STATUTORY RULES AND ORDERS,
1932, No. 1055.

MERCHANT SHIPPING.
Fire Appliances.

The Merchant Shipping (Fire Appliances) Rules, 1932, dated
December 16, 1932, made by the Board of Trade under
section 427 of the Merchant Shipping Act, 1894 (57 & 58
Vicr. c. 60), and sections 4 and 5 of the Merchant Shipping
(Safety and Loadline Conventions) Act, 1932 (22 & 23 Geo.
5. c. 9).

In pursuance of the provisions of Section 427 of the Merchant
Shipping Act, 1894 (57 & 58 Vict. c. 60) and of Sections 4 and 5
of the Merchant Shipping (Safety and Loadline Conventions) Act,
1932 (22 & 23 Geo. 5. c. 9), and of all other powers enabling them in
that behalf, the Board of Trade hereby make the following Rules:—

INTERPRETATION.

1.—(1) These Rules may be cited as the Merchant Shipping
(Fire Appliances) Rules, 1932, and shall come into operation on
the first day of January, 1933.

(2) In these Rules, unless the context otherwise requires:—

"Motor ship" means a ship propelled by internal combus-
tion engines*.

"Approved" means approved by the Board of Trade.

"Length" as applied to a ship means registered length.

(3) The Interpretation Act, 1889 (52 & 53 Vict. c. 63) applies
to the interpretation of these Rules in like manner as it applies
to the interpretation of an Act of Parliament.

* By Section 743 of the Merchant Shipping Act, 1894, any provisions of the
Merchant Shipping Acts applying to steamers or steamships shall apply to ships
propelled by electricity or other mechanical power with such modifications as the
Board of Trade may prescribe for the purpose of adaptation.

Price 3d. net
CLASSIFICATION OF SHIPS.

2. For the purposes of these Rules ships shall be arranged in the following classes:

Class A.

Steamships carrying more than 12 passengers other than ships of Classes B and C (in these rules referred to as ships of class A).

Class B.

(i) Steamships carrying passengers in pursuance of a passenger certificate entitled "Passenger Certificate for a Home trade passenger vessel plying on short excursions to sea, that is, beyond partially smooth water limits between the 1st April and the 31st October inclusive, during daylight and in fine weather ",

(ii) Steamships carrying passengers in pursuance of a passenger certificate entitled "Passenger Certificate for a vessel plying in partially smooth water ",

(iii) Steamships (other than open motor ships) carrying passengers in pursuance of a passenger certificate entitled "Passenger Certificate for a vessel plying in smooth water in estuaries and lakes ",

(iv) Steamships (other than open motor ships) carrying passengers in pursuance of a passenger certificate entitled "Passenger Certificate for a vessel plying in smooth water on rivers and canals ",

(v) Steamhips (other than motor ships) carrying passengers in pursuance of a passenger certificate entitled "Passenger Certificate for a vessel plying for short distances to sea ",

(in these rules referred to as ships of class B.)

Class C.

(i) Open motor ships carrying passengers in pursuance of a passenger certificate entitled "Passenger Certificate for a vessel plying in smooth water in estuaries and lakes ",

(ii) Open motor ships carrying passengers in pursuance of a passenger certificate entitled "Passenger Certificate for a vessel plying in smooth water on rivers and canals ",

(iii) Motor ships carrying passengers in pursuance of a passenger certificate entitled "Passenger Certificate for a vessel plying for short distances to sea ",

(in these rules referred to as ships of class C.)

PATROLS AND DETECTION.

3.—(1) An efficient patrol system shall be maintained on every ship of class A, so that any outbreak of fire may be promptly detected.
(2) On every ship of class A engaged on an international voyage an approved fire alarm or fire detecting system shall be provided which will automatically register at one or more points or stations in the ship where it can be most quickly observed by officers and crew, the presence or indication of fire in any part of the ship which is, in the opinion of the Board of Trade, not accessible to the patrol system.

FIRE EXTINGUISHING APPLIANCES.

Ships of Class A.

Spaces occupied by Passengers and Crew.

4.—(1) Every ship of class A shall be provided with apparatus whereby at least two powerful jets of water can be rapidly and simultaneously brought to bear upon any part of each deck or space occupied by passengers or crew, when the watertight and fire resisting doors are closed.

