Navigation

No. 62 of 1968

An Act to amend the *Navigation Act* 1912-1967 for the purpose of giving effect to the International Convention on Load Lines, 1966, and for other purposes.

[*Assented to 27 June 1968*]

BE it enacted by the Queen's Most Excellent Majesty, the Senate, and the House of Representatives of the Commonwealth of Australia, as follows:—

Short title and citation.

1.—(1.) This Act may be cited as the *Navigation Act* 1968.

(2.) The *Navigation Act* 1912-1967* is in this Act referred to as the Principal Act.

(3.) The Principal Act, as amended by this Act, may be cited as the *Navigation Act* 1912-1968.

Commencement.

2.—(1.) Sections 1, 2 and 15 of this Act shall come into operation on the day on which this Act receives the Royal Assent.

(2.) The remaining provisions of this Act shall come into operation on a date to be fixed by Proclamation.

* Act No. 4, 1913, as amended by No. 32, 1919; No. 1, 1921; No. 8, 1925; No. 8, 1926; No. 49. 1934; No. 30, 1935; No. 1, 1943; No. 80, 1950; No. 109, 1952; No. 96, 1953; No. 46, 1956; No. 36, 1958; No. 96, 1961; No. 1, 1965; No. 93, 1966; and No. 60, 1967.

3. Section 5 of the Principal Act is amended by omitting the words put* and figures—

"Division 5.—Deck and Load Lines (Sections 218-227)."

and inserting in their stead the words and figures—

"Division 5.—Load Lines (Sections 218-227E)".

Engagement of seamen in Australia.

4. Section 46 of the Principal Act is amended by omitting from paragraph (*a*) of sub-section (3.) the words "a Load Line Convention certificate" and inserting in their stead the words "an international load line certificate, a valid Load Line Convention certificate".

Interpretation.

5. Section 187A of the Principal Act is amended—

(*a*) by omitting from sub-section (1.) the definitions of "country to which the Load Line Convention applies" and "country to which the Safety Convention applies" and inserting in their stead the following definition:—

"'country to which the Safety Convention applies' means a country or territory specified in a notice under the next succeeding section;";

(*b*) by omitting from sub-paragraphs (iii) and (iv) of paragraph (a) of the definition of "international voyage" in sub-section (1.) the words "a country to which the Load Line Convention applies" and inserting in their stead the words "a country that is a Load Line Convention country for the purposes of that Division";

(*c*) by omitting from sub-section (1.) the definition of "the Load Line Convention" and inserting in its stead the following definition:—

"'the Load Line Convention' means the International Convention on Load Lines, 1966 (a copy of which, and of the annexes to which, other than the chart attached to Annex II, are set forth in Schedule VII. to this Act), as affected by any amendment, other than an amendment not accepted by Australia, made under Article 29 of the Convention;"; and

(*d*) by omitting from paragraph (*b*) of sub-section (3.) the words "a colony, overseas territory or protectorate, or".

6. Section 187B of the Principal Act is repealed and the following sections are inserted in its stead:—

Declaration of countries to which the Safety Convention applies.

"187B. The Minister may, by notice published in the *Gazette,* declare that, for the purposes of this Part, a country or territory, other than Australia, specified in the notice is a country or territory to which the Safety Convention applies.

When ships deemed to be overloaded.

"187c.—(1.) Where a ship is so loaded at any time that, if the ship were floating without a list in still salt water of a specific gravity of 1.025, the load line marked on either side of the ship that is the appropriate load line at that time would be submerged, the ship shall, for the purposes of this Part, be deemed to be overloaded, and, subject to sub-section (4.) of this section, to be overloaded to the extent to which that load line would be so submerged.

"(2.) Where—

(*a*) a ship is at any time engaged on, or is about to engage on, a voyage during which, in the ordinary course, a load line marked on either side of the ship (not being a load line that is the appropriate load line at that time) would, at some later time during the voyage, become the appropriate load line; and

(*b*) the ship is so loaded at that first-mentioned time that, if the ship were floating without a list in still salt water of a specific gravity of 1.025 and there were unloaded from the ship the fuel and other material that would, in the ordinary course, be consumed or discharged before that later time, that load line would be submerged,

the ship shall, for the purposes of this Part, be deemed to be overloaded and, subject to sub-section (4.) of this section, to be overloaded to the extent to which that load line would be so submerged.

"(3.) Where a passenger ship is so loaded at any time that, if the ship were floating without a list in still salt water of a specific gravity of 1.025, the subdivision load fine marked on either side of the ship that is the appropriate subdivision load line at that time would be submerged, the ship shall, for the purposes of this Part, be deemed to be overloaded, and subject to the next succeeding sub-section, to be overloaded to the extent to which that subdivision load line would be so submerged.

"(4.) Where—

(*a*) in any proceedings under this Act, it is proved that a ship is, by force of more than one sub-section of this section, deemed to be overloaded; and

(*b*) the extent to which, under those sub-sections, the ship is deemed to be overloaded is not the same in each case,

the ship shall, for the purposes of this Part, be deemed to be overloaded to the greatest extent to which she is deemed to be overloaded under those sub-sections.

"(5.) For the purposes of this section, the load line or subdivision load line marked on a ship that is the appropriate load line or subdivision load line at any time shall be determined in accordance with the regulations.

Certificate by Minister as to amendments of Conventions.

"187D. The Minister may, by writing under his hand, certify that amendments set out in, or annexed to, the certificate are the amendments, other than amendments not accepted by Australia, by which the Safety

Convention or the Load Line Convention was affected as at such date as is specified in the certificate and, in any proceedings under this Act, such a certificate is evidence of the matters certified to in the certificate.".

7. Section 188 of the Principal Act is repealed and the following section inserted in its stead:—

Exemption from safety requirements for a single international voyage.

"188. Where a ship (other than a nuclear ship) that is not ordinarily engaged on international voyages undertakes, in exceptional circumstances, a single international voyage, the Minister may, if he is satisfied that the ship complies with safety requirements that, in his opinion, are adequate for the voyage, exempt the ship or any person, in respect of that voyage, from compliance with any provision of this Act or the regulations that gives effect to the Safety Convention.".

8. After section 190 of the Principal Act the following section is inserted:—

Powers of inspection of surveyors.

"190AA.—(1.) A surveyor may at any reasonable time go on board a ship and inspect the ship and any part of the ship, including the hull, boilers, machinery and equipment of the ship, and may require the certificate of competency of the master or of any officer of the ship, or any certificate or other document relating to the ship, to be produced to him.

"(2.) Without limiting the generality of the last preceding sub-section, the powers of a surveyor under that sub-section extend, subject to section two hundred and twenty-seven E of this Act, to the inspection of a ship for the purpose of ascertaining whether the ship complies with such of the provisions of this Act and the regulations relating to load lines as apply to the ship and whether the ship is overloaded, and to requiring the production to him of any certificate relating to load lines issued in respect of the ship.

"(3.) Where the Minister receives the report of a surveyor who has carried out, or proposes to carry out, an inspection of a ship under this section, he may, if he considers it necessary so to do, require the ship to be taken into dock or otherwise dealt with so that a surveyor can inspect the hull, boilers, machinery or equipment of the ship.

"(4.) A surveyor shall not, in exercising his powers under this section, unnecessarily detain or delay a ship from proceeding on a voyage.

"(5.) A person shall not obstruct or hinder a surveyor in the exercise of his powers under this section, and shall, unless he has reasonable excuse for failing to do so, comply with any requirement made by the Minister or a surveyor under this section.

Penalty: Five hundred dollars.".

9. Section 191AA of the Principal Act is repealed and the following section inserted in its stead:—

Offences with respect to sub division load line marks.

"191B.—(1.) If a ship, not being a Safety Convention ship, has been marked in accordance with the regulations with subdivision load fines and the ship is not, except with reasonable cause, kept so marked, the

owner and master of the ship are each guilty of an offence against this Act punishable upon conviction by a fine not exceeding One thousand dollars.

"(2.) If a ship, not being a Safety Convention ship, has been marked in accordance with the regulations with subdivision load lines and any person, except with reasonable cause, conceals, removes, alters, defaces or obliterates, or suffers any person under his control to conceal, remove, alter, deface or obliterate any such mark, he is guilty of an offence against this Act punishable upon conviction by a fine not exceeding One thousand dollars.".

Powers of surveyors.

10. Section 199 of the Principal Act is repealed.

Detention of unseaworthy ships.

11. Section 210 of the Principal Act is amended by inserting in sub-section (1.), after the v

12. Division 5 of Part IV. of the Principal Act is repealed and the following Division inserted in its stead:—

"DIVISION 5.—LOAD LINES.

Interpretation.

"218.—(1.) In this Division, unless the contrary intention appears—

'Australian load line certificate' means a certificate issued under paragraph (*b*) of section two hundred and twenty-two of this Act;

'international load line certificate' means a certificate issued under paragraph (*a*) of section two hundred and twenty-two of this Act;

'international load line exemption certificate' means a certificate issued under section two hundred and twenty-three of this Act;

'load line' means a load line other than a subdivision load line;

'Load Line Convention country' means a country or territory specified in a notice under the next succeeding section;

'non-Australian Load Line Convention ship' means a ship that is registered in a Load Line Convention country and is a ship to which the Load Line Convention applies;

'ship to which the Load Line Convention applies' means a ship to which, in accordance with Articles 4 and 5 of the Load Line Convention, that Convention applies;

'the conditions of assignment' means the regulations which give effect to Chapter II. of Annex I to the Load Line Convention, including any application of those regulations to ships or a class of ships not engaged on international voyages or to which the Load Line Convention does not otherwise apply;

'valid Load Line Convention certificate' means a certificate in the form of the International Load Line Certificate (1966) set out in Annex HI to the Load Line Convention, being a certificate that—

(*a*) is issued in respect of a non-Australian Load Line Convention ship by or with of the country in which the ship is registered; and

(*b*) complies with such requirements as are prescribed;

'valid Load Line Convention exemption certificate' means a certificate in the form of the International Load Line Exemption Certificate set out in Annex III to the Load Line Convention, being a certificate that—

(*a*) is issued in respect of a non-Australian Load Line Convention ship by or with the authority of t the country in which the ship is registered; and

(*b*) complies with such requirements as are prescribed.

"(2.) For the purposes of this Division, an unregistered ship flying the flag of a country shall be deemed to be registered in that country.

Declaration of Load Line Convention countries.

"219. The Minister may, by notice published in the *Gazette*, declare that, for the purposes of this Part, a country or territory, other than Australia, specified in the notice is a Load Line Convention country or territory.

Load line regulations.

"220.—(1.) The regulations may make provision for and in relation to giving effect to the Load Line Convention and generally may make provision for and in relation to load lines, including the assigning of, and the survey of ships for the purpose of assigning, load lines to ships and the marking of load lines on ships.

"(2.) Any regulations that make provision for or in relation to giving effect to the Load Line Convention may be expressed to apply to a ship, or a class of ships, that is not engaged on international voyages or to which the Load Line Convention does not otherwise apply, and may be expressed so to apply without modification or with modifications specified in or to be determined under the regulations.

Exemptions.

"221.—(1.) The Minister may, in relation to a ship that is registered in Australia and is a ship to which the Load Line Convention applies, exercise the right conferred on the government of the Commonwealth by paragraph (1) of Article 6 of the Load Line Convention to exempt a ship from the provisions of the Convention, and a ship so exempted, and the master and owner of the ship, are exempt from compliance with this Division and the regulations that relate to load lines.

"(2.) The Minister may, in relation to a ship that is registered in Australia and is a ship to which the Load Line Convention applies, exercise the right conferred on the government of the Commonwealth by paragraph (2) of Article 6 of the Load Line Convention to exempt a ship from a provision of the Convention, and a ship so exempted, and the master and owner of the ship, are exempt from compliance with any provision of this Division, or any provision of the regulations, that gives effect to that provision of the Convention.

"(3.) An exemption granted by the Minister under the last preceding sub-section may be granted subject to the condition that such safety requirements as are specified by the Minister in relation to the ship are complied with.

"(4.) Where safety requirements specified by the Minister in relation to a ship under the last preceding sub-section are not complied with, the master and the owner of the ship are each guilty of an offence punishable upon conviction by a fine not exceeding One thousand dollars.

"(5.) Where a ship registered in Australia, being a ship that is not ordinarily engaged on international voyages but would be a ship to which the Load Line Convention applies if it were engaged on international voyages, undertakes, in exceptional circumstances, a single international voyage, the Minister may, if he is satisfied that the ship complies with safety requirements that, in his opinion, are adequate for the voyage, exempt the ship or the master and owner of the ship, in respect of that voyage, from compliance with any provision of this Division, or any provision of the regulations that relates to load lines.

"(6.) Where the Minister is satisfied that it would be unreasonable or impracticable to apply this Division, or a provision of this Division or a provision of the regulations that relates to load fines, to or in relation to a ship that is not a ship to which the Load Line Convention applies, he may, subject to such conditions as he thinks fit for ensuring the safety of the ship and the passengers and crew of the ship, exempt the ship, or the master and owner of the ship, from compliance with the provisions of this Division or from compliance with that provision of this Division or of that provision of the regulations, as the case may be.

"(7.) The powers of the Minister under the last preceding sub-section to grant an exemption in respect of a ship extend to granting exemptions in respect of ships included in a class of ships.

"(8.) Where a condition specified by the Minister under sub-section (6.) of this section is not complied with in relation to a ship, the master and owner of the ship are each guilty of an offence punishable upon conviction by a fine not exceeding One thousand dollars.

Issue of load line certificates.

"222. Where a ship, other than a non-Australian Load Line Convention ship, except to the extent of any exemption granted by the Minister under section two hundred and twenty-one of this Act, has been surveyed and marked in accordance with the regulations and complies with the conditions of assignment applicable to the ship, the Minister, or a survey authority authorized in writing by the Minister to issue certificates under this section, may issue in respect of the ship—

(*a*) if the ship is registered in Australia and is a ship to which the Load Line Convention applies or would be such a ship if it were engaged on international voyages—a certificate in the form of the International Load Line Certificate (1966) set out in Annex III to the Load Line Convention; or

(*b*) in any other case—a load line certificate in a form approved by the Minister.

Issue of exemption certificates.

"223. Where, under sub-section (2.) or (5.) of section two hundred and twenty-one of this Act, a ship is exempted from compliance with a provision of this Division or a provision of the regulations, the Minister shall issue in respect of the ship a certificate in the form of the International Load Line Exemption Certificate set out in Annex III to the Load Line Convention.

Duration, extension and cancellation of certificates.

"224.—(1.) Subject to this section and to the regulations, an international load line certificate, an international load line exemption certificate issued in respect of an exemption granted under sub-section (2.) of section two hundred and twenty-one of this Act, or an Australian load line certificate, remains in force for such period as is specified in the certificate, being a period that does not expire later than five years after the date of issue of the certificate.

"(2.) Provision may be made in the regulations for and in relation to—

(*a*) the extension, in accordance with paragraph (2) of Article 19 of the Load Line Convention, of an international load line certificate or an international load line exemption certificate issued in respect of an exemption granted under sub-section (2.) of section two hundred and twenty-one of this Act; and

(*b*) the cancellation, in accordance with paragraph (3) of Article 19 of the Load Line Convention, of such a certificate.

"(3.) An international load line certificate or an international load line exemption certificate ceases to have effect if the ship in respect of which it was issued ceases to be registered in Australia.

"(4.) The regulations may specify circumstances in which an Australian load line certificate ceases to have effect and may make provision for and in relation to the extension or cancellation of an Australian load line certificate.

"(5.) Where an international load line certificate, an international load line exemption certificate or an Australian load line certificate is cancelled, the certificate is of no force or effect after the Minister has given notice in writing of the cancellation to the owner, agent or master of the ship in respect of which the certificate was issued.

"(6.) Where an international load fine certificate, an international load line exemption certificate or an Australian load line certificate has expired or has been cancelled, the Minister may require the owner or master of the ship in respect of which the certificate was issued to deliver up the certificate to the Minister or to such other person as the Minister directs, and the ship may be detained until the requirement is complied with.

Certificates to be exhibited. &c.

"225.—(1.) The master of a ship in respect of which an international load line certificate, an international load line exemption certificate or an Australian load line certificate has been issued shall, while the certificate remains in force, cause a copy of the certificate to be kept displayed in a prominent and accessible place in the ship where it may be read by all persons on board.

"(2.) The master of a ship in respect of which an international load line certificate or an Australian load line certificate has been issued shall enter in the official log-book of the ship particulars of the position of the deck line and load lines specified in the certificate.

Minister may issue certificate at request of Load Line Convention country.

"226.—(1.) Where—

(*a*) the government of a Load Line Convention country requests the Minister to issue, in respect of a ship that is registered in that country and is a ship to which the Load Line Convention applies, a certificate in the form of the International Load Line Certificate (1966) set out in Annex III to the Convention; and

(*b*) the Minister is satisfied that the ship complies with the provisions of the Convention,

he may issue in respect of the ship a certificate in that form.

"(2.) A certificate issued under this section—

(*a*) shall contain a statement to the effect that it has been issued at the request of the government of the country in which the ship is registered; and

(*b*) has effect, for the purposes of this Division, as if it had been issued by that government.

Minister may request Load Line Convention country to issue certificates.

"227.—(1.) The Minister may request the government of a Load Line Convention country to issue, or cause to be issued, in respect of a ship that is registered in Australia and is a ship to which the Load Line Convention applies a certificate in the form of the International Load Line Certificate (1966) set out in Annex III to the Load Line Convention.

"(2.) A certificate issued in pursuance of such a request and containing a statement that it has been so issued has effect, for the purposes of this Division, as if it had been issued by the Minister under section two hundred and twenty-two of this Act.

Ships not to proceed to sea without load line certificates.

"227A.—(1.) The master or owner of a ship registered in Australia shall not take the ship to sea, or permit the ship to be taken to sea, on any voyage, and the master or owner of a ship not registered in Australia, other than a non-Australian Load Line Convention ship, shall not take the ship to sea, or permit the ship to be taken to sea, on a voyage from a port in Australia unless—

(*a*) where the ship is registered in Australia and is a ship to which the Load Line Convention applies or would be such a ship if it were engaged on international voyages—there is in force in respect

of the ship an international load line certificate, and any international load line exemption certificate that is in force in respect of the ship applies to the voyage; or

(*b*) in any other case—there is in force in respect of the ship an Australian load line certificate.

