE.**—A radio signal has been provided for use by vessels in distress for the purpose of actuating the autoalarms of other vessels and thus securing attention to distress calls or messages. The signal consists of a series of 12 dashes, sent in 1 minute, the duration of each dash being 4 seconds, and the duration of the interval between 2 consecutive dashes 1 second.

#### Rule 32

All orders to helmsmen shall be given in the following sense: right rudder or starboard to mean "put the vessel's rudder to starboard;" left rudder or port to mean "put the vessel's rudder to port."

#### Rule 30

The exemption authorized under the existing Regulations in respect to Rules made by local authorities relative to the navigation of any harbor, river or inland water has been extended to cover any Rules applicable to a reserved seaplane area.

#### Rule 31

This Rule sets out the distress signals which a vessel or seaplane on the water requiring assistance from other vessels or the shore may make. Attention is drawn to the note in regard to the radio signal which actuates the autoalarms of other vessels. The list of signals has been rearranged, and the use of a rocket parachute flare showing a red light has been authorized.

#### Rule 32

This Rule embodies the provisions of Article 41 of the International Convention for the Safety of Life at Sea which was signed in London on May 31, 1929, in view of its relevance to the Steering and Sailing Rules.

## APPENDIX

### Amendments to Regulations

#### TITLE 33—NAVIGATION AND NAVIGABLE WATERS

##### Chapter 1—Coast Guard

Department of the Treasury

#### Subchapter C—Aids to Navigation

[CGFR 52-15]

#### REVISION OF SUBCHAPTER

By virtue of the authority contained in 14 U. S. C. 81, 83, 84, 85, 86, 87, 93, 633, 641 and 642, all the regulations in Subchapter C, Title 33, Chapter I, are canceled and the following regulations are hereby promulgated and shall be effective upon publication in the FEDERAL REGISTER.

[EDITOR'S NOTE: Due to space limitations Sections 62.10-1 to 62.45-15 only of Subchapter C will be reprinted in this issue. The balance of the amendments to this Subchapter will be printed in a later issue.]

#### SUBPART 62.10—RECOMMENDATIONS AND REQUESTS

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62.10-10 Federal agencies.

# SUBPART 62.15—REPORTING DEFECTS

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### SUBPART 62.20—FIXED STRUCTURES

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#### 62.45-10 Periods of operation.

#### 62.45-15 Caution.

**AUTHORITY:** §§ 62.01-1 to 62.45-15 issued under sec. 1, 63 Stat. 503, as amended; 14 U. S. C. 92. Interpret or apply sec. 1, 63 Stat. 500, 501, 504, as amended; 14 U. S. C. 81, 87, 93. Other statutory provisions interpreted or applied are cited to text in parentheses.

§ 62.10-1 *Marine commerce.* Requests and recommendation pertaining to the aids to navigation system, or reports of aids to navigation no longer needed should be mailed to the District Commander concerned, or to the Commandant, U. S. Coast Guard, Washington 25, D. C. Requests or recommendations for improvements should be supported with information on the following in order to justify the action proposed:

(a) Quantity, type, capacity and value of vessels involved, and the extent that these vessels traverse the area under consideration seasonally, by day, and by night.

(b) Where practicable, the type of navigating devices, such as compasses, radio direction finders, radar, loran, and searchlights, with which such vessels are equipped.

(c) The number of passengers, and type, quantity, and value of cargo involved.

(d) A chart section or sketch showing the action proposed when necessary to clearly describe the recommended improvement.

§ 62.10-5 *Armed forces.* (a) Requests for the establishment of aids to air navigation and loran service should be addressed to the Secretary of the Treasury. (See § 62.01-5 (b).) Requests for the establishment of other aids to navigation should be addressed to the appropriate District Commander. (See § 62.01-5 (a).)

(b) Requests and recommendations concerning the operation of any aid to navigation maintained by the Coast Guard should be addressed to the appropriate District Commander.