(2) Every ship of class A shall be provided with such number of approved portable fluid fire extinguishers as the Board of Trade may deem sufficient.

Cargo Spaces.

5.—(1) Every ship of class A shall be provided with apparatus whereby at least two powerful jets of water can be rapidly and simultaneously directed into any cargo space.

(2) Every ship of class A of 1,000 tons gross tonnage and upwards shall be provided with apparatus whereby fire smothering gas sufficient to give a minimum volume of free gas equal to 30 per cent. of the gross volume of the largest hold in the ship can be promptly conveyed by a permanent piping system into any compartment in which cargo is carried.

Provided that, in the case of ships propelled by steam engines, the Board of Trade may allow the use of steam in lieu of smothering gas if satisfied that a volume of steam equivalent to the volume of gas required by this rule will always be available.

Machinery and Bunker Spaces.

6. Every ship of class A shall be provided with apparatus whereby at least two powerful jets of water can be rapidly and simultaneously directed into any part of the coal bunker spaces, boiler rooms and machinery spaces.

7. Every ship of class A in which the main boilers are coal fired shall be provided with at least two approved portable fluid fire extinguishers in each of the boiler rooms and machinery spaces.
8.—(1) Every ship of class A in which the main boilers are oil fired shall be provided with:—

(a) Conductors for spraying turfance of the surface;
(b) A receptacle containing at least 10 cubic feet of sand, sawdust impregnated with soda, or other approved dry materials in each firing space, and "coops" for distributing such material.
(c) Two approved portable extinguishers constructed to discharge froth, or other approved medium suitable for quenching oil fires, in each boiler room and in each of the machinery spaces in which a part of the oil fuel installation is situated.
(d) Approved apparatus whereby froth can be rapidly discharged and distributed over the whole of the lower part of the boiler room or of any one boiler room, if there are more than one, or of any machinery space in which oil fuel units or settling tanks are situated. The quantity of froth which can be discharged shall be sufficient to cover to a depth of 6 inches the whole area of the plating formed in any one compartment by the inner bottom plating, or by the shell plating of the vessel if there is no double bottom tank. If the engine and boiler rooms are not entirely separate, and fuel oil can drain from the boiler room bilges into the engine room, the combined engine and boiler rooms shall be considered as one compartment. The apparatus shall be controlled from outside the compartments into which it is required to discharge froth.
(e) One approved extinguisher constructed to discharge froth of at least 30 gallons capacity in the case of ships having one boiler room, and two such extinguishers in the case of ships with more than one boiler room. These extinguishers shall be provided with hoses on reels suitable for reaching any part of the boiler rooms and spaces containing oil fuel units.

(2) All containers and the valves by which such containers are operated shall be easily accessible and so placed that they will not readily be cut off from use by an outbreak of fire.

9.—(1) Every motor ship of class A shall comply with the requirements of sub-paragraph (a) of rule 8 (1) and shall be provided in each of the machinery spaces with at least one approved 10-gallon extinguisher constructed to discharge froth and also with one approved two-gallon extinguisher constructed to discharge froth for each 1,000 B.H.P. of the engines or part thereof, so however that the total number of two-gallon extinguishers so provided shall not be less than two and need not exceed six.
(2) If in any such ship a donkey boiler is situated in a machinery space, there shall be provided in that space, in place of the 10-gallon extinguisher required by paragraph (1) of this rule, an extinguisher of 30 gallons capacity, fitted with suitable hose attachments or other approved means for distributing the froth.

**Pumps.**

10.—(1) Every ship of class A of 4,000 tons gross tonnage and upwards shall be provided with at least three fire pumps operated by steam or other motive power, and every such ship of under 4,000 tons gross tonnage with at least two such fire pumps.

(2) Each of such fire pumps shall be capable of delivering such quantity of water as the Board of Trade may deem sufficient in two powerful jets simultaneously in any part of the ship.

(3) Each of such fire pumps shall be provided with effective escape valves suitably adjusted and so placed as to prevent excessive pressure in any part of the water-service system.

(4) When more than two such pumps are required they shall not all be fitted in the same space.

(5) In ships in which the main boilers are oil-fired, if the engine and boiler rooms are not entirely separated by a steel bulkhead, and if fuel oil can drain from the boiler room bilges into the engine room, one of the fire pumps shall be situated in the tunnel or in some other space outside the machinery compartment.