Penalty: One thousand dollars.

"(2.) Where the Minister, after having regard to any certificate relating to load lines that is in force in respect of a ship that is not registered in Australia and is not a non-Australian Load Line Convention ship, is satisfied that he can do so without danger to the ship or its passengers or crew, he may, subject to such conditions, if any, as are specified in the exemption, exempt the master and the owner of the ship from compliance with the last preceding sub-section in respect of a voyage specified in the exemption.

"(3.) Where application is made to an officer of Customs in respect of a ship, not being a non-Australian Load Line Convention ship, for a clearance under the Customs Act for a voyage from a port in Australia, the master of the ship shall, if so required by the officer of Customs, produce to the officer of Customs the certificate required by sub-section (1.) of this section to be in force in respect of the ship and any international load line exemption certificate in force in respect of the ship, and the officer of Customs may refuse to grant the clearance, and the ship may be detained, until the certificate is, or the certificates are, produced to him.

"(4.) Where application is made to an officer of Customs in respect of a non-Australian Load Line Convention ship for a clearance under the Customs Act for a voyage from a port in Australia, the master of the ship shall, if so required by the officer of Customs, produce to the officer of Customs a valid Load Line Convention certificate in respect of the ship and any valid Load Line Convention exemption certificate in force in respect of the ship, and the officer of Customs may refuse to grant the clearance, and the ship may be detained, until the certificate is, or the certificates are, produced to him.

Ships not to be overloaded.

"227B.—(1.) If, except as permitted by or under the regulations—

(*a*) a ship registered in Australia that is overloaded goes to sea from, or arrives at, any port, or is on any voyage; or

(*b*) a ship not registered in Australia that is overloaded goes to sea from, or arrives at, a port in Australia,

the master and owner of the ship are each guilty of an offence against this Act punishable upon conviction by a fine not exceeding Two thousand dollars and by an additional fine not exceeding an amount calculated at the rate of such amount as is applicable to the ship in accordance with the table at the foot of this sub-section (having regard to the gross registered tonnage of the ship if the ship is a passenger ship, or the deadweight tonnage of the ship if the ship is a cargo ship) for each inch or part of an inch by which the ship is overloaded.

Gross registered tonnage (passenger ships) or deadweight tonnage (cargo ships)	Amount
	$
Not exceeding 1,000 tons	500
Exceeding 1,000 tons but not exceeding 5,000 tons	1,000
Exceeding 5,000 tons but not exceeding 10,000 tons	2,000
Exceeding 10,000 tons but not exceeding 20,000 tons	4,000
Exceeding 20,000 tons but not exceeding 40,000 tons	6,000
Exceeding 40,000 tons	8,000

"(2.) The Minister may, by writing under his hand, certify, in relation to a ship specified in the certificate, that—

(*a*) having regard to the Register Book issued by the Committee of Lloyd's Register of Shipping and Supplements to that Register; or

(*b*) having regard to the report of a surveyor furnished to him for the purposes of the certificate,

he is satisfied that, on a date specified in the certificate, the gross registered tonnage of the ship or the deadweight tonnage of the ship, as the case may be, was such number of tons as is specified in the certificate, and, in proceedings for an offence against the last preceding sub-section in respect of the ship, the certificate is evidence that the gross registered tonnage of the ship or the deadweight tonnage of the ship, as the case may be, was, on the date so specified, the number of tons so specified.

"(3.) It is a defence in proceedings for an offence against sub-section (1.) of this section in respect of a ship if it is proved that the circumstances giving rise to the offence were due only to a deviation or delay of the ship caused solely by stress of weather or other circumstances which neither the master nor owner of the ship could have prevented or forestalled.

Detention of ships incorrectly marked.

"227c. Where—

(*a*) a certificate that relates, in whole or in part, to load fines or sub-division load lines is in

(*b*) a surveyor is not satisfied that any deck fine, load line or sub-division load line marked for that line in the certificate,

the ship may be detained until he is satisfied that the line is in that position.

Offences with respect to marks.

"227D.—(1.) If a ship, not being a non-Australian Load Line Convention ship, has been n deck lines and load lines and it is not, except with reasonable cause, kept so marked, the owner and master of the ship are each guilty of an offence against this Act punishable upon conviction by a fine not exceeding One thousand dollars.

"(2.) If a ship, not being a non-Australian Load Line Convention ship, has been marked in accordance with the regulations with deck lines and load lines and any person, except with reasonable cause, conceals, removes, alters, defaces or obliterates, or suffers any person under his control to conceal, remove, alter, deface or obliterate any such mark, he is guilty of an offence against this Act punishable upon conviction by a fine not exceeding One thousand dollars.

Inspection of non-Australian Load Line Convention ships.

"227E.—(1.) If a valid Load Line Convention certificate is produced to a surveyor in respect of a non-Australian Load Line ship, his powers of inspecting the ship under section one hundred and ninety AA of this Act in respect of the matters referred to in sub-section (2.) of that section are limited to ascertaining—

(*a*) whether the ship is overloaded;

(*b*) whether the positions of the load lines on the ship correspond with the positions specified in the certificate;

(*c*) whether any material alteration that would require the assignment of increased freeboard to the ship has, since the certificate was issued, taken place in the hull or superstructures of the ship;

(*d*) whether the fittings and appliances for the protection of openings, guard rails, freeing ports and means of access to the crew's quarters have been maintained on the ship in an effective condition; and

(*e*) whether the ship complies with the conditions specified in any valid Load Line Convention exemption certificate in force in respect of the ship.

"(2.) If—

(*a*) on inspection by a surveyor of a non-Australian Load Line Convention ship in respect of which a valid Load Line Convention certificate is produced, it is found that—

(i) a material alteration that would require the assignment of increased freeboard to the ship has, since the certificate was issued, taken place in the hull or superstructures of the ship;

(ii) the fittings and appliances for the protection of openings, guard rails, freeing ports and means of access to the crew's quarters have not been maintained on the ship in an effective condition; or

(iii) the ship does not comply with any condition specified in any valid Load Line Convention exemption certificate in force in respect of the ship; and

(*b*) the Minister is satisfied that the ship is manifestly unfit to proceed to sea without danger to human life,

the Minister may declare the ship to be unseaworthy and thereupon the ship shall be deemed to be unseaworthy for the purposes of section two hundred and ten of this Act.".

Schedule VII

13. Schedule VII. to the Principal Act is repealed and the Schedule set out in the Schedule to this Act is inserted in its stead.

Transitional provisions.

14.—(1.) Subject to the next succeeding sub-section, where, immediately before the commencement of this section, there was in force in respect of a ship registered in Australia a certificate of a kind specified in column 1 of the table at the foot of this sub-section, that certificate shall, after the commencement of this section, have the same effect, for the purposes of the Principal Act as amended by this Act, as a certificate issued under the

Principal Act as amended by this Act of a kind specified in column 2 of that table opposite to the first-mentioned certificate, and the Principal Act as so amended shall apply in relation to the certificate as if it were a certificate of such a kind and had been issued under Division 5 of Part IV. of the Principal Act as so amended.

Column 1	Column 2
Load Line Convention certificate issued under paragraph (a) of sub-section (1.) of section 220 of the Principal Act	International load line certificate as defined by sub-section (1.) of section 218 of the Principal Act as amended by this Act
Australian load line certificate issued under paragraph (*b*) of sub-section (1.) of section 220 of the Principal Act	Australian load line certificate as defined by sub-section (1.) of section 218 of the Principal Act as amended by this Act

(2.) The last preceding sub-section ceases to have effect in relation to a certificate at the expiration of two years after the commencement of this section if the certificate has not ceased to be in force before the expiration of that period.

(3.) Where, at any time before the expiration of two years after the commencement of this section, there is in force in respect of a ship not registered in Australia a valid 1930 Load Line Convention certificate, that certificate has effect, at that time, for the purposes of the Principal Act amended by this Act, as if it were a valid Load Line Convention certificate as defined by sub-section (1.) of section 218 of the Principal Act as amended by this Act.

(4.) Where, immediately before the commencement of this section, a country or territory fell within the definition of "country to which the Load Line Convention applies" in sub-section (1.) of section 187A of the Principal Act, that country or territory shall, until the expiration of two years after the commencement of this section or until it is specified in a notice under section 219 of the Principal Act as amended by this Act, whichever first occurs, be deemed to be a country or territory that falls within the definition of "Load Line Convention country" in sub-section (1.) of section 218 of the Principal Act as amended by this Act.

(5.) In this section, "valid 1930 Load Line Convention certificate" means a certificate issued before the commencement of this section that was a valid Load Line Convention certificate for the purposes of the Principal Act or a certificate issued after the commencement of this section that, if it had been issued before the commencement of this section, would have been a valid Load Line Convention certificate for the purposes of the Principal Act.

Making of regulations.

15. At any time after this Act receives the Royal Assent and before the date fixed under sub-section (2.) of section 2 of this Act, regulations may be made under the Principal Act as amended by this Act as if the provisions of this Act referred to in that sub-section had come into operation on the date on which this Act receives the Royal Assent, but regulations so made shall not come into operation before the date fixed under that sub-section.

THE SCHEDULE

Section 13.

SCHEDULE INSERTED IN THE PRINCIPAL ACT BY THIS ACT

"SCHEDULE VII. Section 187A.

ARTICLES OF, AND ANNEXES TO, THE INTERNATIONAL CONVENTION ON LOAD LINES, 1966

ARTICLE 1

General Obligation under the Convention

(1) The Contracting Governments undertake to give effect to the provisions of the present Convention and the Annexes hereto, which shall constitute an integral part of the present Convention. Every reference to the present Co the Annexes.

(2) The Contracting Governments shall undertake all measures which may be necessary to give effect to the present Convention.

ARTICLE 2

Definitions

For the purpose of the present Convention, unless expressly provided otherwise:

(1) "Regulations" means the Regulations annexed to the present Convention.

(2) " Administration" means the Government of the State whose flag the ship is flying.

(3) "Approved" means approved by the Administration.

(4) "International voyage" means a sea voyage from a country to which the present Convention applies to a port outside such coun for the international relations of which a Contracting Government is responsible or for which the United Nations are the administering authority is regarded as a separate country.

(5) A "fishing vessel" is a ship used for catching fish, whales, seals, walrus or other living resources of the sea.

(6) "New ship" means a ship the keel of which is laid, or which is at a similar stage of construction, on or after the date of coming into force of the present Convention for each Contracting Government.

(7) "Existing ship" means a ship which is not a new ship.

(8) "Length" means 96 per cent of the total length on a waterline at 85 per cent of the least moulded depth measured from the top of the keel, or the length from the fore side of the stem to the axis of the rudder stock on that waterline, if that be greater. In ships designed with a rake of keel the waterline on which this length is measured shall be parallel to the designed waterline.

ARTICLE 3

General Provisions

(1) No ship to which the present Convention applies shall proceed to sea on an international voyage after the date on which the present Convention comes into force unless it has been surveyed, marked and provided with an International Load Line Certificate (1966) or, where appropriate, an International Load Line Exemption Certificate in accordance with the provisions of the present Convention.

(2) Nothing in this Convention shall prevent an Administration from assigning a greater freeboard than the minimum freeboard determined in accordance with Annex I.

ARTICLE 4

Application

(1) The present Convention shall apply to:

(*a*) ships registered in countries the Governments of which are Contracting Governments;

(*b*) ships registered in territories to which the present Convention is extended under Article 32; and

(*c*) unregistered ships flying the flag of a State, the Government of which is a Contracting Government.

(2) The present Convention shall apply to ships engaged on international voyages.

(3) The Regulations contained in Annex I are specifically applicable to new ships.

(4) Existing ships which do not fully comply with the requirements of the Regulations contained in Annex I or any part thereof shall meet at least such lesser related requirements as the Administration applied to ships on international voyages prior to the coming into force of the present Convention; in no case shall such ships be required to increase their freeboards. In order to take advantage of any reduction in freeboard from that previously assigned, existing ships shall comply with all the requirements of the present Convention.

(5) The Regulations contained in Annex II are applicable to new and existing ships to which the present Convention applies.

ARTICLE 5

Exceptions

(1) The present Convention shall not apply to:

(*a*) ships of war;

(*b*) new ships of less than 24 metres (79 feet) in length;

(*c*) existing ships of less than 150 tons gross;

(*d*) pleasure yachts not engaged in trade;

(*e*) fishing vessels.

(2) Nothing herein shall apply to ships solely navigating:

(*a*) the Great Lakes of North America and the River St. Lawrence as far east as a rhumb line drawn from Cap des Rosiers to West Point, Anticosti Island, and, on the north side of Anticosti Island, the meridian of longitude 63°W;

(*b*) the Caspian Sea;

(*c*) the Plate, Parana and Uruguay Rivers as far east as a rhumb line drawn between Punta Norte, Argentina, and Punta del Este, Uruguay.

ARTICLE 6

Exemptions

(1) Ships when engaged on international voyages between the near neighbouring ports of two or more States may be exempted by the Administration from the provisions of the present Convention, so long as they shall remain engaged on such voyages, if the Governments of the States in which such ports are situated shall be satisfied that the sheltered nature or conditions of such voyages between such ports make it unreasonable or impracticable to apply the provisions of the present Convention to ships engaged on such voyages.

(2) The Administration may exempt any ship which embodies features of a novel kind from any of the provisions of this Convention the application of which might seriously impede research into the development of such features and their incorporation in ships engaged on international voyages. Any such ship shall, however, comply with safety requirements which, in the opinion of that Administration, are adequate for the service for which it is intended and are such as to ensure the overall safety of the ship and which are acceptable to the Governments of the States to be visited by the ship.

(3) The Administration which allows any exemption under paragraphs (1) and (2) of this Article shall communicate to the Inter-Governmental Maritime Consultative Organization (hereinafter called the Organization) particulars of the same and reasons therefor which the Organization shall circulate to the Contracting Governments for their information.

(4) A ship which is not normally engaged on international voyages but which, in exceptional circumstances, is required to undertake a single international voyage may be exempted by the Administration from any of the requirements of the present Convention, provided that it complies with safety requirements which, in the opinion of that Administration, are adequate for the voyage which is to be undertaken by the ship.

ARTICLE 7

Force Majeure

(1) A ship which is not subject to the provisions of the present Convention at the time of its departure on any voyage shall not become subject to such provisions on account of any deviation from its intended voyage due to stress of weather or any other cause of *force majeure.*

(2) In applying the provisions of the present Convention, the Contracting Governments shall give due consideration to any deviation or delay caused to any ship owing to stress of weather or any other cause of *force majeure.*

THE SCHEDULE—*continued*

ARTICLE 8

Equivalents

(1) The Administration may allow any fitting, material, appliance or apparatus to be fitted, or any other provision to be made in a ship, other than that required by the present Convention, if it is satisfied by trial thereof or otherwise that such fitting, material, appliance or apparatus, or provision, is at least as effective as that required by the Convention.

(2) The Administration which allows a fitting, material, appliance or apparatus, or provision, other than that required by the present Convention, shall communicate to the Organization for circulation to the Contracting Governments particulars thereof, together with a report on any trials made.

ARTICLE 9

Approvals for Experimental Purposes

(1) Nothing in the present Convention shall prevent an Administration from making specific approvals for experimental purposes in respect of a ship to which the Convention applies.

(2) An Administration which makes any such approval shall communicate to the Organization for circulation to the Contracting G

ARTICLE 10

Repairs, Alterations and Modifications

(1) A ship which undergoes repairs, alterations, modifications and outfitting related thereto shall continue to comply with at least the requirements previously applicable to the ship. An existing ship in such a case shall not, as a rule, comply to a lesser extent with the requirements for a new ship than it did before.

(2) Repairs, alterations and modifications of a major character and outfitting related thereto should meet the requirements for a new ship in so far as the Administration deems reasonable and practicable.

ARTICLE 11

Zones and Areas

(1) A ship to which the present Convention applies shall comply with the requirements applicable to that ship in the zones and areas described in Annex II.

(2) A port standing on the boundary line between two zones or areas shall be regarded as within the zone or area from or into which the ship arrives or departs.

ARTICLE 12

Submersion

(1) Except as provided in paragraphs (2) and (3) of this Article, the appropriate load lines on the sides of the ship corresponding to the season of the year and the zone or area in which the ship may be shall not be submerged at any time when the ship puts to sea, during the voyage or on arrival.

(2) When a ship is in fresh water of unit density the appropriate load line may be submerged by the amount of the fresh water allowance shown on the International Load Line Certificate (1966). Where the density is other than unity, an allowance shall be made proportional to the difference between 1.025 and the actual density.

(3) When a ship departs from a port situated on a river or inland waters, deeper loading shall be permitted corresponding to the weight of fuel and all other materials required for consumption between the point of departure and the sea.

ARTICLE 13

Survey, Inspection and Marking

The survey, inspection and marking of ships, as regards the enforcement of the provisions of the present Convention and the granting of exemptions therefrom, shall be carried out by officers of the Administration. The Administration may, however, entrust the survey, inspection and marking either to surveyors nominated for the purpose or to organizations recognized by it. In every case the Administration concerned fully guarantees the completeness and efficiency of the survey, inspection and marking.

THE SCHEDULE—*continued*

ARTICLE 14

Initial and Periodical Surveys and Inspections

(1) A ship shall be subjected to the surveys and inspections specified below:

(*a*) A survey before the ship is put in service, which shall include a complete inspection of its structure and equipment in so far as the ship is covered by the present Convention. This survey shall be such as to ensure that the arrangements, material, and scantlings fully comply with the requirements of the present Convention.

(*b*) A periodical survey at intervals specified by the Administration, but not exceeding five years, which shall be such as to ensure that the structure, equipment, arrangements, material and scantlings fully comply with the requirements of the present Convention.

(*c*) A periodical inspection within three months either way of each annual anniversary date of the certificate, to ensure that alterations have not been made to the hull or superstructures which would affect the calculations determining the position of the load line and so as to ensure the maintenance in an effective condition of fittings and appliances for:

(i) protection of openings;
(ii) guard rails;
(iii) freeing ports; and
(iv) means of access to crew's quarters.

(2) The periodical inspections referred to in paragraph (1) (c) of this Article shall be endorsed on the International Load Line Certificate (1966) or on the International Load Line Exemption Certificate issued to a ship exempted under paragraph (2) of Article 6 of the present Convention.