(c) Requests and recommendations should be made as far in advance as possible of the time of actual need in order that the funds required may be considered in preparing Coast Guard budget estimates. When such requests and recommendations require work not normally covered by or specifically included in the Coast Guard budget estimates, the Coast Guard will proceed with the work if funds available to the requesting agency for the purpose are transferred to the Coast Guard. Custody of the material and equipment acquired with such funds must remain with the Coast Guard.

§ 62.10-10 *Federal agencies.* Requests and recommendations from federal agencies other than the armed forces for the establishment or improvement of aids to navigation should be addressed to the appropriate District Commander.

### SUBPART 62.15—REPORTING DEFECTS

§ 62.15-1 *Procedure.* Mariners are requested to notify immediately the nearest District Commander of any defects observed in an aid to navigation. Radio messages should be prefixed "Coast Guard" and transmitted directly to one of the United States Government shore radio stations listed under "Communications" in the "Navy Hydrographic Bulletin" or under section 400 B of "Radio Aids to Navigation" (HO-205) for relay to the District Commander. If the radio call sign of the nearest United States Government radio station is not known, radio-telegraph communication may be established by the use of the general call "NCG" on the frequency of 500 kilocycles. Merchant ships may send messages relating to defects noted in aids to navigation through commercial facilities only when they are unable to contact a United States Government shore radio station. Charges for these messages will be accepted "collect" by the Coast Guard.

### SUBPART 62.20—LIGHTS ON FIXED STRUCTURES

§ 62.20-1 *General.* Lights on fixed structures are aids to navigation placed on shore or on marine sites to assist a navigator to determine his position or safe course, to mark channels and to warn him of dangers or obstructions to navigation. They are identified by their light color and flashing characteristics at night, and by the color and construction of the structure during day time. The location, description and characteristic of lights on fixed structures are published in the Light Lists.

### SUBPART 62.25—BUOYS

§ 62.25-1 *General.* (a) The waters of the United States are marked for safe navigation by the lateral system of buoyage. This system employs a simple arrangement of colors, shapes, numbers, and light characteristics to show the side on which a buoy should be passed when proceeding in a given direction. The characteristics are determined by the position of the buoy with respect to the navigable channels as the channels are entered from seaward toward the head of navigation. As all channels do not lead from seaward, arbitrary assumptions must at times be made in order that the system may be consistently applied. The characteristics of buoys are based on the assumption that proceeding in a southerly direction along the Atlantic Coast, in a northerly and westerly direction along the Gulf Coast, in a northerly direction on the Pacific Coast, and in a northerly and westerly direction on the Great Lakes is proceeding from seaward.

(b) On the Intracoastal Waterway proceeding in a general southerly direction along the Atlantic Coast, and in a general westerly direction along the Gulf Coast, is considered as proceeding from seaward. On the Mississippi and Ohio Rivers and their tributaries the aids to navigation characteristics are determined as proceeding from sea toward the head of navigation although local terminology describes "left bank" and "right bank" as proceeding with the flow of the river.

§ 62.25-5 *Colors.* When proceeding from seaward:

(a) Black buoys mark the port (left) sides of channels, or the location of wrecks or obstructions which must be passed by keeping the buoy on the port (left) hand.

(b) Red buoys mark the starboard (right) sides of channels, or the location of wrecks or obstructions which must be passed by keeping the buoy on the starboard (right) hand.

(c) Red and black horizontally banded buoys mark junctions or bi-



furcations in the channel, or wrecks or obstructions which may be passed on either side. If the topmost band is black, the preferred channel will be followed by keeping the buoy on the port (left) hand. If the topmost band is red, the preferred channel will be followed by keeping the buoy on the starboard (right) hand.

**NOTE:** When proceeding toward seaward, it may not be possible to pass on either side of these buoys, and the chart should always be consulted.

(d) Black and white vertically striped buoys mark the fairway or midchannel and should be passed close to, on either side.