**Water Service Pipes.**

11.—(1) Every ship of class A shall be provided with water service pipes of ample size and made of suitable material to the satisfaction of the Board of Trade.

(2) On every ship of class A the branch water-service pipes and hydrants shall be so placed on each deck that the fire hoses may be easily coupled to them.

**Fire Hoses.**

12.—(1) Every ship of class A shall be provided with such number of fire hoses as the Board of Trade may deem sufficient. The fire hoses shall be of approved material and provided with the necessary fittings.

(2) Each of the hoses shall be of sufficient length to project a jet of water to any part of the space in which it is intended to be used.
Smoke Helmets and Safety Lamps.

13. Every ship of class A shall be provided with at least two approved equipments, each consisting of a breathing apparatus or smoke helmet and a safety lamp, and these equipments shall be kept ready for use in widely separated places.

Emergency Appliances.

14. Every ship of class A shall be provided with such outfit of emergency fire appliances as the Board of Trade may deem sufficient.

Ships of Class B.

Spaces Occupied by Passengers and Crew.

15.—(1) Every ship of class B shall be provided with apparatus whereby a powerful jet of water can be rapidly brought to bear upon any part of each deck or space occupied by passengers or crew.

(2) Every ship of class B shall be provided with such number of approved portable fluid fire extinguishers as the Board of Trade may deem sufficient.

Store Rooms, etc.

16. Every ship of class B shall be provided with apparatus whereby a powerful jet of water can be rapidly directed into any store room or cargo space.

Machinery and Bunker Spaces.

17. Every ship of class B, other than ships to which sub-paragraph (a) of rule 18 (1) applies, shall be provided with apparatus whereby a powerful jet of water can be rapidly directed into any part of the coal bunker spaces, boiler rooms and machinery spaces.

18.—(1) Every ship of class B which proceeds beyond partially smooth water limits, and in which the boiler or boilers are oil fired, shall be provided with:

(a) Apparatus whereby two powerful jets of water can be rapidly and simultaneously directed into any part of the boiler rooms and machinery spaces.

(b) Conductors for spraying water on oil without undue disturbance of the surface.

(c) A receptacle containing a suitable quantity of sand, sawdust impregnated with soda or other approved dry materials in each firing space, and scoops for distributing such material.
(d) Two approved portable extinguishers constructed to
discharge froth, or other approved medium suitable for
quenching oil fires, in the boiler room and in each of the
machinery spaces in which a part of the oil fuel installa-
tion is situated.

(e) Approved apparatus whereby froth can be rapidly dis-
charged and distributed over the whole of the lower part
of the boiler room, or of any machinery space in which
oil fuel units or settling tanks are situated. The quantity
of froth which can be discharged shall be sufficient to
cover to a depth of 6 inches the whole area of the plating
formed in any one compartment by the inner bottom
plating or by the shell plating of the vessel if there is no
double bottom. If the engine and boiler rooms are not
entirely separate, and fuel oil can drain from the boiler
room bilges into the engine room, the combined engine
and boiler rooms shall be considered as one compart-
ment. The apparatus shall be controlled from outside
the compartments into which it is required to discharge
froth.

(f) At least two approved extinguishers constructed to dis-
charge froth of 10 gallons capacity with hoses suitable
for reaching any part of the boiler room and spaces con-
taining oil fuel units.

(2) All containers and the valves by which such containers are
operated shall be easily accessible and so placed that they will not
readily be cut off from use by an outbreak of fire.

19. Every ship of class B which does not proceed beyond
partially smooth water limits, and in which the boiler or boilers are
oil fired, shall be provided with one approved extinguisher con-
structed to discharge froth of at least 30 gallons capacity with hoses suitable
for reaching any part of the boiler room and spaces con-
taining oil fuel units and shall also comply with the requirements
of sub-paragraphs (b), (c) and (d) of paragraph (1) and paragraph (2)
of rule 18.