ARTICLE 15

Maintenance of Conditions after Survey

After any survey of the ship under Article 14 has been completed, no change shall be made in the structure, equipment, arrangements, material or scantlings covered by the survey, without the sanction of the Administration.

ARTICLE 16

Issue of Certificates

(1) An International Load Line Certificate (1966) shall be issued to every ship which has been surveyed and marked in accordance with the present Convention.

(2) An International Load Line Exemption Certificate shall be issued to any ship to which an exemption has been granted under and in accordance with paragraph (2) or (4) of Article 6.

(3) Such certificates shall be issued by the Administration or by any person or organization duly authorized by it. In every case, the Administration assumes full responsibility for the certificate.

(4) Notwithstanding any other provision of the present Convention, any international load line certificate which is current when the present Convention comes into force in respect of the Government of the State whose flag the ship is flying shall remain valid for two years or until it expires, whichever is earlier. After that time an International Load Line Certificate (1966) shall be required.

ARTICLE 17

Issue of Certificate by another Government

(1) A Contracting Government may, at the request of another Contracting Government, cause a ship to be surveyed and, if satisfied that the provisions of the present Convention are complied with, shall issue or authorize the issue of an International Load Line Certificate (1966) to the ship in accordance with the present Convention.

(2) A copy of the certificate, a copy of the survey report used for computing the freeboard, and a copy of the computations shall be transmitted as early as possible to the requesting Government.

(3) A certificate so issued must contain a statement to the effect that it has been issued at the request of the Government of the State whose flag the ship is or will be flying and it shall have the same force and receive the same recognition as a certificate issued under Article 16.

(4) No International Load Line Certificate (1966) shall be issued to a ship which is flying he flag of a State the Government of which is not a Contracting Government.

THE SCHEDULE—*continued*

ARTICLE 18

Form of Certificates

(1) The certificates shall be drawn up in the official language or languages of the issuing country. If the language used is neither English nor French, the text shall include a translation into one of these languages.

(2) The form of the certificates shall be that of the models given in Annex III. The arrangement of the printed part of each model certi issued, and in any certified copies thereof.

ARTICLE 19

Duration of Certificates

(1) An International Load Line Certificate (1966) shall be issued for a period specified by the Administration, which shall not exceed five years from the date of issue.

(2) If, after the periodical survey referred to in paragraph (1) (6) of Article 14, a new certificate cannot be issued to the ship before the expiry of the certificate originally issued, the person or organization carrying out the survey may extend the validity of the original certificate for a period which shall not exceed five months. This extension shall be endorsed on the certificate, and shall be granted only where there have been no alterations in the structure, equipment, arrangements, material or scantlings which affect the ship's freeboard.

(3) An International Load Line Certificate (1966) shall be cancelled by the Administration if any of the following circumstances exist:

(*a*) material alterations have taken place in the hull or superstructures of the ship such as would necessitate the assignment of an increased freeboard;

(*b*) the fittings and appliances mentioned in sub-paragraph (c) of paragraph (1) of Article 14 are not maintained in an effective condition;

(*c*) the certificate is not endorsed to show that the ship has been inspected as provided in sub-paragraph (*c*) of paragraph (1) of Article 14;

(*d*) the structural strength of the ship is lowered to such an extent that the ship is unsafe.

(4) (*a*) The duration of an International Load Line Exemption Certificate issued by an Administration to a ship exempted under paragraph (2) of Article 6 shall not exceed five years from the date of issue. Such certificate shall be subject to a renewal, endorsement and cancellation procedure similar to that provided for an International Load Line Certificate (1966) under this Article.

(*b*) The duration of an International Load Line Exemption Certificate issued to a ship exempted under paragraph (4) of Article 6 shall be limited to the single voyage for which it is issued.

(5) A certificate issued to a ship by an Administration shall cease to be valid upon the transfer of such a ship to the flag of another State.

ARTICLE 20

Acceptance of Certificates

The certificates issued under the authority of a Contracting Government in accordance with the present Convention shall be accepted by the other Contracting Governments and regarded for all purposes covered by the present Convention as having the same force as certificates issued by them.

ARTICLE 21

Control

(1) Ships holding a certificate issued under Article 16 or Article 17 are subject, when in the ports of other Contracting Governments, to control by officers duly authorized by such Governments. Contracting Governments shall ensure that such control is exercised as far as is reasonable and practicable with a view to verifying that there is on board a valid certificate under the present Convention. If there is a valid International Load Line Certificate (1966) on board the ship, such control shall be limited to the purpose of determining that:

(*a*) the ship is not loaded beyond the limits allowed by the certificate;

(*b*) the position of the load line of the ship corresponds with the certificate; and

(*c*) the ship has not been so materially altered in respect to the matters set out in sub-paragraphs (*a*) and (*b*) of par
to proceed to sea without danger to human life.

If there is a valid International Load Line Exemption Certificate on board, such control shall be limited to the purpose of determining that any conditions stipulated in that certificate are complied with.

(2) If such control is exercised under sub-paragraph (*c*) of paragraph (1) of this Article, it shall only be exercised in so far as may be necessary to ensure that the ship shall not sail until it can proceed to sea without danger to the passengers or the crew.

(3) In the event of the control provided for in this Article giving rise to intervention of any kind, the officer carrying out the control shall immediately inform in writing the Consul or the diplomatic representative of the State whose flag the ship is flying of this decision and of all the circumstances in which intervention was deemed to be necessary.

ARTICLE 22

Privileges

The privileges of the present Convention may not be claimed in favour of any ship unless it holds a valid certificate under the Convention.

ARTICLE 23

Casualties

(1) Each Administration undertakes to conduct an investigation of any casualty occurring to ships for which it is responsible and which are subject to the provisions of the present Convention when it judges that such an investigation may assist in determining what changes in the Convention might be desirable.

(2) Each Contracting Government undertakes to supply the Organization with the pertinent information concerning the findings of such investigations. No reports or recommendations of the Organization based upon such information shall disclose the identity or nationality of the ships concerned or in any manner fix or imply responsibility upon any ship or person.

ARTICLE 24

Prior Treaties and Conventions

(1) All other treaties, conventions and arrangements relating to load line matters at present in force between Governments parties to the present Convention shall continue to have full and complete effect during the terms thereof as regards:

(*a*) ships to which the present Convention does not apply; and

(*b*) ships to which the present Convention applies, in respect of matters for which it has not expressly provided.

(2) To the extent, however, that such treaties, conventions or arrangements conflict with the provisions of the present Convention, the provisions of the present Convention shall prevail.

ARTICLE 25

Special Rules drawn up by Agreement

When in accordance with the present Convention special rules are drawn up by agreement among all or some of the Contracting Governments, such rules shall be communicated to the Organization for circulation to all Contracting Governments.

ARTICLE 26

Communication of Information

(1) The Contracting Governments undertake to communicate to and deposit with the Organization:

(*a*) a sufficient number of specimens of their certificates issued under the provisions of the present Convention for circulation to the Contracting Governments;

(*b*) the text of the laws, decrees, orders, regulations and other instruments which shall have been promulgated on the various matters within the scope of the present Convention; and

(*c*) a list of non-governmental agencies which are authorized to act in their behalf in the administration of load line matters for circulation to the Contracting Governments.

THE SCHEDULE—*continued*

(2) Each Contracting Government agrees to make its strength standards available to any other Contracting Government, upon request.

ARTICLE 27

Signature, Acceptance and Accession

(1) The present Convention shall remain open for signature for three months from 5 April 1966 and shall thereafter remain open for accession. Governments of States Members of the United Nations, or of any of the Specialized Agencies, or of the International Atomic Energy Agency, or parties to the Statute of the International Court of Justice may become parties to the Convention by:

(*a*) signature without reservation as to acceptance;

(*b*) signature subject to acceptance followed by acceptance; or

(*c*) accession.

(2) Acceptance or accession shall be effected by the deposit of an instrument of acceptance or accession with the Organization which shall inform all Governments that have signed the Convention or acceded to it of each new acceptance or accession and of the date of its deposit.

ARTICLE 28

Coming into Force

(1) The present Convention shall come into force twelve months after the date on which not less than fifteen Governments of the States, including seven each with not less than one million gross tons of shipping, have signed without reservation as to acceptance or deposited instruments of acceptance or accession in accordance with Article 27. The Organization shall inform all Governments which have signed or acceded to the present Convention of the date on which it comes into force.

(2) For Governments which have deposited an instrument of acceptance of or accession to the present Convention during the twelve months mentioned in paragraph **(1)** of this Article, the acceptance or accession shall take effect on the coming into force of the present Convention or three months after the date of deposit of the instrument of acceptance or accession, whichever is the later date.

(3) For Governments which have deposited an instrument of acceptance of or accession to the present Convention after the date on which it comes into force, the Convention shall come into force three months after the date of the deposit of such instrument.

(4) After the date on which all the measures required to bring an amendment to the present Convention into force have been completed, or all necessary acceptances are deemed to have been given under sub-paragraph (*b*) of paragraph (2) of Article 29 in case of amendment by unanimous acceptance, any instrument of acceptance or accession deposited shall be deemed to apply to the Convention as amended.

ARTICLE 29

Amendments

(1) The present Convention may be amended upon the proposal of a Contracting Government by any of the procedures specified in this Article.

(2) Amendment by unanimous acceptance

(*a*) Upon the request of a Contracting Government, any amendment proposed by it to the present Convention shall be communicated by the Organization to all Contracting Governments for consideration with a view to unanimous acceptance.

(*b*) Any such amendment shall enter into force twelve months after the date of its acceptance by all Contracting Governments unless an earlier date is agreed upon. A Contracting Government which does not communicate its acceptance or rejection of the amendment to the Organization within three years of its first communication by the latter shall be deemed to have accepted the amendment.

(*c*) Any proposed amendment shall be deemed to be rejected if it is not accepted under sub-paragraph (*b*) of the present paragraph within three years after it has been first communicated to all Contracting Governments by the Organization.

(3) Amendment after consideration in the Organization

(*a*) Upon the request of a Contracting Government, any amendment proposed by it to the present Convention will be considered in the Organization. If adopted by a majority of two-thirds of those present and voting in the Maritime Safety Committee of the

Organization, such amendment shall be communicated to all Members of the Organization and all Contracting Governments at least six months prior to its consideration by the Assembly of the Organization.

(*b*) If adopted by a two-thirds majority of those present and voting in the Assembly, the amendment shall be communicated by the Organization to all Contracting Governments for their acceptance.

(*c*) Such amendment shall come into force twelve months after the date on which it is accepted by two-thirds of the Contracting Governments. The amendment shall come into force with respect to all Contracting Governments except those which, before it comes into force, make a declaration that they do not accept the amendment.

(*d*) The Assembly, by a two-thirds majority of those present and voting, including two-thirds of the Governments represented on the Maritime Safety Committee and present and voting in the Assembly, may propose a determination at the time of its adoption that an amendment is of such an important nature that any Contracting Government which makes a declaration under sub-paragraph (c), and which does not accept the amendment within a period of twelve months after it comes into force, shall cease to be a party to the present Convention upon the expiry of that period. This determination shall be subject to the prior acceptance of two-thirds of the Contracting Governments to the present Convention.

(*e*) Nothing in this paragraph shall prevent the Contracting Government which first proposed action under this paragraph on an amendment to the present Convention from taking at any time such alternative action as it deems desirable in accordance with paragraph (2) or (4) of this Article.

(4) Amendment by a conference

(*a*) Upon the request of a Contracting Government, concurred in by at least one-third of the Contracting Governments, a conference of Governments will be convened by the Organization to consider amendments to the present Convention.

(*b*) Every amendment adopted by such a conference by a two-thirds majority of those present and voting of the Contracting Governments shall be communicated by the Organization to all Contracting Governments for their acceptance.

(*c*) Such amendment shall come into force twelve months after the date on which it is accepted by two-thirds of the Contracting Governments. The amendment shall come into force with respect to all Contracting Governments except those which, before it comes into force, make a declaration that they do not accept the amendment.

(*d*) By a two-thirds majority of those present and voting, a conference convened under sub-paragraph (*a*) may determine at the time of its adoption that an amendment is of such an important nature that any Contracting Government which makes a declaration under sub-paragraph (*c*), and which does not accept the amendment within a period of twelve months after it comes into force, shall cease to be a party to the present Convention upon the expiry of that period.

(5) Any amendments to the present Convention made under this Article which relate to the structure of a ship shall apply only to ships the keels of which are laid, or which are at a similar stage of construction, on or after the date on which the amendment comes into force.

(6) The Organization shall inform all Contracting Governments of any amendments which come into force under this Article, together with the date on which each such amendment will come into force.

(7) Any acceptance or declaration under this Article shall be made by a notification in writing to the Organization which shall notify all Contracting Governments of the receipt of the acceptance or declaration.

ARTICLE 30

Denunciation

(1) The present Convention may be denounced by any Contracting Government at any time after the expiry of five years from the date on which the Convention comes into force for that Government.

(2) Denunciation shall be effected by a notification in writing addressed to the Organization which shall inform all the other Contracting Governments of any such notification received and of the date of its receipt.

(3) A denunciation shall take effect one year, or such longer period as may be specified in the notification, after its receipt by the Organization.

THE SCHEDULE—*continued*

ARTICLE 31

Suspension

(1) In case of hostilities or other extraordinary circumstances which affect the vital interests of a State the Government of which is a Contracting Government, that Government may suspend the operation of the whole or any part of the present Convention. The suspending Government shall immediately give notice of any such suspension to the Organization.

(2) Such suspension shall not deprive other Contracting Governments of any right of control under the present Convention over the ships of the suspending Government when such ships are within their ports.

(3) The suspending Government may at any time terminate such suspension and shall immediately give notice of such termination to the Organization.

(4) The Organization shall notify all Contracting Governments of any suspension or termination of suspension under this Article.

ARTICLE 32

Territories

(1) (*a*) The United Nations, in cases where they are the administering authority for a territory, or any Contracting Government responsible for the international relations of a territory, shall as soon as possible consult with such territory in an endeavour to extend the present Convention to that territory and may at any time by notification in writing to the Organization declare that the present Convention shall extend to such territory.

(6) The present Convention shall, from the date of the receipt of the notification or from such other date as may be specified in the notification, extend to the territory named therein.

(2) (*a*) The United Nations, or any Contracting Government which has made a declaration under sub-paragraph *(a)* of paragraph (1) the expiry of a period of five years from the date on which the Convention has been so extended to any territory, may by notification in writing to the Organization declare that the present Convention shall cease to extend to any such territory named in the notification.

(*b*) The present Convention shall cease to extend to any territory mentioned in such notification one year, or such longer period as may be specified therein, after the date of receipt of the notification by the Organization.

(3) The Organization shall inform all the Contracting Governments of the extension of the present Convention to any territories under paragraph (1) of this Article, and of the termination of any such extension under the provisions of paragraph (2), stating in each case the date from which the present Convention has been or will cease to be so extended.

ARTICLE 33

Registration

(1) The present Convention shall be deposited with the Organization and the Secretary-General of the Organization shall transmit certified true copies thereof to all Signatory Governments and to all Governments which accede to the present Convention.

(2) As soon as the present Convention comes into force it shall be registered by the Organization in accordance with Article 102 of the Charter of the United Nations.

ARTICLE 34

Languages

The present Convention is established in a single copy in the English and French languages, both texts being equally authentic. Official translations in the Russian and Spanish languages shall be prepared and deposited with the signed original.

THE SCHEDULE—*continued*

ANNEX I

REGULATIONS FOR DETERMINING LOAD LINES

CHAPTER I.—GENERAL

The Regulations assume that the nature and stowage of the cargo, ballast, etc., are such as to secure sufficient stability of the ship and the avoidance of excessive structural stress.

The Regulations also assume that where there are international requirements relating to stability or subdivision, these requirements have been complied with.

REGULATION 1

Strength of Hull

The Administration shall satisfy itself that the general structural strength of the hull is sufficient for the draught corresponding to the freeboard assigned. Ships built and maintained in conformity with the requirements of a classification society recognized by the Administration may be considered to possess adequate strength.

REGULATION 2

Application

(1) Ships with mechanical means of propulsion or lighters, barges or other ships without independent means of propulsion, shall be assigned freeboards in accordance with the provisions of Regulations 1–

(2) Ships carrying timber deck cargoes may be assigned, in addition to the freeboards prescribed in paragraph (1) of this Regulation, timber freeboards in accordance with the provisions of Regulations 41–45 of this Annex.

(3) Ships designed to carry sail, whether as the sole means of propulsion or as a supplementary means, and tugs, Regulations 1–40 inclusive of this Annex. Such additional freeboard shall be required as determined by the Administration.

(4) Ships of wood or of composite construction, or of other materials the use of which the Administration has approved, or ships whose constructional features are such as to render the application of the provisions of this Annex unreasonable or impracticable, shall be assigned freeboards as determined by the Administration.

(5) Regulations 10 to 26 inclusive of this Annex shall apply to every ship to which a minimum freeboard is assigned. Relaxations from these requirements may be granted to a ship to which a greater than minimum freeboard is assigned on condition that the Administration is satisfied with the safety conditions provided.

REGULATION 3

Definitions of Terms used in the Annexes

(1) *Length.* The length (L) shall be taken as 96 per cent of the total length on a waterline at 85 per cent of the least moulded depth measured from the top of the keel, or as the length from the fore side of the stem to the axis of the rudder stock on that waterline, if that be greater. In ships designed with a rake of keel the waterline on which this length is measured shall be parallel to the designed waterline.

(2) *Perpendiculars.* The forward and after perpendiculars shall be taken at the forward and after ends of the length (L). The forward perpendicular shall coincide with the fore side of the stem on the waterline on which the length is measured.

(3) *Amidships.* Amidships is at the middle of the length (L).

(4) *Breadth.* Unless expressly provided otherwise, the breadth (B) is the maximum breadth of the ship, measured amidships to the moulded line of the frame in a ship with a metal shell and to the outer surface of the hull in a ship with a shell of any other material.

THE SCHEDULE—*continued*

(5) *Moulded Depth*

(*a*) The moulded depth is the vertical distance measured from the top of the keel to the top of the freeboard deck beam at side. In wood and composite ships the distance is measured from the lower edge of the keel rabbet. Where the form at the lower part of the midship section is of **a** hollow character, or where thick garboards are fitted, the distance is measured from the point where the line of the flat of the bottom continued inwards cuts the side of the keel.

(*b*) In ships having rounded gunwales, the moulded depth shall be measured to the point of intersection of the moulded lines of the deck and side shell plating, the lines extending as though the gunwale were of angular design.