§ 62.25-10 *Shapes.* In order to provide ready identification certain unlighted buoys are differentiated by shape.

(a) Red buoys, or red and black horizontally banded buoys with the topmost band red are conical shaped and called nun buoys.

(b) Black buoys, or black and red horizontally banded buoys with the topmost band black are cylindrical shaped and called can buoys.

(c) Black and white vertically striped buoys may be either nun or can buoys. The shape has no significance in this case. Lighted buoys, sound buoys, and spar buoys are not differentiated by shape to indicate the side on which they should be passed. No special significance is attached to the shapes of these buoys, their purpose being indicated only by the coloring, numbering, or light characteristics.

§ 62.25-15 *Numbers.* (a) All solid red and solid black buoys are numbered, the red buoys bearing even numbers and the black buoys bearing odd numbers, the numbers for each increasing from seaward. The numbers are kept in approximate sequence on both sides of a channel by omitting numbers where required.

(b) No other color buoys are numbered; however, any color buoy may be lettered for the purpose of identification.

§ 62.25-20 *Light color characteristics.* Red lights on buoys are used only on red buoys or red and black horizontally banded buoys with the topmost band red. Green lights on buoys are used only on the black buoys or red and black horizontally banded buoys with the topmost band black. White lights on buoys are used on any color buoy. No special significance is attached to a white light on a buoy, the purpose of the buoy being indicated by its color, number, or its light phase characteristic.

§ 62.25-25 *Light phase characteristics.* (a) Lights on red buoys or black buoys, if not fixed, will always be regularly flashing or regularly occulting. For ordinary purposes the frequency of flashes will be not more than 30 per minute (slow flashing). For purposes when it is desired that lights have a distinct cautionary significance, as at sharp turns or sudden constructions in the channel, or to mark wrecks or dangerous obstructions, the frequency of flashes will be not less than 60 per minute (quick flashing).

(b) Lights on red and black horizontally banded buoys will always show a series of quick flashes interrupted by eclipses about 8 times per minute (interrupted quick flashing).

(c) Lights on black and white vertically striped buoys will always show a white short-long flash, this combination recurring at the rate of about eight times per minute.

§ 62.25-30 *Intracoastal Waterway identification.* (a) Intracoastal Waterway aids to navigation have characteristic yellow markings which distinguish them from aids to navigation marking other waters. Buoys and single piles have a yellow band at the top; daymarks have a yellow border.

(b) When the Intracoastal Waterway route coincides with another waterway, such as a river on which the aids to navigation are marked from the sea to the head of navigation according to the lateral system of buoyage, special markings are used consisting of yellow squares or yellow triangles painted on a conspicuous part of such dual-purpose aids to navigation. A yellow triangle on an aid to navigation indicates that the aid must be left on the starboard side, and a yellow square on an aid indicates that it must be left on the port side, regardless of the color or number of the aid, when traversing the Intracoastal Waterway route from north to south on the Atlantic coast and from east to west along the Gulf Coast.

§ 62.25-35 *Special purpose buoys.*

(a) Buoys for special purposes which have no lateral significance are colored as follows. White buoys mark anchorage areas. Yellow buoys mark quarantine anchorage areas. White buoys with green tops are used in connection with dredging and survey operations. White and black alternately horizontally banded buoys mark fish net areas. White and international orange buoys alternately banded, either horizontally or vertically, are for special purposes to which neither the lateral system colors nor the other special purpose colors ap-

ply. Yellow and black vertically striped buoys are used for seadrome markings and have no marine significance.

(b) The shape of special purpose buoys has no significance. They are not numbered, but may be lettered. They may display any color light except red or green. Only fixed, occulting, or slow flashing characteristics are used. This section does not apply to aids to navigation marking floating plant moorings which shall be lighted as prescribed by the Secretary of the Army.