20.—(1) Every motor ship of class B proceeding beyond partially
smooth water limits and every decked motor ship of class B plying
in partially smooth water, propelled by internal combustion
engines consuming oil of a flash point of not less than 150° F., shall
be provided in each of the machinery spaces with at least one
approved 10-gallon extinguisher constructed to discharge froth and
also with one approved two-gallon extinguisher constructed to dis-
charge froth for each 1,000 B.
so however that the total number of two-gallon extinguishers so
provided shall be not less than two, and need not exceed six.
(2) If in any such ship a donkey boiler is situated in a machinery space, there shall be provided in that space, in place of the 15-gallon extinguisher required by paragraph (1) of this rule, an extinguisher of 30 gallons capacity, fitted with suitable hose attachments or other approved means for distributing the froth.

21. Every decked motor ship of class B plying in smooth water, propelled by internal combustion engines consuming oil of a flash point of not less than 150° F., shall be provided in each of the machinery spaces with at least two approved two-gallon extinguishers constructed to discharge froth, or, if that space can be rapidly and completely closed, a suitable number of tetrachloride or other approved extinguishers in lieu of such froth extinguishers.

Pumps.

22.—(1) Every ship of class B shall be provided with at least one fire pump of ample capacity operated by steam or other motive power.

(2) Every ship of class B in which the boiler or boilers are oil-fired and every motor ship of class B shall be provided with an additional fire pump connected to the water service pipes. Such pump shall not be placed in the same compartment with the pump required by paragraph (1) of this rule, and may be a manual bilge pump of the rotary type of large power, situated on deck in a position away from the engine room. The sea suction valve shall be capable of being controlled from outside the machinery compartment.

Water Service Pipes and Fire Hoses.

23. Every ship of class B shall comply with the requirements of rules 11 and 12.

Wood ships and other ships requiring special consideration.

24. Wood ships and ships in which the flash point of the oil used as fuel is lower than 150° F.

the foregoing rules with such modifications as the Board of Trade may deem necessary.

Ships of Class C.

Buckets and Balers.

25. Every ship of class C shall be provided with such number of buckets and balers as the Board of Trade may deem sufficient and such buckets and balers shall be placed in convenient and accessible positions on the ship so that they will be readily available in case of fire.
Sand.

26. Every ship of class C shall be provided with a box containing a suitable quantity of sand, sawdust impregnated with soda or other approved dry materials, and a scoop for distributing such material.

Fire Extinguishers.

27.—(1) Every ship of class C shall be provided with approved fire extinguishers in accordance with the following scale:—

(a) *Open motor ships not exceeding 30 feet in length.*

Two tetrachloride fluid extinguishers of the hand pump type and one froth or foam fluid extinguisher, each of a capacity of at least one gallon.

(b) *Open motor ships over 30 feet, but not exceeding 50 feet in length.*

Two tetrachloride fluid extinguishers of the hand pump type and two froth or foam fluid extinguishers, each of a capacity of at least one gallon.

(c) *Open motor ships over 50 feet, but not exceeding 70 feet in length.*

Three tetrachloride fluid extinguishers of the hand pump type and two froth or foam fluid extinguishers, each of a capacity of at least two gallons.

(d) *Open motor ships over 70 feet in length.*

Such number of tetrachloride and froth or foam fluid extinguishers of such size as the Board of Trade may deem sufficient.

(2) Such fire extinguishers shall be placed in positions ready for immediate use, and one shall be placed at each end of the vessel.

(3) Every decked motor ship of class C shall in addition be provided with—

(a) *One fire pump (hand or power),*

(b) *One approved portable fluid fire extinguisher in each passenger compartment.*

General.

28. All fire extinguishing apparatus and appliances shall be in working order and available for immediate use before the ship leaves port and at all times during the voyage.
29.—(1) Where these rules require that a particular fitting, appliance, or apparatus or type thereof, shall be fitted or carried in a ship, or that any particular provision shall be made in a ship, the Board of Trade may allow any other fitting, appliance or apparatus, or type thereof, to be fitted or carried or any other provision to be made if they are satisfied that that other fitting, appliance or apparatus, or type thereof, or provision, is at least as effective as that required by these rules.

(2) The Board of Trade may, on such conditions as they think fit, exempt any ship constructed before the 1st July, 1931 (not being a ship in respect of which exemption can be granted under the provisions of proviso (1) (a) to Section 4 of the Merchant Shipping (Safety and Loan Line Conventions) Act, 1932) from any of the requirements of these rules, if they are satisfied that that requirement is either impracticable or unreasonable in the case of that ship.

Dated this 16th day of December, 1932.

Walter Runciman,
President of the Board of Trade.