(*c*) Where the freeboard deck is stepped and the raised part of the deck extends over the point at which the moulded depth is to be determined, the moulded depth shall be measured to a line of reference extending from the lower part of the deck along a line parallel with the raised part.

(6) *Depth for Freeboard* (*D*)

(*a*) The depth for freeboard (D) is the moulded depth amidships, plus the thickness of the freeboard deck stringer plate, where fitted, plus ???T (L-S)/L if the exposed freeboard deck is sheathed, where

T is the mean thickness of the exposed sheathing clear of deck openings, and

S is the total length of superstructures as defined in sub-paragraph (10) (*d*) of this Regulation.

(*b*) The depth for freeboard (D) in a ship having **a** rounded gunwale with a radius greater than 4 per cent of the breadth (B) or having topsides of unusual form is the depth for freeboard of **a** ship having a midship section with vertical topsides and with the same round of beam and area of topside section equal to that provided by the actual midship section.

(7) *Block Coefficient.* The block coefficient (C_b) is given by

$$C_b = ???; \text{ where}$$

??? is the volume of the moulded displacement of the ship, excluding bossing, in a ship with a metal shell, and is the volume of displacement to the outer surface of the hull in a ship with a shell of any other material, both taken at a moulded draught of d; and where

d is 85 per cent of the least moulded depth.

(8) *Freeboard.* The freeboard assigned is the distance measured vertically downwards amidships from the upper edge of the deck line to the upper edge of the related load line.

(9) *Freeboard Deck.* The freeboard deck is normally the uppermost complete deck exposed to weather and sea, which has permanent means of closing all openings in the weather part thereof, and below which all openings in the sides of the ship are fitted with permanent means of watertight closing. In a ship having a discontinuous freeboard deck, the lowest line of the exposed deck and the continuation of that line parallel to the upper part of the deck is taken as the freeboard deck. At the option of the owner and subject to the approval of the Administration, a lower deck may be designated as the freeboard deck, provided it is a complete and permanent deck continuous in a fore and aft direction at least between the machinery space and peak bulkheads and continuous athwartships. When this lower deck is stepped the lowest line of the deck and the continuation of that line parallel to the upper part of the deck is taken as the freeboard deck. When a lower deck is designated as the freeboard deck, that part of the hull which extends above the freeboard deck is treated as a superstructure so far as concerns the application of the conditions of assignment and the calculation of freeboard. It is from this deck that the freeboard is calculated.

(10) *Superstructure*

(*a*) A superstructure is a decked structure on the freeboard deck, extending from side to side of the ship or with the side plating not being inboard of the shell plating more than 4 per cent of the breadth (B). A raised quarter deck is regarded as a superstructure.

THE **SCHEDULE**—*continued*

(*b*) An enclosed superstructure is a superstructure with:

(i) enclosing bulkheads of efficient construction;

(ii) access openings, if any, in these bulkheads fitted with doors complying with the requirements of Regulation 12;

(iii) all other openings in sides or ends of the superstructure fitted with efficient weathertight means of closing.

A bridge or poop shall not be regarded as enclosed unless access is provided for the crew to reach machinery and other working spaces inside these superstructures by alternative means which are available at all times when bulkhead openings are closed.

(*c*) The height of a superstructure is the least vertical height measured at side from the top of the superstructure deck beams to the top of the freeboard deck beams.

(*d*) The length of a superstructure (S) is the mean length of the part of the superstructure which lies within the length (L).

(11) *Flush Deck Ship.* A flush deck ship is one which has no superstructure on the freeboard deck.

(12) *Weathertight.* Weathertight means that in any sea conditions water will not penetrate into the ship.

REGULATION 4

Deck Line

The deck line is a horizontal line 300 millimetres (12 inches) in length and 25 millimetres (1 inch) in breadth. It shall be marked amidships on each side of the ship, and its upper edge shall normally pass through the point where the continuation outwards of the upper surface of the freeboard deck intersects the outer surface of the shell (as illustrated in Figure 1), provided that the deck line may be placed with reference to another fixed point on the ship on condition that the freeboard is correspondingly corrected. The location of the reference point and the identification of the freeboard deck shall in all cases be indicated on the International Load Line Certificate (1966).

REGULATION 5

Load Line Mark

The Load Line Mark shall consist of a ring 300 millimetres (12 inches) in outside diameter and 25 millimetres (1 inch) wide which is intersected by a horizontal line 450 millimetres (18 inches) in length and 25 millimetres (1 inch) in breadth, the upper edge of which passes through the centre of the ring. The centre of the ring shall be placed amidships and at a distance equal to the assigned summer freeboard measured vertically below the upper edge of the deck line (as illustrated in Figure 2).

REGULATION 6

Lines to be used with the Load Line Mark

(1) The lines which indicate the load line assigned in accordance with these Regulations shall be horizontal lines 230 millimetres (9 inches) in length and 25 millimetres (1 inch) in breadth which extend forward of, unless expressly provided otherwise, and at right angles to, a vertical line 25 millimetres (1 inch) in breadth marked at a distance 540 millimetres (21 inches) forward of the centre of the ring (as illustrated in Figure 2).

(2) The following load lines shall be used:

(*a*) The Summer Load Line indicated by the upper edge of the line which passes through the centre of the ring and also by a line marked S.

(*b*) The Winter Load Line indicated by the upper edge of a line marked W.

(*c*) The Winter North Atlantic Load Line indicated by the upper edge of a line marked WNA.

Fig. 1. Deck Line

Fig. 2. Load Line Mark and lines to be used with this mark

Fig. 3. Timber Load Line Mark and lines to be used with this mark

Fig. 4. Load Line Mark on sailing ships and lines to be used with this mark

THE SCHEDULE—*continued*

(*d*) The Tropical Load Line indicated by the upper edge of a line marked T.

(*e*) The Fresh Water Load Line in summer indicated by the upper edge of a line marked F. The Fresh Water Load Line in summer is marked abaft the vertical line. The difference between the Fresh Water Load Line in summer and the Summer Load Line is the allowance to be made for loading in fresh water at the other load lines.

(*f*) The Tropical Fresh Water Load Line indicated by the upper edge of a line marked TF, and marked abaft the vertical line.

(3) If timber freeboards are assigned in accordance with these Regulations, the timber load lines shall be marked in addition to ordinary load lines. These lines shall be horizontal lines 230 millimetres (9 inches) in length and 25 millimetres (1 inch) in breadth which extend abaft unless expressly provided otherwise, and are at right angles to, a vertical line 25 millimetres (1 inch) in breadth marked at a distance 540 millimetres (21 inches) abaft the centre of the ring (as illustrated in Figure 3).

(4) The following timber load lines shall be used:

(*a*) The Summer Timber Load Line indicated by the upper edge of a line marked LS.

(*b*) The Winter Timber Load Line indicated by the upper edge of a line marked LW.

(*c*) The Winter North Atlantic Timber Load Line indicated by the upper edge of a line marked LWNA.

(*d*) The Tropical Timber Load Line indicated by the upper edge of a line marked LT.

(*e*) The Fresh Water Timber Load Line in summer indicated by the upper edge of a line marked LF and marked forward of the vertical line.

The difference between the Fresh Water Timber Load Line in summer and the Summer Timber Load Line is the allowance to be made for loading in fresh water at the other timber load lines.

(*f*) The Fresh Water Timber Load Line in the Tropical Zone indicated by the upper edge of a line marked LTF and marked forward of the vertical line.

(5) Where the characteristics of a ship or the nature of the ship's service or navigational limits make any of the seasonal lines inapplicable, these lines may be omitted.

(6) Where a ship is assigned a greater than minimum freeboard so that the load line is marked at a position corresponding to, or lower than, the lowest seasonal load line assigned at minimum freeboard in accordance with the present Convention, only the Fresh Water Load Line need be marked.

(7) On sailing ships only the Fresh Water Load Line and the Winter North Atlantic Load Line need be marked (as illustrated in Figure 4).

(8) Where a Winter North Atlantic Load Line is identical with the Winter Load Line corresponding to the same vertical line, this load line shall be marked W.

(9) Additional load lines required by other international conventions in force may be marked at right angles to and abaft the vertical line specified in paragraph (1) of this Regulation.

REGULATION 7

Mark of Assigning Authority

The mark of the Authority by whom the load lines are assigned may be indicated alongside the load line ring above the horizontal line which passes through the centre of the ring, or above and below it. This mark shall consist of not more than four initials to identify the Authority's name, each measuring approximately 115 millimetres (4-??? inches) in height and 75 millimetres (3 inches) in width.

REGULATION 8

Details of Marking

The ring, lines and letters shall be painted in white or yellow on a dark ground or in black on a light ground. They shall also be permanently marked on the sides of the ships to the satisfaction of the Administration. The marks shall be plainly visible and, if necessary, special arrangements shall be made for this purpose.

REGULATION 9

Verification of Marks

The International Load Line Certificate (1966) shall not be delivered to the ship until the officer or surveyor acting under the provisions of Article 13 of the present Convention has certified that the marks are correctly and permanently indicated on the ship's sides.

THE SCHEDULE—*continued*

CHAPTER II.—CONDITIONS OF ASSIGNMENT OF FREEBOARD

REGULATION 10

Information to be supplied to the Master

(1) The master of every new ship shall be supplied with sufficient information, in an approved form, to enable him to arrange for the loading and ballasting of his ship in such a way as to avoid the creation of any unacceptable stresses in the ship's structure, provided that this requirement need not apply to any particular length, design or class of ship where the Administration considers it to be unnecessary.

(2) The master of every new ship which is not already provided with stability information under an international convention for the safety of life at sea in force shall be supplied with sufficient information in an approved form to give him guidance as to the stability of the ship under varying conditions of service, and a copy shall be furnished to the Administration.

REGULATION 11

Superstructure End Bulkheads

Bulkheads at exposed ends of enclosed superstructures shall be of efficient construction and shall be to the satisfaction of the Administration.

REGULATION 12

Doors

(1) All access openings in bulkheads at ends of enclosed superstructures shall be fitted with doors of steel or other equivalent material, permanently and strongly attached to the bulkhead, and framed, stiffened and fitted so that the whole structure is of equivalent strength to the unpierced bulkhead and weathertight when closed. The means for securing these doors weathertight shall consist of gaskets and clamping devices or other equivalent means and shall be permanently attached to the bulkhead or to the doors themselves, and the doors shall be so arranged that they can be operated from both sides of the bulkhead.

(2) Except as otherwise provided in these Regulations, the height of the sills of access openings in bulkheads at ends of enclosed superstructures shall be at least 380 millimetres (15 inches) above the deck.

REGULATION 13

Position of Hatchways, Doorways and Ventilators

For the purpose of the Regulations, two positions of hatchways, doorways and ventilators are defined as follows:

Position 1—Upon exposed freeboard and raised quarter decks, and upon exposed superstructure decks situated forward of a point located a quarter of the ship's length from the forward perpendicular.

Position 2—Upon exposed superstructure decks situated abaft a quarter of the ship's length from the forward perpendicular.

REGULATION 14

Cargo and other Hatchways

(1) The construction and the means for securing the weathertightness of cargo and other hatchways in positions 1 and 2 shall be at least equivalent to the requirements of Regulations 15 and 16 of this Annex.

(2) Coamings and hatchway covers to exposed hatchways on decks above the superstructure deck shall comply with the requirements of the Administration.

THE SCHEDULE—*continued*

REGULATION 15

Hatchways closed by Portable Covers and secured Weathertight by Tarpaulins and Battening Devices

Hatchway Coamings

(1) The coamings of hatchways closed by portable covers secured weathertight by tarpaulins and battening devices shall be of substantial construction, and their height above the deck shall be at least as follows:

600 millimetres (23½ inches) if in position 1.
450 millimetres (17½ inches) if in position 2.

Hatchway Covers

(2) The width of each bearing surface for hatchway covers shall be at least 65 millimetres (2½ inches).

(3) Where covers are made of wood, the finished thickness shall be at least 60 millimetres (2 inches) in association with a span of not more than 1.5 metres (4.9 feet).

(4) Where covers are made of mild steel the strength shall be calculated with assumed loads not less than 1.75 metric tons per square metre (358 pounds per square foot) on hatchways in position 1, and not less than 1.30 metric tons per square metre (266 pounds per square foot) on hatchways in position 2, and the product of the maximum stress thus calculated and the factor 4.25 shall not exceed the minimum ultimate strength of the material. They shall be so designed as to limit the deflection to not more than 0.0028 times the span under these loads.

(5) The assumed loads on hatchways in position 1 may be reduced to 1 metric ton per square metre (205 pounds per square foot) for ships 24 metres (79 feet) in length and shall be not less than 1.75 metric tons per square metre (358 pounds per square foot) for ships 100 metres (328 feet) in length. The corresponding loads on hatchways in position 2 may be reduced to 0.75 metric tons per square metre (154 pounds per square foot) and 1.30 metric tons per square metre (266 pounds per square foot) respectively. In all cases values at intermediate lengths shall be obtained by interpolation.

Portable Beams

(6) Where portable beams for supporting hatchway covers are made of mild steel the strength shall be calculated with assumed loads not less than 1.75 metric tons per square metre (358 pounds per square foot) on hatchways in position 1 and not less than 1.30 metric tons per square metre (266 pounds per square foot) on hatchways in position 2 and the product of the maximum stress thus calculated and the factor 5 shall not exceed the minimum ultimate strength of the material. They shall be so designed as to limit the deflection to not more than 0.0022 times the span under these loads. For ships of not more than 100 metres (328 feet) in length the requirements of paragraph (5) of this Regulation shall be applicable.

Pontoon Covers

(7) Where pontoon covers used in place of portable beams and covers are made of mild steel the strength shall be calculated with the assumed loads given in paragraph (4) of this Regulation, and the product of the maximum stress thus calculated and the factor 5 shall not exceed the minimum ultimate strength of the material. They shall be so designed as to limit the deflection to not more than 0.0022 times the span. Mild steel plating forming the tops of covers shall be not less in thickness than one per cent of the spacing of stiffeners or 6 millimetres (0.24 inches) if that be greater. For ships of not more than 100 metres (328 feet) in length the requirements of paragraph (5) of this Regulation are applicable.

(8) The strength and stiffness of covers made of materials other than mild steel shall be equivalent to those of mild steel to the satisfaction of the Administration.

Carriers or Sockets

(9) Carriers or sockets for portable beams shall be of substantial construction, and shall provide means for the efficient fitting and securing of the beams. Where rolling types of beams are used, the arrangements shall ensure that the beams remain properly in position when the hatchway is closed.

Cleats

(10) Cleats shall be set to fit the taper of the wedges. They shall be at least 65 millimetres (2½ inches) wide and spaced not more than 600 millimetres (23½ inches) centre to centre; the cleats along each side or end shall be not more than 150 millimetres (6 inches) from the hatch corners.

THE SCHEDULE—*continued*

Battens and Wedges

(11) Battens and wedges shall be efficient and in good condition. Wedges shall be of tough wood or other equivalent material. They shall have a taper of not more than 1 in 6 and shall be not less than 13 millimetres (½ inch) thick at the toes.

Tarpaulins

(12) At least two layers of tarpaulin in good condition shall be provided for each hatchway in position 1 or 2. The tarpaulins shall be waterproof and of ample strength. They shall be of a material of at least an approved standard weight and quality.

Security of Hatchway Covers

(13) For all hatchways in position 1 or 2 steel bars or other equivalent means shall be provided in order efficiently and independently to secure each section of hatchway covers after the tarpaulins are battened down. Hatchway covers of more than 1.5 metres (4.9 feet) in length shall be secured by at least two such securing appliances.

REGULATION 16

Hatchways closed by Weathertight Covers of Steel or Other Equivalent Material fitted with Gaskets and Clamping Devices

Hatchway Coamings

(1) At positions 1 and 2 the height above the deck of hatchway coamings fitted with weathertight hatch covers of steel or other equivalent material fitted with gaskets and clamping devices shall be as specified in Regulation 15 (1). The height of these coamings may be reduced, or the coamings omitted entirely, on condition that the Administration is satisfied that the safety of the ship is not thereby impaired in any sea conditions. Where coamings are provided they shall be of substantial construction.

Weathertight Covers

(2) Where weathertight covers are of mild steel the strength shall be calculated with assumed loads not less than 1.75 metric tons per square metre (358 pounds per square foot) on hatchways in position 1, and not less than 1.30 metric tons per square metre (266 pounds per square foot) on hatchways in position 2, and the product of the maximum stress thus calculated and the factor of 4.25 shall not exceed the minimum ultimate strength of the material. They shall be so designed as to limit the deflection to not more than 0.0028 times the span under these loads. Mild steel plating forming the tops of covers shall be not less in thickness than one per cent of the spacing of stiffeners or 6 millimetres (0.24 inches) if that be greater. The provisions of Regulation 15 (5) are applicable for ships of not more than 100 metres (328 feet) in length.

(3) The strength and stiffness of covers made of materials other than mild steel shall be equivalent to those of mild steel to the satisfaction of the Administration.

Means for Securing Weathertightness

(4) The means for securing and maintaining weathertightness shall be to the satisfaction of the Administration. The arrangements shall ensure that the tightness can be maintained in any sea conditions, and for this purpose tests for tightness shall be required at the initial survey, and may be required at periodical surveys and at annual inspections or at more frequent intervals.

REGULATION 17

Machinery Space Openings

(1) Machinery space openings in position 1 or 2 shall be properly framed and efficiently enclosed by steel casings of ample strength, and where the casings are not protected by other structures their strength shall be specially considered. Access openings in such casings shall be fitted with doors complying with the requirements of Regulation 12 (1), the sills of which shall be at least 600 millimetres (23½ inches) above the deck if in position 1, and at least 380 millimetres (15 inches) above the deck if in position 2. Other openings in such casings shall be fitted with equivalent covers, permanently attached in their proper positions.

(2) Coamings of any fiddley, funnel or machinery space ventilator in an exposed position on the freeboard or superstructure deck shall be as high above the deck as is reasonable and practicable. Fiddley openings shall be fitted with strong covers of steel or other equivalent material permanently attached in their proper positions and capable of being secured weathertight.

THE SCHEDULE—*continued*

REGULATION 18

Miscellaneous Openings in Freeboard and Superstructure Decks

(1) Manholes and flush scuttles in position 1 or 2 or within superstructures other than enclosed superstructures shall be closed by substantial covers capable of being made watertight. Unless secured by closely spaced bolts, the covers shall be permanently attached.