§ 62.25-40 *Buoys marking wrecks.* Buoys established by the Coast Guard to mark wrecks are generally placed on the seaward or channel side of the wreck and as near to the wreck as conditions will permit.

§ 62.25-45 *Minor lights and day-beacons.* Minor lights and day-beacons used to mark the sides of channels are given numbers and characteristics in accordance with the lateral system of buoyage.

§ 62.25-50 *Reflectors.* (a) Certain aids to navigation are fitted with light reflecting material (reflectors) to assist in their location in darkness. The colors of such reflectors have the same lateral significance as the colors of lights.

(b) Certain aids to navigation may be fitted with or have incorporated in their design, special fixtures (radar reflectors) designed to enhance their ability to reflect radar energy. In general, these fixtures will materially improve the aids for use by vessels equipped with radar.

§ 62.25-55 *Caution.* (a) Buoys are liable to be carried away, shifted, capsized, sunk, etc.; lighted buoys may be extinguished or sound buoys may not function as the result of storm, the accumulation of ice, running ice or other natural causes, collision or other accident.

(b) For the foregoing reasons, mariners should not rely completely upon the position or operation of floating aids to navigation, but should also utilize bearings from fixed objects and aid to navigation on shore.

(c) Station buoys are sometimes placed in close proximity to a major aid to mark the station in case the regular aid is accidentally shifted from station. Station buoys are colored and numbered the same as the regular aid to navigation. Lightship station buoys bear the letter "LS" above the initials of the station.

#### SUBPART 62.30—LIGHTSHIPS

§ 62.30-1 *General.* Lightships are aids to navigation placed in exposed locations where it is impractical to



construct fixed aids to navigation. They provide light, fog, and radiobeacon signals, and are distinguished from each other by the characteristics of their signals in the same manner as any other aid to navigation. The characteristics of the various lightships are given in the Light Lists.

**§ 62.30-5 Relief lightships.** Relief lightships may be placed at any of the lightship stations, and, when practicable, exhibit light, sound and radiobeacon signals having the same characteristic of the station.

**§ 62.30-10 Color and name.** All lightships, except Lake Huron Lightship, are painted red with the name of the station in white on both sides; Lake Huron Lightship is painted black with the name of the station painted in white on both sides. Relief lightships are painted the same color as the regular station ships, with the word "RELIEF" in white letters on both sides.

**§ 62.30-15 Identification.** Lightships, especially relief lightships, will display the international code signal of the station whenever a vessel is approaching or is in the vicinity and there are any indications that such a vessel is in strange waters or fails to recognize the station, or whenever a vessel asks for the information.

**§ 62.30-20 Caution.** Because of casualties and near casualties to lightships, all mariners are cautioned that courses should invariably be set to pass lightships with sufficient clearance to avoid possibility of collision from any cause. Experience shows that lightships cannot be safely used as leading marks to be passed close aboard, but should invariably be left broad off the course wherever searoom permits. When approaching a lightship on radio bearings, the risk of collision will be avoided by insuring that the radio bearing does not remain constant.

#### SUBPART 62.35—MARINE RADIOBEACONS

**§ 62.35-1 General.** Marine radiobeacons operate during periods of fog or low visibility and in clear weather during specific intervals as published in Coast Guard Light Lists. For station identification simple characteristics consisting of combinations of dots and dashes are used. Certain low-power marine radiobeacons use combinations of high and low-tone dashes to provide additional distinction in their characteristic. The characteristics of marker radiobeacons are composed of groups or series of dashes or by a continuous signal for part of a 30 second cycle which is followed by a silent period to complete the 30 second cycle. Marine radiobeacons are divided into classes

depending on their transmitting power. Class A radiobeacons give reliable average range of 200 miles; Class B give reliable average range of 100 miles; Class C give reliable average range of 20 miles; and Class D give reliable average range of 10 miles. All Coast Guard marine radiobeacons operate within the frequency band 285-315 kilocycles.

**§ 62.35-5 Carrier type operation.** Certain radiobeacons have been modified to transmit with the station characteristic code superimposed on a carrier which is on 60 seconds, off 120 seconds or on continuously. Those types of operation are for the purpose of extending the usefulness of these radiobeacons to aircraft and ships employing automatic direction finders.

**§ 62.35-10 Calibration service.** Radiobeacon stations and calibration stations, as listed in the current editions of the Coast Guard Light Lists, will broadcast for the purpose of enabling vessels to calibrate their direction finders upon request either to the cognizant District Commander or, if time does not permit, directly to the radiobeacon or calibration station. Signals for requesting calibration service are described in the current editions of the Coast Guard Light Lists. In the case of radiobeacon stations, transmission for calibration purposes will be continuous without the two minute silent interval unless another station in the same frequency group is in operation at the time, in which case calibration operation will be "one minute on, two minutes off." Transmission from calibration stations for calibration purposes will always be continuous.

**§ 62.35-15 Distance finding.** At certain radiobeacon stations the radiobeacon signal and sound signal are synchronized for distance finding. Distance finding from these stations is based on the principle of determining the time difference in receipt of the radiobeacon signal and the sound signal which are transmitted from the station simultaneously. Distance finding stations are listed in the current editions of the Coast Guard Light Lists. These publications also describe the method of using distance finding stations.

**§ 62.35-20 Caution.** Caution must be used in approaching radiobeacons on radio bearings, and care must be taken to set courses to pass safely clear. The risk of collision will be avoided by insuring that the radio bearing does not remain constant. This caution is applicable to those lightships and stations on submarine sites which are passed close to.

#### SUBPART 62.40—LORAN

**§ 62.40-1 General.** Standard loran is an electronic aid to navigation by means of which navigators on or over the ocean can determine their position accurately and quickly, day or night, and under practically any condition of weather and sea. A loran line of position is determined by measuring the time difference in receipt of synchronized electromagnetic wave pulses from two transmitting stations. A position fix may be determined by crossing a loran line of position with another loran line, sun line, star line, or other normal line of position. The reliable average daytime range of loran is 700 miles using ground waves and 1,400 miles nighttime range using sky waves. Loran is usable only by vessels or aircraft equipped with a loran receiver-indicator and loran charts or tables.

**§ 62.40-5 Rate designation.** The loran signals transmitted from two paired transmitting stations determine a loran rate. Loran rates are given designators consisting of a single digit number followed by either the letter "L", "H" or "S" followed by another single digit number. The first digit indicates the frequency channel of the rate and the letter and final digit designate the pulse recurrence rate, i. e., the number of pulses per second transmitted.

**§ 62.40-10 Charts, tables, and instruction books.** Loran charts, tables and operating instruction books are published by the Hydrographic Office, Navy Department, Washington 25, D. C., and may be obtained upon request at nominal cost. These instructions, tables and charts contain complete descriptions of the loran system and service available. General coast charts of the United States with loran lines printed on the reverse side are published by the U. S. Coast and Geodetic Survey.

**§ 62.40-15 Signal warning.** When loran signals are not synchronized or for any other reason are not satisfactory for navigation, one of the two signals on the unsatisfactory rate will "blink," i. e., the signal will appear and disappear alternately. Under no circumstances should a loran rate which is blinking be used for navigation purposes.

**§ 62.40-20 Caution.** Caution must be used in matching loran signals to insure that the ground wave signal of one station is not matched with a sky wave signal of the other station of the rate. Tables and charts are computed for determination of position from matching ground waves with ground waves or sky waves with sky waves.

# SUBPART 62.45—FOG SIGNALS

§ 62.45-1 *General.* The function of a fog signal in the system of aids to navigation is to warn of danger, and to provide the mariner with a practical means of determining his position with relation to the fog signal at such times as the station or any visual signal which it displays is obscured from view by fog, snow, rain, smoke or thick weather. Among the devices in common use as fog signals are diaphones, diaphragm horns, reed horns, sirens, whistles, bells and gongs. (Radiobeacons are treated separately under Subpart 62.35.)