(2) Openings in freeboard decks other than hatchways, machinery space openings, manholes and flush scuttles shall be protected by an enclosed superstructure, or by a deckhouse or companionway of equivalent strength and weathertightness. Any such opening in an exposed superstructure deck or in the top of a deckhouse on the freeboard deck which gives access to a space below the freeboard deck or a space within an enclosed superstructure shall be protected by an efficient deckhouse or companionway. Doorways in such deckhouses or companionways shall be fitted with doors complying with the requirements of Regulation 12 (1).

(3) In position 1 the height above the deck of sills to the doorways in companionways shall be at least 600 millimetres (23½ inches). In position 2 it shall be at least 380 millimetres (15 inches).

REGULATION 19

Ventilators

(1) Ventilators in position 1 or 2 to spaces below freeboard decks or decks of enclosed superstructures shall have coamings of steel or other equivalent material, substantially constructed and efficiently connected to the deck. Where the coaming of any ventilator exceeds 900 millimetres (35??? inches) in height it shall be specially supported.

(2) Ventilators passing through superstructures other than enclosed superstructures shall have substantially constructed coamings of steel or other equivalent material at the freeboard deck.

(3) Ventilators in position 1 the coamings of which extend to more than 4.5 metres (14.8 feet) above the deck, and in position 2 the coamings of which extend to more than 2.3 metres (7.5 feet) above the deck, need not be fitted with closing arrangements unless specifically required by the Administration.

(4) Except as provided in paragraph (3) of this Regulation, ventilator openings shall be provided with efficient weathertight closing appliances. In ships of not more than 100 metres (328 feet) in length the closing appliances shall be permanently attached; where not so provided in other ships, they shall be conveniently stowed near the ventilators to which they are to be fitted. Ventilators in position 1 shall have coamings of a height of at least 900 millimetres (35??? inches) above the deck; in position 2 the coamings shall be of a height at least 760 millimetres (30 inches) above the deck.

(5) In exposed positions, the height of coamings may be required to be increased to the satisfaction of the Administration.

REGULATION 20

Air Pipes

Where air pipes to ballast and other tanks extend above the freeboard or superstructure decks, the exposed parts of the pipes shall be of substantial construction; the height from the deck to the point where water may have access below shall be at least 760 millimetres (30 inches) on the freeboard deck and 450 millimetres (17½ inches) on the superstructure deck. Where these heights may interfere with the working of the ship, a lower height may be approved, provided the Administration is satisfied that the closing arrangements and other circumstances justify a lower height. Satisfactory means permanently attached, shall be provided for closing the openings of the air pipes.

REGULATION 21

Cargo Ports and other similar Openings

(1) Cargo ports and other similar openings in the sides of ships below the freeboard deck shall be fitted with doors so designed as to ensure watertightness and structural integrity commensurate with the surrounding shell plating. The number of such openings shall be the minimum compatible with the design and proper working of the ship.

(2) Unless permitted by the Administration, the lower edge of such openings shall not be below a line drawn parallel to the freeboard deck at side, which has at its lowest point the upper edge of the uppermost load line.

THE SCHEDULE—*continued*

REGULATION 22

Scuppers, Inlets and Discharges

(1) Discharges led through the shell either from spaces below the freeboard deck or from within superstructures and deckhouses on the freeboard deck fitted with doors complying with the requirements of Regulation 12 shall be fitted with efficient and accessible means for preventing water from passing inboard. Normally each separate discharge shall have one automatic non-return valve with a positive means of closing it from a position above the freeboard deck. Where, however, the vertical distance from the summer load waterline to the inboard end of the discharge pipe exceeds 0.01 L, the discharge may have two automatic non-return valves without positive means of closing, provided that the inboard valve is always accessible for examination under service conditions; where that vertical distance exceeds 0.02 L a single automatic non-return valve without positive means of closing may be accepted subject to the approval of the Administration. The means for operating the positive action valve shall be readily accessible and provided with an indicator snowing whether the valve is open or closed.

(2) In manned machinery spaces main and auxiliary sea inlets and discharges in connexion with the operation of machinery may be controlled locally. The controls shall be readily accessible and shall be provided with indicators showing whether the valves are open or closed.

(3) Scuppers and discharge pipes originating at any level and penetrating the shell either more than 450 millimetres (17½ inches) below the freeboard deck or less than 600 millimetres (23½ inches) above the summer load waterline shall be provided with a non-return valve at the shell. This valve, unless required by paragraph (1), may be omitted if the piping is of substantial thickness.

(4) Scuppers leading from superstructures or deckhouses not fitted with doors complying with the requirements of Regulation 12 shall be led overboard.

(5) All valves and shell fittings required by this Regulation shall be of steel, bronze or other approved ductile material. Valves of ordinary cast iron or similar material are not acceptable. All pipes to which this Regulation refers shall be of steel or other equivalent material to the satisfaction of the Administration.

REGULATION 23

Side Scuttles

(1) Side scuttles to spaces below the freeboard deck or to spaces within enclosed superstructures shall be fitted with efficient hinged inside deadlights arranged so that they can be effectively closed and secured watertight.

(2) No side scuttle shall be fitted in a position so that its sill is below a line drawn parallel to the freeboard deck at side and having its lowest point 2.5 per cent of the breadth (B) above the load waterline, or 500 millimetres (19½ inches), whichever is the greater distance.

(3) The side scuttles, together with their glasses, if fitted, and deadlights, shall be of substantial and approved construction.

REGULATION 24

Freeing Ports

(1) Where bulwarks on the weather portions of freeboard or superstructure decks form wells, ample provision shall be made for rapidly freeing the decks of water and for draining them. Except as provided in paragraphs (2) and (3) of this Regulation, the minimum freeing port area (A) on each side of the ship for each well on the freeboard deck shall be that given by the following formulae in cases where the sheer in way of the well is standard or greaterthan standard. The minimum area for each well on superstructure decks shall be one-half of the area given by the formulae.

Where the length of bulwark (l) in the well is 20 metres or less

$A = 0.7 + 0.035l$ square metres,

where l exceeds 20 metres

$A = 0.07l$ square metres.

l need in no case be taken as greater than 0.7 L.

If the bulwark is more than 1.2 metres in average height the required area shall be increased by 0.004 square metres per metre of length of well for each 0.1 metre difference in height. If the bulwark is less than 0.9 metre in average height, the required area may be decreased by 0.004 square metres per metre of length of well for each 0.1 metre difference in height.

THE SCHEDULE—*continued*

Or,

where the length of bulwark (l) in the well is 66 feet or less
$A=7.6+0.115l$ square feet,

where l exceeds 66 feet
$A=0.23l$ square feet.

l need in no case be taken as greater than 0.7 L.

If the bulwark is more than 3.9 feet in average height the required area shall be increased by 0.04 square feet per foot of length of well for each foot difference in height. If the bulwark is less than 3 feet in average height, the required area may be decreased by 0.04 square feet per foot of length for each foot difference in height.

(2) In ships with no sheer the calculated area shall be increased by 50 per cent. Where the sheer is less than the standard the percentage shall be obtained by interpolation.

(3) Where a ship is fitted with a trunk which does not comply with the requirements of Regulation 36 (1) (*e*) or where continuous or substantially continuous hatchway side coamings are fitted between detached superstructures the minimum area of the freeing port openings shall be calculated from the following Table:

Breadth of hatchway or trunk in relation to the breadth of ship	Area of freeing ports in relation to the total area of the bulwarks
40% or less	20%
75% or more	10%

The area of freeing ports at intermediate breadths shall be obtained by linear interpolation.

(4) In ships having superstructures which are open at either or both ends, adequate provision for freeing the space within such superstructures shall be provided to the satisfaction of the Administration.

(5) The lower edges of the freeing ports shall be as near the deck as practicable. Two-thirds of the freeing port area required shall be provided in the half of the well nearest the lowest point of the sheer curve.

(6) All such openings in the bulwarks shall be protected by rails or bars spaced approximately 230 millimetres (9 inches) apart. If shutters are fitted to freeing ports, ample clearance shall be provided to prevent jamming. Hinges shall have pins or bearings of non-corrodible material. If shutters are fitted with securing appliances, these appliances shall be of approved construction.

REGULATION 25

Protection of the Crew

(1) The strength of the deckhouses used for the accommodation of the crew shall be to the satisfaction of the Administration.

(2) Efficient guard rails or bulwarks shall be fitted on all exposed parts of the freeboard and superstructure decks. The height of the bulwarks or guard rails shall be at least 1 metre (39½ inches) from the deck, provided that where this height would interfere with the normal operation of the ship, a lesser height may be approved if the Administration is satisfied that adequate protection is provided.

(3) The opening below the lowest course of the guard rails shall not exceed 230 millimetres (9 inches). The other courses shall be not more than 380 millimetres (15 inches) apart. In the case of ships with rounded gunwales the guard rail supports shall be placed on the flat of the deck.

(4) Satisfactory means (in the form of guard rails, life lines, gangways or underdeck passages etc.) shall be provided for the protection of the crew in getting to and from their quarters, the machinery space and all other parts used in the necessary work of the ship.

(5) Deck cargo carried on any ship shall be so stowed that any opening which is in way of the cargo and which gives access to and from the crew's quarters, the machinery space and all other parts used in the necessary work of the ship, can be properly closed and secured against the admission of water. Effective protection for the crew in the form of guard rails or life lines shall be provided above the deck cargo if there is no convenient passage on or below the deck of the ship.

THE SCHEDULE—*continued*

REGULATION 26

Special Conditions of Assignment for Type 'A' Ships

Machinery Casings

(1) Machinery casings on Type 'A' ships as defined in Regulation 27 shall be protected by an enclosed poop or bridge of at least standard height, or by a deckhouse of equal height and equivalent strength, provided that machinery casings may be exposed if there are no openings giving direct access from the freeboard deck to the machinery space. A door complying with the requirements of Regulation 12 may, however, be permitted in the machinery casing, provided that it leads to a space or passageway which is as strongly constructed as the casing and is separated from the stairway to the engine room by a second weathertight door of steel or other equivalent material.

Gangway and Access

(2) An efficiently constructed fore and aft permanent gangway of sufficient strength shall be fitted on Type 'A' ships at the level of the superstructure deck between the poop and the midship bridge or deckhouse where fitted, or equivalent means of access shall be provided to carry out the purpose of the gangway, such as passages below deck. Elsewhere, and on Type 'A' ships without a midship bridge, arrangements to the satisfaction of the Administration shall be provided to safeguard the crew in reaching all parts used in the necessary work of the ship.

(3) Safe and satisfactory access from the gangway level shall be available between separate crew accommodations and also between crew accommodations and the machinery space.

Hatchways

(4) Exposed hatchways on the freeboard and forecastle decks or on the tops of expansion trunks on Type 'A' ships shall be provided with efficient watertight covers of steel or other equivalent material.

Freeing Arrangements

(5) Type 'A' ships with bulwarks shall have open rails fitted for at least half the length of the exposed parts of the weather deck or other effective freeing arrangements. The upper edge of the sheer strake shall be kept as low as practicable.

(6) Where superstructures are connected by trunks, open rails shall be fitted for the whole length of the exposed parts of the freeboard deck.

CHAPTER III.—FREEBOARDS

REGULATION 27

Types of Ships

(1) For the purposes of freeboard computation ships shall be divided into Type 'A' and Type 'B'.

Type 'A' ships

(2) A Type 'A' ship is one which is designed to carry only liquid cargoes in bulk, and in which cargo tanks have only small access openings closed by watertight gasketed covers of steel or equivalent material. Such a ship necessarily has the following inherent features:

(*a*) high integrity of the exposed deck; and

(*b*) high degree of safety against flooding, resulting from the low permeability of loaded cargo spaces and the degree of subdivision usually provided.

(3) A Type 'A' ship, if over 150 metres (492 feet) in length, and designed to have empty compartments when loaded to her summer load waterline, shall be able to withstand the flooding of any one of these empty compartments at an assumed permeability of 0.95, and remain afloat in a condition of equilibrium considered to be satisfactory by the Administration. In such a ship, over 225 metres (738 feet) in length, the machinery space shall be treated as a floodable compartment but with a permeability of 0.85.

THE SCHEDULE—*continued*

For the guidance of Administrations the following limits may be regarded as satisfactory:

(*a*) the final waterline after flooding is below the lower edge of any opening through which progressive flooding may take place;

(*b*) the maximum angle of heel due to unsymmetrical flooding is of the order of 15*;

(*c*) the metacentric height in the flooded condition is positive.

(4) A Type 'A' ship shall be assigned a freeboard not less than that based on Table A of Regulation 28.

Type 'B' ships

(5) All ships which do not come within the provisions regarding Type 'A' ships in paragraphs (2) and (3) of this Regulation shall be considered as Type 'B' ships.

(6) Type 'B' ships, which in position 1 have hatchways fitted with hatch covers complying with the requirements of Regulations 15 (7) or 16 shall, except as provided in paragraphs (7) to (10) inclusive of this Regulation, be assigned freeboards based on Table B of Regulation 28.

(7) Any Type 'B' ships of over 100 metres (328 feet) in length may be assigned freeboards less than those required under paragraph (6) of this Regulation provided that, in relation to the amount of reduction granted, the Administration is satisfied that:

(*a*) the measures provided for the protection of the crew are adequate;

(*b*) the freeing arrangements are adequate;

(*c*) the covers in positions 1 and 2 comply with the provisions of Regulation 16 and have adequate strength; special care being given to their sealing and securing arrangements;

(*d*) the ship, when loaded to her summer load waterline, will remain afloat in a satisfactory condition of equilibrium after flooding of any single damaged compartment at an assumed permeability of 0.95 excluding the machinery space; and

(*e*) in such a ship, over 225 metres (738 feet) in length, the machinery space shall be treated as a floodable compartment but with a permeability of 0.85.

For the guidance of Administrations in applying sub-paragraphs (*d*) and (*e*) of this paragraph the limits given in sub-paragraphs (3) (*a*), (*b*) and (*c*) may be regarded as satisfactory.

The relevant calculations may be based upon the following main assumptions:

- the vertical extent of damage is equal to the depth of the ship;
- the penetration of damage is not more than B/5;
- no main transverse bulkhead is damaged;
- the height of the centre of gravity above the base line is assessed allowing for homogeneous loading of cargo holds, and for 50 per cent of the designed capacity of consumable fluids and stores, etc.

(8) In calculating the freeboards for Type 'B' ships which comply with the requirements of paragraph (7) of this Regulation, the values from Table B of Regulation 28 shall not be reduced by more than 60 per cent of the difference between the 'B' and 'A' tabular values for the appropriate ship lengths.

(9) The reduction in tabular freeboard allowed under paragraph (8) of this Regulation may be increased up to the total difference between the values in Table A and those in Table B of Regulation 28 on condition that the ship complies with the requirements of Regulation 26 (1), (2), (3), (5) and (6), as if it were a Type 'A' ship, and further complies with the provisions of paragraph (7) (*a*) to (*d*) inclusive of this Regulation except that the reference in sub-paragraph (*d*) to the flooding of any single damaged compartment shall be treated as a reference to the flooding of any two adjacent fore and aft compartments, neither of which is the machinery space. Also any such ship of over 225 metres (738 feet) in length, when loaded to her summer load waterline, shall remain afloat in a satisfactory condition of equilibrium after flooding of the machinery space, taken alone, at an assumed permeability of 0.85.

(10) Type 'B' ships, which in position 1 have hatchways fitted with hatch covers which comply with the requirements of Regulation 15, other than paragraph (7), shall be assigned freeboards based upon the values given in Table B of Regulation 28 increased by the values given in the following table:

THE SCHEDULE—*continued*

Freeboard increase over tabular freeboard for Type 'B' ships, for ships with hatch covers not complying with Regulation 15 (7) or 16

Length of ship (metres)	Freeboard increase (millimetres)	Length of ship (metres)	Freeboard increase (millimetres)	Length of ship (metres)	Freeboard increase (millimetres)
108 and below	50	139	175	170	290
109	52	140	181	171	292
110	55	141	186	172	294
111	57	142	191	173	297
112	59	143	196	174	299
113	62	144	201	175	301
114	64	145	206	176	304
115	68	146	210	177	306
116	70	147	215	178	308
117	73	148	219	179	311
118	76	149	224	180	313
119	80	150	228	181	315
120	84	151	232	182	318
121	87	152	236	183	320
122	91	153	240	184	322
123	95	154	244	185	325
124	99	155	247	186	327
125	103	156	251	187	329
126	108	157	254	188	332
127	112	158	258	189	334
128	116	159	261	190	336
129	121	160	264	191	339
130	126	161	267	192	341
131	131	162	270	193	343
132	136	163	273	194	346
133	142	164	275	195	348
134	147	165	278	196	350
135	153	166	280	197	353
136	159	167	283	198	355
137	164	168	285	199	357
138	170	169	287	200	358

Freeboards at intermediate lengths of ship shall be obtained by linear interpolation. Ships above 200 metres in length shall be dealt with by the Administration.

Freeboard increase over tabular freeboard for Type 'B' ships, for ships with hatch covers not complying with Regulation 15 (7) or 16

Length of ship (feet)	Freeboard increase (inches)	Length of ship (feet)	Freeboard increase (inches)	Length of ship (feet)	Freeboard increase (inches)
350 and below	2.0	450	6.4	560	11.4
		460	7.0	570	11.8
360	2.3	470	7.6	580	12.1
370	2.6	480	8.2	590	12.5
380	2.9	490	8.7	600	12.8
390	3.3	500	9.2	610	13 1
400	3.7	510	9.6	620	13 4
410	4.2	520	10.0	630	13.6
420	4.7	530	10.4	640	13.9
430	5.2	540	10.7	650	14.1
440	5.8	550	11.0	660	14.3

Freeboards at intermediate lengths of ship shall be obtained by linear interpolation. Ships above 660 feet in length shall be dealt with by the Administration.

THE SCHEDULE—*continued*

(11) A lighter, barge or other ship without independent means of propulsion shall be assigned a freeboard in accordance with the provisions of these Regulations. However, in the case of barges which are unmanned the requirements of Regulations 25,26 (2) and (3) and 39 shall not apply. Such unmanned barges which have on the freeboard deck only small access openings closed by weathertight gasketed covers of steel or equivalent material may be assigned freeboards 25 per cent less than those calculated in accordance with these Regulations.