§ 62.45-5 *Identification.* Fog signals are distinguished by their characteristics as specified in the Light Lists. The characteristic of a fog signal is described by its tone and signal characteristics. Its tone is determined by the device used to create the sound, such as diaphone, siren, bell, etc. The signal characteristic is the phase relationship of the recurring sound emissions. Fog signals on fixed stations and lightships produce a specific number of blasts and silent periods each minute, when operating, to provide positive identification; fog signals on buoys are generally actuated by the motion of the sea and, therefore, do not emit regular signal characteristics, and when the sea is calm, may omit no sound signals.

§ 62.45-10 *Periods of operation.* (a) Fog signals at stations where a continuous watch is maintained are sounded when the visibility decreases to five miles, and also whenever the fog whistle of a passing vessel is heard. Fog signals at certain stations which also operate radiobeacons are synchronized with the radiobeacon for distance finding. (See § 62.35-15.)

(b) Fog signals at locations where no watch is maintained are operated continuously unless otherwise stated in the Light List for any particular aid to navigation.

(c) Fog signals on buoys are generally operated by the motion of the sea.

§ 62.45-15 *Caution.* Mariners are cautioned that the hearing of fog signals cannot be implicitly relied upon. Experience indicates:

(a) That distance must not be judged only by the intensity of the sound.

(b) That occasionally there may be areas close to a fog signal in which it is not heard, and, that the mariner must not assume that a fog signal is not operating because he does not hear it.

(c) That fog may exist not far from a station, and yet not be seen from it, and that, therefore, the signal may not be in operation.

# Merchant Marine Personnel Statistics

## MERCHANT MARINE OFFICER LICENSES ISSUED

### DECK

December 1952

| Grade                              | Original | Renewal |
|------------------------------------|----------|---------|
| <b>Master:</b>                     |          |         |
| Ocean                              | 38       | 125     |
| Coastwise                          |          | 14      |
| Great Lakes                        | 1        | 31      |
| B. S. & L.                         | 3        | 32      |
| Rivers                             | 1        | 9       |
| Radio officer licenses issued      | 18       |         |
| <b>Chief mate:</b>                 |          |         |
| Ocean                              | 24       | 26      |
| Coastwise                          |          |         |
| <b>Mate:</b>                       |          |         |
| Great Lakes                        |          | 1       |
| B. S. & L.                         | 5        | 7       |
| Rivers                             |          |         |
| <b>Second mate:</b>                |          |         |
| Ocean                              | 32       | 20      |
| Coastwise                          |          |         |
| <b>Third mate:</b>                 |          |         |
| Ocean                              | 17       | 32      |
| Coastwise                          |          |         |
| <b>Pilots:</b>                     |          |         |
| Great Lakes                        | 1        | 18      |
| B. S. & L.                         | 54       | 124     |
| Rivers                             | 21       | 32      |
| <b>Master: Uninspected vessels</b> |          | 9       |
| <b>Mate: Uninspected vessels</b>   |          |         |
| Total                              | 216      | 477     |
| Grand total                        |          | 693     |

## ENGINEER

| Grade  | Original | Renewal |
|--|----------|---------|
| <b>STEAM</b>                                   |          |         |
| <b>Chief engineer:</b>                         |          |         |
| Unlimited                                      | 23       | 127     |
| Limited  | 9        | 47      |
| <b>First assistant engineer:</b>               |          |         |
| Unlimited                                      | 21       | 38      |
| Limited  | 1        | 18      |
| <b>Second assistant engineer:</b>              |          |         |
| Unlimited                                      | 18       | 47      |
| Limited  |          | 9       |
| <b>Third assistant engineer:</b>               |          |         |
| Unlimited                                      | 35       | 46      |
| Limited  | 1        |         |
| <b>MOTOR</b>                                   |          |         |
| <b>Chief engineer:</b>                         |          |         |
| Unlimited                                      | 4        | 31      |
| Limited  | 10       | 38      |
| <b>First assistant engineer:</b>               |          |         |
| Unlimited                                      | 1        | 12      |
| Limited  | 7        | 15      |
| <b>Second assistant engineer:</b>              |          |         |
| Unlimited                                      | 4        | 6       |
| Limited  |          |         |
| <b>Third assistant engineer:</b>               |          |         |
| Unlimited                                      | 29       | 55      |
| Limited  | 1        |         |
| <b>Chief engineer: Uninspected vessels</b>     |          | 2       |
| <b>Assistant engineer: Uninspected vessels</b> |          | 1       |
| Total  | 171      | 492     |
| Grand total                                    |          | 663     |

## INVESTIGATING UNITS

Coast Guard Merchant Marine Investigating Units and Merchant Marine Details investigated a total of 793 cases during the month of

## ORIGINAL SEAMEN'S DOCUMENTS ISSUED

December 1952

| Type of document                  | Atlantic coast | Gulf coast | Pacific coast | Great Lakes and rivers | Total |
|-----------------------------------|----------------|------------|---------------|------------------------|-------|
| Staff officer                     | 43             | 6          | 12            | 2                      | 63    |
| Continuous discharge book         |                |            |               |                        | 0     |
| Merchant mariner's documents      | 666            | 192        | 490           | 514                    | 1,862 |
| AB any waters unlimited           | 45             | 20         | 53            | 4                      | 122   |
| AB any waters, 12 months          | 32             | 18         | 38            | 23                     | 111   |
| AB Great Lakes, 18 months         | 1              | 1          | 4             | 25                     | 31    |
| AB tugs and tow boats, any waters |                |            |               |                        | 0     |
| AB bays and sounds                |                |            |               |                        | 0     |
| AD seagoing barges                |                |            |               |                        | 0     |
| Lifeboatman                       | 68             | 1          | 98            | 12                     | 179   |
| Q. M. E. D.                       | 130            | 55         | 91            | 39                     | 315   |
| Certificate of service            | 662            | 181        | 490           | 496                    | 1,829 |
| Tankerman                         | 9              | 13         | 2             | 33                     | 57    |

\* 12 months, vessels 500 gross tons or under, not carrying passengers.

NOTE.—The last 10 categories indicate number of endorsements made on United States merchant mariner's documents.

## WAIVER OF MANNING REQUIREMENTS

| Waivers  | Atlantic coast | Gulf coast | Pacific coast | Great Lakes | Total |
|--|----------------|------------|---------------|-------------|-------|
| Deck officers substituted for higher ratings     |                |            | 1             |             | 1     |
| Engineer officers substituted for higher ratings |                | 1          | 1             |             | 2     |
| OS for AB  | 4              | 4          | 4             |             | 12    |
| Wiper or coalpassers for Q. M. E. D.             | 6              | 2          | 4             | 1           | 13    |
| Total waivers                                    | 10             | 7          | 10            | 1           | 28    |
| Number of vessels                                | 8              | 7          | 7             | 1           | 23    |

NOTE.—In addition, individual waivers were granted to permit the employment of 43 able seamen holding certificates for "any waters—12 months" in excess of the 25 percent authorized by statute.

December 1952. From this number, hearings before Examiners resulted involving 14 officers and 67 unlicensed men. In the case of officers, no license was revoked, nine were suspended without probation, seven were suspended with probation granted, no license was voluntarily surrendered, two cases were dismissed after hearing and one hearing was closed with an admonition. Of the unlicensed personnel, 11 certificates were revoked, 10 were suspended without probation, 22 were suspended with probation granted, 18 certificates were voluntarily surrendered, no hearings were closed with admonitions, and 13 cases were dismissed after hearing.