REGULATION 28

Freeboard Tables

Type 'A' Ships

(1) The tabular freeboard for Type 'A' ships shall be determined from the following table:

TABLE A

Freeboard Table for Type 'A' Ships

Length of ship (metres)	Freeboard (millimetres)	Length of ship (metres)	Freeboard (millimetres)	Length of ship (metres)	Freeboard (millimetres)
24	200	70	706	116	1392
25	208	71	720	117	1409
26	217	72	733	118	1426
27	225	73	746	119	1442
28	233	74	760	120	1459
29	242	75	773	121	1476
30	250	76	786	122	1494
31	258	77	800	123	1511
32	267	78	814	124	1528
33	275	79	828	125	1546
34	283	80	841	126	1563
35	292	81	855	127	1580
36	300	82	869	128	1598
37	308	83	883	129	1615
38	316	84	897	130	1632
39	325	85	911	131	1650
40	334	86	926	132	1667
41	344	87	940	133	1684
42	354	88	955	134	1702
43	364	89	969	135	1719
44	374	90	984	136	1736
45	385	91	999	137	1753
46	396	92	1014	138	1770
47	408	93	1029	139	1787
48	420	94	1044	140	1803
49	432	95	1059	141	1820
50	443	96	1074	142	1837
51	455	97	1089	143	1853
52	467	98	1105	144	1870
53	478	99	1120	145	1886
54	490	100	1135	146	1903
55	503	101	1151	147	1919
56	516	102	1166	148	1935
57	530	103	1181	149	1952
58	544	104	1196	150	1968
59	559	105	1212	151	1984
60	573	106	1228	152	2000
61	587	107	1244	153	2016
62	600	108	1260	154	2032
63	613	109	1276	155	2048
64	626	110	1293	156	2064
65	639	111	1309	157	2080
66	653	112	1326	158	2096
67	666	113	1342	159	2111
68	680	114	1359	160	2126
69	693	115	1376	161	2141

THE SCHEDULE—*continued*

TABLE A—*continued*

Length of ship (metres)	Freeboard (millimetres)	Length of ship (metres)	Freeboard (millimetres)	Length of ship (metres)	Freeboard (millimetres)
162	2155	225	2833	288	3211
163	2169	226	2841	289	3215
164	2184	227	2849	290	3220
165	2198	228	2857	291	3224
166	2212	229	2865	292	3228
167	2226	230	2872	293	3233
168	2240	231	2880	294	3237
169	2254	232	2888	295	3241
170	2268	233	2895	296	3246
171	2281	234	2903	297	3250
172	2294	235	2910	298	3254
173	2307	236	2918	299	3258
174	2320	237	2925	300	3262
175	2332	238	2932	301	3266
176	2345	239	2939	302	3270
177	2357	240	2946	303	3274
178	2369	241	2953	304	3278
179	2381	242	2959	305	3281
180	2393	243	2966	306	3285
181	2405	244	2973	307	3288
182	2416	245	2979	308	3292
183	2428	246	2986	309	3295
184	2440	247	2993	310	3298
185	2451	248	3000	311	3302
186	2463	249	3006	312	3305
187	2474	250	3012	313	3308
188	2486	251	3018	314	3312
189	2497	252	3024	315	3315
190	2508	253	3030	316	3318
191	2519	254	3036	317	3322
192	2530	255	3042	318	3325
193	2541	256	3048	319	3328
194	2552	257	3054	320	3331
195	2562	258	3060	321	3334
196	2572	259	3066	322	3337
197	2582	260	3072	323	3339
198	2592	261	3078	324	3342
199	2602	262	3084	325	3345
200	2612	263	3089	326	3347
201	2622	264	3095	327	3350
202	2632	265	3101	328	3353
203	2641	266	3106	329	3355
204	2650	267	3112	330	3358
205	2659	268	3117	331	3361
206	2669	269	3123	332	3363
207	2678	270	3128	333	3366
208	2687	271	3133	334	3368
209	2696	272	3138	335	3371
210	2705	273	3143	336	3373
211	2714	274	3148	337	3375
212	2723	275	3153	338	3378
213	2732	276	3158	339	3380
214	2741	277	3163	340	3382
215	2749	278	3167	341	3385
216	2758	279	3172	342	3387
217	2767	280	3176	343	3389
218	2775	281	3181	344	3392
219	2784	282	3185	345	3394
220	2792	283	3189	346	3396
221	2801	284	3194	347	3399
222	2809	285	3198	348	3401
223	2817	286	3202	349	3403
224	2825	287	3207	350	3406

THE SCHEDULE—*continued*

TABLE A—*continued*

Length of ship (metres)	Freeboard (millimetres)	Length of ship (metres)	Freeboard (millimetres)	Length of ship (metres)	Freeboard (millimetres)
351	3408	356	3418	361	3427
352	3410	357	3420	362	3428
353	3412	358	3422	363	3430
354	3414	359	3423	364	3432
355	3416	360	3425	365	3433

Freeboards at intermediate lengths of ship shall be obtained by linear interpolation. Ships above 365 metres in length shall be dealt with by the Administration.

TABLE A

Freeboard Table for Type 'A' Ships

Length of ship (feet)	Freeboard (inches)	Length of ship (feet)	Freeboard (inches)	Length of ship (feet)	Freeboard (inches)
80	8.0	460	71.1	840	120.1
90	8.9	470	73.1	850	120.7
100	9.8	480	75.1	860	121.4
110	10.8	490	77.1	870	122.1
120	11.9	500	79.0	880	122.7
130	13.0	510	80.9	890	123.4
140	14.2	520	82.7	900	124.0
150	15.5	530	84.5	910	124.6
160	16.9	540	86.3	920	125.2
170	18.3	550	88.0	930	125.7
180	19.8	560	89.6	940	126.2
190	21.3	570	91.1	950	126.7
200	22.9	580	92.6	960	127.2
210	24.5	590	94.1	970	127.7
220	26.2	600	95.5	980	128.1
230	27.8	610	96.9	990	128.6
240	29.5	620	98.3	1000	129.0
250	31.1	630	99.6	1010	129.4
260	32.8	640	100.9	1020	129.9
270	34.6	650	102.1	1030	130.3
280	36.3	660	103.3	1040	130.7
290	38.0	670	104.4	1050	131.0
300	39.7	680	105.5	1060	131.4
310	41.4	690	106.6	1070	131.7
320	43.2	700	107.7	1080	132.0
330	45.0	710	108.7	1090	132.3
340	46.9	720	109.7	1100	132.6
350	48.8	730	110.7	1110	132.9
360	50.7	740	111.7	1120	133.2
370	52.7	750	112.6	1130	133.5
380	54.7	760	113.5	1140	133.8
390	56.8	770	114.4	1150	134.0
400	58.8	780	115.3	1160	134.3
410	60.9	790	116.1	1170	134.5
420	62.9	800	117.0	1180	134.7
430	65.0	810	117.8	1190	135.0
440	67.0	820	118.6	1200	135.2
450	69.1	830	119.3		

Freeboards at intermediate lengths of ship shall be obtained by linear interpolation. Ships above 1200 feet in length shall be dealt with by the Administration.

THE SCHEDULE—*continued*

Type 'B' ships

(2) The tabular freeboard for Type 'B' ships shall be determined from the following table:

TABLE B

Freeboard Table for Type 'B' Ships

Length of ship (metres)	Freeboard (millimetres)	Length of ship (metres)	Freeboard (millimetres)	Length of ship (metres)	Freeboard (millimetres)
24	200	81	905	138	2065
25	208	82	923	139	2087
26	217	83	942	140	2109
27	225	84	960	141	2130
28	233	85	978	142	2151
29	242	86	996	143	2171
30	250	87	1015	144	2190
31	258	88	1034	145	2209
32	267	89	1054	146	2229
33	275	90	1075	147	2250
34	283	91	1096	148	2271
35	292	92	1116	149	2293
36	300	93	1135	150	2315
37	308	94	1154	151	2334
38	316	95	1172	152	2354
39	325	96	1190	153	2375
40	334	97	1209	154	2396
41	344	98	1229	155	2418
42	354	99	1250	156	2440
43	364	100	1271	157	2460
44	374	101	1293	158	2480
45	385	102	1315	159	2500
46	396	103	1337	160	2520
47	408	104	1359	161	2540
48	420	105	1380	162	2560
49	432	106	1401	163	2580
50	443	107	1421	164	2600
51	455	108	1440	165	2620
52	467	109	1459	166	2640
53	478	110	1479	167	2660
54	490	111	1500	168	2680
55	503	112	1521	169	2698
56	516	113	1543	170	2716
57	530	114	1565	171	2735
58	544	115	1587	172	2754
59	559	116	1609	173	2774
60	573	117	1630	174	2795
61	587	118	1651	175	2815
62	601	119	1671	176	2835
63	615	120	1690	177	2855
64	629	121	1709	178	2875
65	644	122	1729	179	2895
66	659	123	1750	180	2915
67	674	124	1771	181	2933
68	689	125	1793	182	2952
69	705	126	1815	183	2970
70	721	127	1837	184	2988
71	738	128	1859	185	3007
72	754	129	1880	186	3025
73	769	130	1901	187	3044
74	784	131	1921	188	3062
75	800	132	1940	189	3080
76	816	133	1959	190	3098
77	833	134	1979	191	3116
78	850	135	2000	192	3134
79	868	136	2021	193	3151
80	887	137	2043	194	3167

THE SCHEDULE—*continued*

TABLE B—*continued*

Length of ship (metres)	Freeboard (millimetres)	Length of ship (metres)	Freeboard (millimetres)	Length of ship (metres)	Freeboard (millimetres)
195	3185	252	4045	309	4725
196	3202	253	4058	310	4736
197	3219	254	4072	311	4748
198	3235	255	4085	312	4757
199	3249	256	4098	313	4768
200	3264	257	4112	314	4779
201	3280	258	4125	315	4790
202	3296	259	4139	316	4801
203	3313	260	4152	317	4812
204	3330	261	4165	318	4823
205	3347	262	4177	319	4834
206	3363	263	4189	320	4844
207	3380	264	4201	321	4855
208	3397	265	4214	322	4866
209	3413	266	4227	323	4878
210	3430	267	4240	324	4890
211	3445	268	4252	325	4899
212	3460	269	4264	326	4909
213	3475	270	4276	327	4920
214	3490	271	4289	328	4931
215	3505	272	4302	329	4943
216	3520	273	4315	330	4955
217	3537	274	4327	331	4965
218	3554	275	4339	332	4975
219	3570	276	4350	333	4985
220	3586	277	4362	334	4995
221	3601	278	4373	335	5005
222	3615	279	4385	336	5015
223	3630	280	4397	337	5025
224	3645	281	4408	338	5035
225	3660	282	4420	339	5045
226	3675	283	4432	340	5055
227	3690	284	4443	341	5065
228	3705	285	4455	342	5075
229	3720	286	4467	343	5086
230	3735	287	4478	344	5097
231	3750	288	4490	345	5108
232	3765	289	4502	346	5119
233	3780	290	4513	347	5130
234	3795	291	4525	348	5140
235	3808	292	4537	349	5150
236	3821	293	4548	350	5160
237	3835	294	4560	351	5170
238	3849	295	4572	352	5180
239	3864	296	4583	353	5190
240	3880	297	4595	354	5200
241	3893	298	4607	355	5210
242	3906	299	4618	356	5220
243	3920	300	4630	357	5230
244	3934	301	4642	358	5240
245	3949	302	4654	359	5250
246	3965	303	4665	360	5260
247	3978	304	4676	361	5268
248	3992	305	4686	362	5276
249	4005	306	4695	363	5285
250	4018	307	4704	364	5294
251	4032	308	4714	365	5303

Freeboards at intermediate lengths of ship shall be obtained by linear interpolation. Ships above 365 metres in length shall be dealt with by the Administration.

THE SCHEDULE—*continued*

TABLE B

Freeboard Table for Type 'B' Ships

Length of ship (feet)	Freeboard (inches)	Length of ship (feet)	Freeboard (inches)	Length of ship (feet)	Freeboard (inches)
80	8.0	460	83.1	840	161.2
90	8.9	470	85.6	850	162.8
100	9.8	480	88.1	860	164.3
110	10.8	490	90.6	870	165.9
120	11.9	500	93.1	880	167.4
130	13.0	510	95.6	890	168.9
140	14.2	520	98.1	900	170.4
150	15.5	530	100.6	910	171.8
160	16.9	540	103.0	920	173.3
170	18.3	550	105.4	930	174.7
180	19.8	560	107.7	940	176.1
190	21.3	570	110.0	950	177.5
200	22.9	580	112.3	960	178.9
210	24.7	590	114.6	970	180.3
220	26.6	600	116.8	980	181.7
230	28.5	610	119.0	990	183.1
240	30.4	620	121.1	1000	184.4
250	32.4	630	123.2	1010	185.8
260	34.4	640	125.3	1020	187.2
270	36.5	650	127.3	1030	188.5
280	38.7	660	129.3	1040	189.8
290	41.0	670	131.3	1050	191.0
300	43.3	680	133.3	1060	192.3
310	45.7	690	135.3	1070	193.5
320	48.2	700	137.1	1080	194.8
330	50.7	710	139.0	1090	196.1
340	53.2	720	140.9	1100	197.3
350	55.7	730	142.7	1110	198.6
360	58.2	740	144.5	1120	199.9
370	60.7	750	146.3	1130	201.2
380	63.2	760	148.1	1140	202.3
390	65.7	770	149.8	1150	203.5
400	68.2	780	151.5	1160	204.6
410	70.7	790	153.2	1170	205.8
420	73.2	800	154.8	1180	206.9
430	75.7	810	156.4	1190	208.1
440	78.2	820	158.0	1200	209.3
450	80.7	830	159.6		

Freeboards at intermediate lengths of ship shall be obtained by linear interpolation.

Ships above 1200 feet in length shall be dealt with by the Administration.

REGULATION 29

Correction to the Freeboard for Ships under 100 *metres* (328 *feet) in length*

The tabular freeboard for a Type ' B ' ship of between 24 metres (79 feet) and 100 metres (328 feet) in length having enclosed superstructures with an effective length of up to 35 per cent of the length of the ship shall be increased by:

???7.5(100 - L)(0.35 - E\L) millimetres

where L = length of ship in metres,
E = effective length of superstructure in metres as defined in Regulation 35;
or

0.09 (328 - L) (0.35 - E/L) inches

where L = length of ship in feet,
E = effective length of superstructure in feet as defined in Regulation 35.

THE SCHEDULE—*continued*

REGULATION 30

Correction for Block Coefficient

Where the block coefficient (C_b) exceeds 0.68, the tabular freeboard specified in Regulation 28 as modified, if applicable, by Regulations 27 (8), 27 (10) and 29 shall be multiplied by the factor $C_b + 0.68/1.36$. ???

REGULATION 31

Correction for Depth

(1) Where D exceeds ??? L/15 the freeboard shall be increased by

(D — L/15 ???) R millimetres where R is L/0.48 at lengths less than 120 metres and 250 at 120 metres length and above, or

(D - L/15) R inches, where R is L/131.2 at lengths less than 393.6 feet and 3 at 393.6 feet length and above.

L

(2) Where D is less than ??? L/15 reduction shall be made except in a ship with an enclosed superstructure covering at least 0.6 L amidships, with a complete trunk, or combination of detached enclosed superstructures and trunks which extend all fore and aft, where the freeboard shall be reduced at the rate prescribed in paragraph (1) of this Regulation.

(3) Where the height of superstructure or trunk is less than the standard height, the reduction shall be in the ratio of the actual to the standard height as defined in Regulation 33.

REGULATION 32

Correction for Position of Deck Line

Where the actual depth to the upper edge of the deck line is greater or less than D, the difference between the depths shall be added to or deducted from the freeboard.

REGULATION 33

Standard Height of Superstructure

The standard height of a superstructure shall be as given in the following table:

Standard Height (*in metres*)

L (metres)	Raised Quarter Deck	All other Superstructures
30 or less	0.90	1.80
75	1.20	1.80
125 or more	1.80	2.30

Standard Height (*in feet*)

L (feet)	Raised Quarter Deck	All other Superstructures
98.5 or less	3.0	5.9
246	3.9	5.9
410 or more	5.9	7.5

The standard heights at intermediate lengths of the ship shall be obtained by linear interpolation.

THE SCHEDULE—*continued*

REGULATION 34

Length of Superstructure

(1) Except as provided in paragraph (2) of this Regulation, the length of a superstructure (S) shall be the mean length of the parts of the superstructure which lie within the length (L).

(2) Where the end bulkhead of an enclosed superstructure extends in a fair convex curve beyond its intersection with the superstructure sides, the length of the superstructure may be increased on the basis of an equivalent plane bulkhead. This increase shall be two-thirds of the fore and aft extent of the curvature. The maximum curvature which may be taken into account in determining this increase is one-half the breadth of the superstructure at the point of intersection of the curved end of the superstructure with its side.

REGULATION 35

Effective Length of Superstructure

(1) Except as provided for in paragraph (2) of this Regulation, the effective length (E) of an enclosed superstructure of standard height shall be its length.

(2) In all cases where an enclosed superstructure of standard height is set in from the sides of the ship as permitted in Regulation 3 (10), the effective length shall be the length modified by the ratio of b/Bs, where

b is the breadth of the superstructure at the middle of its length; and

Bs is the breadth of the ship at the middle of the length of the superstructure.

Where a superstructure is set in for a part of its length, this modification shall be applied only to the set in part.

(3) Where the height of an enclosed superstructure is less than the standard height, the effective length shall be its length reduced in the ratio of the actual height to the standard height. Where the height exceeds the standard, no increase shall be made to the effective length of the superstructure.

(4) The effective length of a raised quarter deck, if fitted with an intact front bulkhead, shall be its length up to a maximum of 0.6 L. Where the bulkhead is not intact, the raised quarter deck shall be treated as a poop of less than standard height.

(5) Superstructures which are not enclosed shall have no effective length.

REGULATION 36

Trunks

(1) A trunk or similar structure which does not extend to the sides of the ship shall be regarded as efficient on the following conditions:

(*a*) the trunk is at least as strong as a superstructure;

(*b*) the hatchways are in the trunk deck, and the hatchway coamings and covers comply with the requirements of Regulations 13 to 16 inclusive and the width of the trunk deck stringer provides a satisfactory gangway and sufficient lateral stiffness. However, small access openings with watertight covers may be permitted in the freeboard deck;

(*c*) a permanent working platform fore and aft fitted with guard rails is provided by the trunk deck, or by detached trunks connected to superstructures by efficient permanent gangways;

(*d*) ventilators are protected by the trunk, by watertight covers or by other equivalent means;

(*e*) open rails are fitted on the weather parts of the freeboard deck in way of the trunk for at least half their length;

(*f*) the machinery casings are protected by the trunk, by a superstructure of at least standard height, or by a deckhouse of the same height and of equivalent strength;

(*g*) the breadth of the trunk is at least 60 per cent of the breadth of the ship; and

(*h*) where there is no superstructure, the length of the trunk is at least 0.6 L.

THE SCHEDULE—*continued*

(2) The full length of an efficient trunk reduced in the ratio of its mean breadth to B shall be its effective length.

(3) The standard height of a trunk is the standard height of a superstructure other than a raised quarter deck.

(4) Where the height of a trunk is less than the standard height, its effective length shall be reduced in the ratio of the actual to the standard height. Where the height of hatchway coamings on the trunk deck is less than that required under Regulation 15 (1), a reduction from the actual height of trunk shall be made which corresponds to the difference between the actual and the required height of coaming.

REGULATION 37

Deduction for Superstructures and Trunks

(1) Where the effective length of superstructures and trunks is 1.0 L, the deduction from the freeboard shall be 350 millimetres at 24 metres length of ship, 860 millimetres at 85 metres length, and 1070 millimetres at 122 metres length and above (14 inches at 79 feet length of ship, 34 inches at 279 feet length, and 42 inches at 400 feet length and above); deductions at intermediate lengths shall be obtained by linear interpolation.

(2) Where the total effective length of superstructures and trunks is less than 1.0 L the deduction shall be a percentage obtained from one of the following tables:

Percentage of Deduction for Type 'A' ships

	Total Effective Length of Superstructures and Trunks										
	0	0.1 L	0.2 L	0.3 L	0.4 L	0.5 L	0.6 L	0.7 L	0.8 L	0.9 L	1.0 L
Percentage of deduction for all types of superstructures	0	7	14	21	31	41	52	63	75.3	87.7	100

Percentages at intermediate lengths of superstructures shall be obtained by linear interpolation.

Percentage of Deduction for Type 'B' ships

	Line	Total Effective Length of Superstructures and Trunks										
		0	0.1 L	0.2 L	0.3 L	0.4 L	0.5 L	0.6 L	0.7 L	0.8 L	0.9 L	1.0 L
Ships with forecastle and without detached bridge	1	0	5	10	15	23.5	32	46	63	75.3	87.7	100
Ships with forecastle and detached bridge	II	0	6.3	12.7	19	27.5	36	46	63	75.3	87.7	100

Percentages at intermediate lengths of superstructures shall be obtained by linear interpolation.

(3) For ships of Type 'B':

(*a*) Where the effective length of a bridge is less than 0.2 L, the percentages shall be obtained by linear interpolation between lines I and II.

(*b*) Where the effective length of a forecastle is more than 0.4 L, the percentages shall be obtained from line II.

(*c*) Where the effective length of a forecastle is less than 0.07 L, the above percentages shall be reduced by:

???5X(0.07 L - F)/0.07 L

where f is the effective length of the forecastle.

THE SCHEDULE—*continued*

REGULATION 38

Sheer

General

(1) The sheer shall be measured from the deck at side to a line of reference drawn parallel to the keel through the sheer line at amidships.

(2) In ships designed with a rake of keel, the sheer shall be measured in relation to a reference line drawn parallel to the design load waterline.

(3) In flush deck ships and in ships with detached superstructures the sheer shall be measured at the freeboard deck.

(4) In ships with topsides of unusual form in which there is a step or break in the topsides, the sheer shall be considered in relation to the equivalent depth amidships.

(5) In ships with a superstructure of standard height which extends over the whole length of the freeboard deck, the sheer shall be measured at the superstructure deck. Where the height exceeds the standard the least difference (Z) between the actual and standard heights shall be added to each end ordinate. Similarly, the intermediate ordinates at distances of ???1/6 L and ½ L from each perpendicular shall be increased by 0.444 Z and 0.111 Z respectively.

(6) Where the deck of an enclosed superstructure has at least the same sheer as the exposed freeboard deck, the sheer of the enclosed portion of the freeboard deck shall not be taken into account.

(7) Where an enclosed poop or forecastle is of standard height with greater sheer than that of the freeboard deck, or is of more than standard height, an addition to the sheer of the freeboard deck shall be made as provided in paragraph (12) of this Regulation.

Standard Sheer Profile

(8) The ordinates of the standard sheer profile are given in the following table:

Standard Sheer Profile

(Where L is in metres)

	Station	Ordinate (in millimetres)	Factor
After half	After Perpendicular	25 (L/3 + 10)	1
	??? L from A.P.	11.1 (L/3+ 10)	3
	L from A.P.	2.8(L/3+10)	3
	Amidships	0	1
Forward half	Amidships	0	1
	L from F.P.	5.6 (L/3+ 10)	3
	??? L from F.P.	22.2 (L/3 + 10)	3
	Forward Perpendicular	50 (L/3 + 10)	1

THE SCHEDULE—*continued*

Standard Sheer Profile

(Where L is in feet)

	Station	Ordinate (in inches)	Factor
After half	After Perpendicular	0.1 L + 10	1
	??? L from A.P.	0.0444 L + 4.44	3
	L from A.P.	0.0111 L + 1.11	3
	Amidships	0	1
Forward half	Amidships	0	1
	L from F.P.	0.0222 L + 2.22	3
	??? L from F.P.	0.0888 L + 8.88	3
	Forward Perpendicular	0.2 L + 20	1

Measurement of Variation from Standard Sheer Profile

(9) Where the sheer profile differs from the standard, the four ordinates of each profile in the forward or after half shall be multiplied by the appropriate factors given in the table of ordinates. The difference between the sums of the respective products and those of the standard divided by 8 measures the deficiency or excess of sheer in the forward or after half. The arithmetical mean of the excess or deficiency in the forward and after halves measures the excess or deficiency of sheer.

(10) Where the after half of the sheer profile is greater than the standard and the forward half is less than the standard, no credit shall be allowed for the part in excess and deficiency only shall be measured.

(11) Where the forward half of the sheer profile exceeds the standard, and the after portion of the sheer profile is not less than 75 per cent of the standard, credit shall be allowed for the part in excess; where the after part is less than 50 per cent of the standard no credit shall be given for the excess sheer forward. Where the after sheer is between 50 per cent and 75 per cent of the standard intermediate allowances may be granted for excess sheer forward.

(12) Where sheer credit is given for a poop or forecastle the following formula shall be used:

$$s = Y/3L'/L$$

where s = sheer credit, to be deducted from the deficiency or added to the excess of sheer,

y = difference between actual and standard height of superstructure at the end of sheer,

L' = mean enclosed length of poop or forecastle up to a maximum length of 0.5L,

L = length of ship as defined in Regulation 3 (1) of this Annex.

The above formula provides a curve in the form of a parabola tangent to the actual sheer curve at the freeboard deck and intersecting the end ordinate at a point below the superstructure deck a distance equal to the standard height of a superstructure. The superstructure deck shall not be less than standard height above this curve at any point. This curve shall be used in determining the sheer profile for forward and after halves of the ship.

Correction for Variations from Standard Sheer Profile

(13) The correction for sheer shall be the deficiency or excess of sheer (see paragraphs (9) to (11) inclusive of this Regulation), multiplied by

???

where S is the total length of enclosed superstructures.

THE SCHEDULE—*continued*

Addition for Deficiency in Sheer

(14) Where the sheer is less than the standard, the correction for deficiency in sheer (see paragraph (13) of this Regulation) shall be added to the freeboard.

Deduction for Excess Sheer

(15) In ships where an enclosed superstructure covers 0.1 L before and 0.1 L abaft amidships, the correction for excess of sheer as calculated under the provisions of paragraph (13) of this Regulation shall be deducted from the freeboard; in ships where no enclosed superstructure covers amidships, no deduction shall be made from the freeboard; where an enclosed superstructure covers less than 0.1 L before and 0.1 L abaft amidships,the deduction shall be obtained by linear interpolation. The maximum deduction for excess sheer shall be at the rate of 125 millimetres per 100 metres of length (1½ inches per 100 feet of length).

REGULATION 39

Minimum Bow Height

(1) The bow height defined as the vertical distance at the forward perpendicular between the waterline corresponding to the assigned summer freeboard and the designed trim and the top of the exposed deck at side shall be not less than:

for ships below 250 metres in length,

??? millimetres

for ships of 250 metres and above in length,

7000 1.36/C_b + 0.68 millimetres;

where L is the length of the ship in metres,

C_b is the block coefficient which is to be taken as not less than 0.68

or,

for ships below 820 feet in length,

??? inches;

for ships of 820 feet and above in length,

inches;

where L is the length of the ship in feet,

C_b is the block coefficient which is to be taken as not less than 0.68.

(2) Where the bow height required in paragraph (1) of this Regulation is obtained by sheer, the sheer shall extend for at least 15 per cent of the length of the ship measured from the forward perpendicular. Where it is obtained by fitting a superstructure, such superstructure shall extend from the stem to a point at least 0.07 L abaft the forward perpendicular, and it shall comply with the following requirements:

(*a*) for ships not over 100 metres (328 feet) in length it shall be enclosed as defined in Regulation 3 (10), and

(*b*) for ships over 100 metres (328 feet) in length it need not comply with Regulation 3 (10) but shall be fitted with closing appliances to the satisfaction of the Administration.

(3) Ships which, to suit exceptional operational requirements, cannot meet the requirements of paragraphs (1) and (2) of this Regulation may be given special consideration by the Administration.

REGULATION 40

Minimum Freeboards

Summer Freeboard

(1) The minimum freeboard in summer shall be the freeboard derived from the tables in Regulation 28 as modified by the corrections in Regulations 27, as applicable, 29, 30, 31, 32, 37, 38 and, if applicable, 39.

THE SCHEDULE—*continued*

(2) The freeboard in salt water, as calculated in accordance with paragraph (1) of this Regulation, but without the correction for deck line, as provided by Regulation 32, shall not be less than 50 millimetres (2 inches). For ships having in position 1 hatchways with covers which do not comply with the requirements of Regulations 15 (7), 16 or 26, the freeboard shall be not less than 150 millimetres (6 inches).

Tropical Freeboard

(3) The minimum freeboard in the Tropical Zone shall be the freeboard obtained by a deduction from the summer freeboard of one forty-eighth of the summer draught measured from the top of the keel to the centre of the ring of the load line mark.

(4) The freeboard in salt water, as calculated in accordance with paragraph (1) of this Regulation, but without the correction for deck line, as provided by Regulation 32, shall not be less than 50 millimetres (2 inches). For ships having in position 1 hatchways with covers which do not comply with the requirements of Regulations 15 (7), 16 or 26, the freeboard shall be not less than 150 millimetres (6 inches).

Winter Freeboard

(5) The minimum freeboard in winter shall be the freeboard obtained by an addition to the summer freeboard of one forty-eighth of summer draught, measured from the top of **the** keel to the centre of the ring of the load line mark.

Winter North Atlantic Freeboard

(6) The minimum freeboard for ships of not more than 100 metres (328 feet) in length, which enter any part of the North Atlantic denned in Regulation 52 (Annex II). during the winter seasonal period, shall be the winter freeboard plus 50 millimetres (2 inches). For other ships, the Winter North Atlantic Freeboard shall be the winter freeboard.

Fresh Water Freeboard

(7) The minimum freeboard in fresh water of unit density shall be obtained by deducting from the minimum freeboard in salt water :

??? centimetres (inches)

where ??? = displacement in salt water in tons at the summer load waterline,
T = tons per centimetre (inch) immersion in salt water at the summer load waterline.

(8) Where the displacement at the summer load waterline cannot be certified, the deduction shall be one forty-eighth of summer draught, measured from the top of the keel to the centre of the ring of the load line mark.

CHAPTER IV.—SPECIAL REQUIREMENTS FOR SHIPS ASSIGNED TIMBER FREEBOARDS

REGULATION 41

Application of this Chapter

Regulations 42 to 45 inclusive apply only to ships to which timber load lines are assigned.

REGULATION 42

Definitions

(1) *Timber Deck Cargo.* The term "timber deck cargo" means a cargo of timber carried on an uncovered part of a freeboard or superstructure deck. The term does not include wood pulp or similar cargo.

(2) *Timber Load Line.* A timber deck cargo may be regarded as giving a ship a certain additional bouyancy and a greater degree of protection against the sea. For that reason, ships carrying a timber deck cargo may be granted a reduction of freeboard calculated according to the provisions of Regulation 45 and marked on the ship's side in accordance with the provisions of Regulation 6 (3) and (4). However, in order that such special freeboard may be granted and used, the timber deck cargo shall comply with certain conditions which are laid down in Regulation 44, and the ship itself shall also comply with, certain conditions relating to its construction which are set out in Regulation 43.

THE SCHEDULE—*continued*

REGULATION 43

Construction of Ship

Superstructure

(1) Ships shall have a forecastle of at least standard height and a length of at least 0.07 L. In addition, if the ship is less than 100 metres (328 feet) in length, a poop of at least standard height, or a raised quarter deck with either a deckhouse or a strong steel hood of at least the same total height shall be fitted aft.

Double Bottom Tanks

(2) Double bottom tanks where fitted within the midship half length of the ship shall have adequate watertight longitudinal subdivision.

Bulwarks

(3) The ship shall be fitted either with permanent bulwarks at least 1 metre (39½ inches) in height, specially stiffened on the upper edge and supported by strong bulwark stays attached to the deck and provided with necessary freeing ports, or with efficient rails of the same height and of specially strong construction.

REGULATION 44

Stowage

General

(1) Openings in the weather deck over which cargo is stowed shall be securely closed and battened down. The ventilators shall be efficiently protected.

(2) Timber deck cargo shall extend over at least the entire available length which is the total length of the well or wells between superstructures. Where there is no limiting superstructure at the after end, the timber shall extend at least to the after end of the aftermost hatchway. The timber shall be stowed as solidly as possible to at least the standard height of the superstructure.

(3) On a ship within a seasonal winter zone in winter, the height of the deck cargo above the weather deck shall not exceed one-third of the extreme breadth of the ship.

(4) The timber deck cargo shall be compactly stowed, lashed and secured. It shall not interfere in any way with the navigation and necessary work of the ship.

Uprights

(5) Uprights, when required by the nature of the timber, shall be of adequate strength considering the breadth of the ship; the spacing shall be suitable for the length and character of timber carried, but shall not exceed 3 metres (9.8 feet). Strong angles or metal sockets or equally efficient means shall be provided for securing the uprights.

Lashings

(6) Timber deck cargo shall be efficiently secured throughout its length by independent over-all lashings spaced not more than 3 metres (9.8 feet) apart. Eye plates for these lashings shall be efficiently attached to the sheer strake or to the deck stringer plate at intervals of not more than 3 metres (9.8 feet). The distance from an end bulkhead of a superstructure to the first eye plate shall be not more than 2 metres (6.6 feet). Eye plates and lashings shall be provided 0.6 metres (23½ inches) and 1.5 metres (4.9 feet) from the ends of timber deck cargoes where there is no bulkhead.

(7) Lashings shall be not less than 19 millimetres (¾ inch) close link chain or flexible wire rope of equivalent strength, fitted with sliphooks and turnbuckles, which shall be accessible at all times. Wire rope lashings shall have a short length of long link chain to permit the length of lashings to be regulated.

(8) When timber is in lengths less than 3.6 metres (11.8 feet) the spacing of the lashings shall be reduced or other suitable provisions made to suit the length of timber.

(9) All fittings required for securing the lashings shall be of strength corresponding to the strength of the lashings.

THE SCHEDULE—*continued*

Stability

(10) Provision shall be made for a safe margin of stability at all stages of the voyage, regard being given to additions of weight, such as those due to absorption of water and icing and to losses of weight such as those due to consumption of fuel and stores.

Protection of Crew, Access to Machinery Spaces, etc.

(11) In addition to the requirements of Regulation 25 (5) of this Annex guard rails or life lines spaced not more than 33 centimetres (13 inches) apart vertically shall be provided on each side of the deck cargo to a height of at least 1 metre (39½ inches) above the cargo.

Steering Arrangements

(12) Steering arrangements shall be effectively protected from damage by cargo and, as far as practicable, shall be accessible. Efficient provision shall be made for steering in the event of a breakdown in the main steering arrangements.

REGULATION 45

Computation for Freeboard

(1) The minimum summer freeboards are computed in accordance with Regulations 27 (5), 27 (6), 27 (11), 28, 29, 30, 31, 32, 37 and 38, except that Regulation 37 is modified by sub-stituting the following percen

	Total effective length of superstructures										
	0	0.1 L	0.2 L	0.3 L	0.4 L	0.5 L	0.6 L	0.7 L	0.8 L	0.9 L	1.0 L
Percentage of deduction for all types of superstructure	20	31	42	53	64	70	76	82	88	94	100

Percentages at intermediate lengths of superstructures shall be obtained by linear interpolation.

(2) The Winter Timber Freeboard shall be obtained by adding to the Summer Timber Freeboard one thirty-sixth of the moulded summer timber draught.

(3) The Winter North Atlantic Timber Freeboard shall be the same as the Winter North Atlantic Freeboard prescribed in Regulation 40 (6).

(4) The Tropical Timber Freeboard shall be obtained by deducting from the Summer Timber Freeboard one forty-eighth of the moulded summer timber draught.

(5) The Fresh Water Timber Freeboard shall be computed in accordance with Regulation 40 (7) based on the summer timber load waterline.

THE SCHEDULE—*continued*

ANNEX II

ZONES, AREAS AND SEASONAL PERIODS

The zones and areas in this Annex are, in general, based on the following criteria:

Summer—not more than 10 per cent winds of force 8 Beaufort (34 knots) or more.

Tropical—not more than 1 per cent winds of force 8 Beaufort (34 knots) or more.

Not more than one tropical storm in 10 years in an area of 5° square in any one separate calendar month.

In certain special areas, for practical reasons, some degree of relaxation has been found acceptable.

A chart is attached to this Annex to illustrate the zones and areas defined below.

REGULATION 46

Northern Winter Seasonal Zones and Area

(1) *North Atlantic Winter Seasonal Zones I and 11*

(*a*) The North Atlantic Winter Seasonal Zone I lies within the meridian of longitude 50°W from the coast of Greenland to latitude 45°N, thence the parallel of latitude 45°N to longitude 15°W, thence the meridian of longitude 15°W to latitude 60°N, thence the parallel of latitude 60°N to the Greenwich Meridian, thence this meridian northwards.

Seasonal periods:

WINTER: 16 October to 15 April
SUMMER: 16 April to 15 October

(*b*) The North Atlantic Winter Seasonal Zone II lies within the meridian of longitude 68°30'W from the coast of the United States to latitude 40°N, thence the rhumb line to the point latitude 36°N, longitude 73°W, thence the parallel of latitude 36°N to longitude 25°W and thence the rhumb line to Cape Toriñana.

Excluded from this zone are the North Atlantic Winter Seasonal Zone I and the Baltic Sea bounded by the parallel of the latitude of The Skaw in the Skagerrak.

Seasonal periods:

WINTER: 1 November to 31 March
SUMMER: 1 April to 31 October

(2) *North Atlantic Winter Seasonal Area*

The boundary of the North Atlantic Winter Seasonal Area is—

the meridian of longitude 68°30'W from the coast of the United States to latitude 40°N, thence the rhumb line to the southernmost intersection of the meridian of longitude 61°W with the coast of Canada and thence the east coasts of Canada and the United States.

Seasonal periods:

For ships over 100 metres (328 feet) in length:
WINTER: 16 December to 15 February
SUMMER: 16 February to 15 December

For ships of 100 metres (328 feet) and under in length:
WINTER: 1 November to 31 March
SUMMER: 1 April to 31 October

(3) *North Pacific Winter Seasonal Zone*

The southern boundary of the North Pacific Winter Seasonal Zone is—

the parallel of latitude 50°N from the east coast of the USSR to the west coast of Sakhalin, thence the west coast of Sakhalin to the southern extremity of Kurilion, thence the rhumb line to Wakkanai, Hokkaido, Japan, thence the east and south coasts of Hokkaido to longitude 145°E, thence the meridian of longitude 145°E to latitude 35°N, thence the parallel of latitude 35°N to longitude 150°W and thence the rhumb line to the southern extremity of Dall Island, Alaska.

THE SCHEDULE—*continued*

Seasonal periods:
WINTER: 16 October to 15 April
SUMMER: 16 April to 15 October

REGULATION 47

Southern Winter Seasonal Zone

The northern boundary of the Southern Winter Seasonal Zone is—

the rhumb line from the east coast of the American continent to Cape Tres Puntas to the point latitude 34°S, longitude 50°W, thence the parallel of latitude 34°S to longitude 17°E, thence the rhumb line to the point latitude 35°10'S, longitude 20°E, thence the rhumb line to the point latitude 34°S, longitude 28°E, thence along the rhumb line to the point latitude 35°30'S, longitude 118°E, and thence the rhumb line to Cape Grim on the northwest coast of Tasmania; thence along the north and east coasts of Tasmania to the southernmost point of Bruny Islan thence the rhumb line to the point latitude 47°S, longitude 170°E, thence along the rhumb line to the point latitude 33°S, longitude 170°W, and thence the parallel of latitude 33°S to the west coast of the American continent.

Seasonal periods:

WINTER: 16 April to 15 October
SUMMER: 16 October to 15 April

REGULATION 48

Tropical Zone

(1) *Northern Boundary of the Tropical Zone*

The northern boundary of the Tropical Zone is—

the parallel of latitude 13°N from the east coast of the American continent to longitude 60°W, thence the rhumb line to the point latitude 10°N, longitude 58°W, thence the parallel of latitude 10°N to longitude 20°W, thence the meridian of longitude 20°W to latitude 30°N and thence the parallel of latitude 30°N to the west coast of Africa; from the east coast of Africa the parallel of latitude 8°N to longitude 70°E, thence the meridian of longitude 70°E to latitude 13°N, thence the parallel of latitude 13°N to the west coast of India; thence the south coast of India to latitude 10°30'N on the east coast of India, thence the rhumb line to the point latitude 9°N, longitude 82°E, thence the meridian of longitude 82°E to latitude 8°N, thence the parallel of latitude 8°N to the west coast of Malaysia, thence the coast of South-East Asia to the east coast of Vietnam at latitude 10°N, thence the parallel of latitude 10°N to longitude 145°E, thence the meridian of longitude 145°E to latitude 13°N and thence the parallel of latitude 13°N to the west coast of the American continent.

Saigon is to be considered as being on the boundary line of the Tropical Zone and the Seasonal Tropical Area.

(2) *Southern Boundary of the Tropical Zone*

The southern boundary of the Tropical Zone is—

the rhumb line from the Port of Santos, Brazil, to the point where the meridian of longitude 40°W intersects the Tropic of Capricorn; thence the Tropic of Capricorn to the west coast of Africa; from the east coast of Africa the parallel of latitude 20°S to the west coast of Madagascar, thence the west and north coasts of Madagascar to longitude 50°E, thence the meridian of longitude 50°E to latitude 10°S, thence the parallel of latitude 10°S to longitude 98°E, thence the rhumb line to Port Darwin, Australia, thence the coasts of Australia and Wessel Island eastwards to Cape Wessel, thence the parallel of latitude 11°S to the west side of Cape York; from the east side of Cape York the parallel of latitude 11°S to longitude 150°W, thence the rhumb line to the point latitude 26°S, longitude 75°W, and thence the rhumb line to the west coast of the American continent at latitude 30°S.

Coquimbo and Santos are to be considered as being on the boundary line of the Tropical and Summer Zones.

THE SCHEDULE—*continued*

(3) *Areas to be included in the Tropical Zone*

The following areas are to be treated as included in the Tropical Zone—

(*a*) The Suez Canal, the Red Sea and the Gulf of Aden, from Port Said to the meridian of longitude 45°E.

Aden and Berbera are to be considered as being on the boundary line of the Tropical Zone and the Seasonal Tropical Area.

(*b*) The Persian Gulf to the meridian of longitude 59°E.

(*c*) The area bounded by the parallel of latitude 22°S from the east coast of Australia to the Great Barrier Reef, thence the Great Barrier Reef to latitude 11°S. The northern boundary of the area is the southern boundary of the Tropical Zone.

REGULATION 49

Seasonal Tropical Areas

The following are Seasonal Tropical Areas:

(1) *In the North Atlantic*

An area bounded—

on the north by the rhumb line from Cape Catoche, Yucatan, to Cape San Antonio, Cuba, the north coast of Cuba to latitude 20°N and thence the parallel of latitude 20°N to longitude 20°W;

on the west by the coast of the American continent;

on the south and east by the northern boundary of the Tropical Zone.

Seasonal periods:

TROPICAL: 1 November to 15 July
SUMMER: 16 July to 31 October

(2) *In the Arabian Sea*

An area bounded—

on the west by the coast of Africa, the meridian of longitude 45°E in the Gulf of Aden, the coast of South Arabia and the meridian of longitude 59°E in the Gulf of Oman;

on the north and east by the coasts of Pakistan and India;

on the south by the northern boundary of the Tropical Zone.

Seasonal periods:

TROPICAL: 1 September to 31 May
SUMMER: 1 June to 31 August

(3) *In the Bay of Bengal*

The Bay of Bengal north of the northern boundary of the Tropical Zone.

Seasonal periods:

TROPICAL: 1 December to 30 April
SUMMER: 1 May to 30 November

(4) *In the South Indian Ocean*

(*a*) An area bounded—

on the north and west by the southern boundary of the Tropical Zone and the east coast of Madagascar;

on the south by the parallel of latitude 20°S;

on the east by the rhumb line from the point latitude 20°S, longitude 50°E, to the point latitude 15°S, longitude 51°30'E, and thence by the meridian of longitude 51°30'E to latitude 10°S.

Seasonal periods:

TROPICAL: 1 April to 30 November
SUMMER: 1 December to 31 March

THE SCHEDULE—*continued*

(*b*) An area bounded—

on the north by the southern boundary of the Tropical Zone;

on the east by the coast of Australia;

on the south by the parallel of latitude 15°S from longitude 51°30'E, to longitude 120°E and thence the meridian of longitude 120°E to the coast of Australia;

on the west by the meridian of longitude 51°30'E.

Seasonal periods:

TROPICAL: 1 May to 30 November

SUMMER: 1 December to 30 April

(5) *In the China Sea*

An area bounded—

on the west and north by the coasts of Vietnam and China from latitude 10°N to Hong Kong;

on the east by the rhumb line from Hong Kong to the Port of Sual (Luzon Island) and the west coasts of the Islands of Luzon, Samar and Leyte to latitude 10°N;

on the south by the parallel of latitude 10°N.

Hong Kong and Sual are to be considered as being on the boundary of the Seasonal Tropical area and Summer Zone.

Seasonal periods:

TROPICAL: 21 January to 30 April

SUMMER: 1 May to 20 January

(6) *In the North Pacific*

(*a*) An area bounded—

on the north by the parallel of latitude 25°N;

on the west by the meridian of longitude 160°E;

on the south by the parallel of latitude 13°N;

on the east by the meridian of longitude 130°W.

Seasonal periods:

TROPICAL: 1 April to 31 October

SUMMER: 1 November to 31 March

(*b*) An area bounded—

on the north and east by the west coast of the American continent;

on the west by the meridian of longitude 123°W from the coast of the American continent to latitude 33°N and by the rhumb line from the point latitude 33°N, longitude 123°W, to the point latitude 13°N, longitude 105°W;

on the south by the parallel of latitude 13°N.

Seasonal periods:

TROPICAL: 1 March to 30 June and 1 November to 30 November

SUMMER: 1 July to 31 October and 1 December to 28/29 February

(7) *In the South Pacific*

(*a*) The Gulf of Carpentaria south of latitude 11°S.

Seasonal periods:

TROPICAL: 1 April to 30 November

SUMMER: 1 December to 31 March

THE SCHEDULE—*continued*

(*b*) An area bounded—

on the north and east by the southern boundary of the Tropical Zone;

on the south by the Tropic of Capricorn from the east coast of Australia to longitude 150°W, thence by the meridian of longitude 150°W to latitude 20°S and thence by the parallel of latitude 20°S to the point where it intersects the southern boundary of the Tropical Zone;

on the west by the boundaries of the area within the Great Barrier Reef included in the Tropical Zone and by the east coast of Australia.

Seasonal periods:

TROPICAL: 1 April to 30 November
SUMMER: 1 December to 31 March

REGULATION 50

Summer Zones

The remaining areas constitute the Summer Zones.

However, for ships of 100 metres (328 feet) and under in length, the area bounded—

on the north and west by the east coast of the United States;

on the east by the meridian of longitude 68°30'W from the coast of the United States to latitude 40°N and thence by the rhumb line to the point latitude 36°N, longitude 73°W;

on the south by the parallel of latitude 36°N;

is a Winter Seasonal Area.

Seasonal periods:

WINTER: 1 November to 31 March
SUMMER: 1 April to 31 October

REGULATION 51

Enclosed Seas

(1) *Baltic Sea*

This sea bounded by the parallel of latitude of the Skaw in the Skagerrak is included in the Summer Zones.

However, for ships of 100 metres (328 feet) and under in length, it is a Winter Seasonal Area.

Seasonal periods:

WINTER: 1 November to 31 March
SUMMER: 1 April to 31 October

(2) *Black Sea*

This sea is included in the Summer Zones.

However, for ships of 100 metres (328 feet) and under in length, the area north of latitude 44°N is a Winter Seasonal Area.

Seasonal periods:

WINTER: 1 December to 28/29 February
SUMMER: 1 March to 30 November

(3) *Mediterranean*

This sea is included in the Summer Zones.

However, for ships of 100 metres (328 feet) and under in length, the area bounded—

on the north and west by the coasts of France and Spain and the meridian of longitude 3°E from the coast of Spain to latitude 40°N;

THE SCHEDULE—*continued*

on the south by the parallel of latitude 40°N from longitude 3°E to the west coast of Sardinia;

on the east by the west and north coasts of Sardinia from latitude 40°N to longitude 9°E, thence by the meridian of longitude 9°E to the south coast of Corsica, thence by the west and north coasts of Corsica to longitude 9°E and thence by the rhumb line to Cape Sicié;

is a Winter Seasonal Area.

Seasonal periods:

WINTER: 16 December to 15 March
SUMMER: 16 March to 15 December

(4) *Sea of Japan*

This sea south of latitude 50°N is included in the Summer Zones.

However, for ships of 100 metres (328 feet) and under in length, the area between the parallel of latitude 50°N and the rhumb line from the east coast of Korea at latitude 38°N to the west coast of Hokkaido, Japan, at latitude 43°12'N is a Winter Seasonal Area.

Seasonal periods:

WINTER: 1 December to 28/29 February
SUMMER: 1 March to 30 November

REGULATION 52

The Winter North Atlantic Load Line

The part of the North Atlantic referred to in Regulation 40 (6) (Annex I) comprises:

(*a*) that part of the North Atlantic Winter Seasonal Zone II which lies between the meridians of 15°W and 50°W;

(*b*) the whole of the North Atlantic Winter Seasonal Zone I, the Shetland Islands to be considered as being on the boundary.

THE SCHEDULE—*continued*

ANNEX III

CERTIFICATES

INTERNATIONAL LOAD LINE CERTIFICATE (1966)

(Official seal)

Issued under the provisions of the International Convention on Load Lines, 1966, under the authority of the Government of

(full official designation of the country)

.....

(full official designation of the competent person or organization

by.....

recognized under the provisions of the International Convention

Name of Ship	Distinctive Number or Letters	Port of Registry	Length (L) as defined in Article 2 (8)
	on Load Lines, 1966)		

Freeboard assigned as:	Type of ship
A new ship	Type 'A'
	Type 'B'
An existing ship	Type 'B' with reduced freeboard
	Type'B' with increased freeboard

* Delete whatever is inapplicable.

	Freeboard from deck line	Load line
Tropical	mm. (inches) (T)	mm. (inches) above (S)
Summer	mm. (inches) (S)	Upper edge of line through centre of ring
Winter	mm. (inches) (W)	mm. (inches) below (S)
Winter North Atlantic	mm. (inches) (WNA)	mm. (inches) below (S)
Timber tropical	mm. (inches) (LT)	mm. (inches) above (LS)
Timber summer	mm. (inches) (LS)	mm. (inches) above (S)
Timber winter	mm. (inches) (LW)	mm. (inches) below (LS)
Timber winter North Atlantic	mm. (inches) (LWNA)	mm. (inches) below (LS)

NOTE: Freeboards and load lines which are not applicable need not be entered on the certificate.

Allowance for fresh water for all freeboards other than timber .....mm. (inches). For timber freeboards.....mm. (inches).

THE SCHEDULE—*continued*

The upper edge of the deck line from which these freeboards are measured is.....mm. (inches)
.....deck at side.

Date of initial or periodical survey.....

This is to certify that this ship has been surveyed and that the freeboards have been assigned and load lines shown above have been marked in accordance with the International Convention on Load Lines, 1966.

This certificate is valid until....., subject to periodical inspections in accordance with Article 14 (l)(c) of the Convention.

Issued at.....
(Place of issue of certificate)

.....19..... .....
(Date of issue) (Signature of official issuing the certificate)

and/or

(Seal of issuing authority)

if signed, the following paragraph is to be added:

The undersigned declares that he is duly authorized by the said Government to issue this certificate.

.....
(Signature)

NOTES: 1. When a ship departs from a port situated on a river or inland waters, deeper loading shall be permitted corresponding to the weight of fuel and all other materials required for consumption between the point of departure and the sea.

2. When a ship is in fresh water of unit density the appropriate load line may be submerged by the amount of the fresh water allowance shown above. Where the density is other than unity, an allowance shall be made proportional to the difference between 1.025 and the actual density.

Reverse of Certificate

This is to certify that at a periodical inspection required by Article 14(1) (c) of the Convention, this ship was found to comply with the relevant provisions of the Convention.

Place..... Date.....
Signature and/or Seal of issuing authority.

Place..... Date.....
Signature and/or Seal of issuing authority.

Place..... Date.....
Signature and/or Seal of issuing authority.

Place..... Date.....
Signature and/or Seal of issuing authority.

The provisions of the Convention being fully complied with by this ship, the validity of this certificate is, in accordance with Article 19 (2) of the Convention, extended until.....

Date.....
Signature and/or Seal of issuing authority.

THE SCHEDULE—*continued*

INTERNATIONAL LOAD LINE EXEMPTION CERTIFICATE

(Official seal)

Issued under the provisions of the International Convention on Load Lines, 1966, under the authority of the Government of

full official designation of the country)

.....

(full official designation of the competent person or organization

by.....

recognized under the provisions of the International Convention

Name of Ship	Distinctive Number or Letters	Port of Registry
.....	.....	.....
on Load Lines, 1966)		
.....	.....	.....

This is to certify that the above-mentioned ship is exempted from the provisions of the 1966 Convention, under the authority conferred by Article 6 (2)/Article 6 (4)* of the Convention referred to above.

The provisions of the Convention from which the ship is exempted under Article 6 (2) are:

* Delete whichever is inapplicable.

The voyage for which exemption is granted under Article 6 (4) is:

From:.....

To:.....

Conditions, if any, on which the exemption is granted under either Article 6 (2) or Article 6 (4):

This certificate is valid until.....subject, where appropriate, to periodical inspections in accordance with Article 14 (1) (*c*) of the Convention.

Issued at.....

(Place of issue of certificate)

.....19.....

(Date of issue) (Signature of official issuing the certificate)

and/or

(Seal of issuing authority)

If signed, the following paragraph is to be added:

The undersigned declares that he is duly authorized by the said Government to issue this certificate.

.....

(Signature)

THE SCHEDULE—*continued*

Reverse of Certificate

This is to certify that this ship continues to comply with the conditions under which this exemption was granted.

Place..... Date.....

Signature and/or Seal of issuing authority.

Place..... Date.....

Signature and/or Seal of issuing authority.

Place..... Date.....

Signature and/or Seal of issuing authority.

Place.....

Signature and/or Seal of issuing authority.

This ship continues to comply with the conditions under which this exemption was granted and the validity of this certificate is, in accordance with Article 19 (4) (*a*) of the Convention, extended until.....

Place..... Date.....

Signature and/or Seal of issuing authority.".