Treaty Series No. 25 (2005)

International Convention for the Safety of Life at Sea

2002 Amendments (MSC.123(75))

2002 Amendments to the Protocol of 1998 MSC.124(75))

2002 Amendments to the Guidelines on the Enhanced Programme of Inspections during Surveys of Bulk Carriers and Oil Tankers (Resolution A.744(18), as amended) (MSC.125(75))

London, 24 May 2002

2002 Amendments (MSC.134(76))

London, 12 December 2002

[The Amendments entered into force on 1 January 2004]

Presented to Parliament
by the Secretary of State for Foreign and Commonwealth Affairs
by Command of Her Majesty
June 2005

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2002 AMENDMENTS TO THE INTERNATIONAL CONVENTION FOR THE SAFETY OF LIFE AT SEA, 1974,[1] AS AMENDED

(Resolution MSC.123(75))
(adopted on 24 May 2002)

CHAPTER 1V

RADIOCOMMUNICATIONS

Regulation 1—Application

1. Paragraphs 3, 4, 5, 6 and 7 are deleted.

2. Existing paragraph 8 is renumbered as paragraph 3.

Regulation 3—Exemptions

3. The word "; or" at the end of paragraph 2.2 is replaced by full stop(.).

4. Paragraph 2.3 is deleted.

Regulation 4—Functional requirements

5. In paragraph 1.6, the reference to "V/12(g) and (h)" is replaced by "V/19.2.3.2".

Regulation 7—Radio equipment: General

6. Paragraphs 2, 3 and 4 are deleted.

7. Existing paragraph 5 is renumbered as paragraph 2.

Regulation 12—Watches

8. Paragraph 4 is deleted.

Regulation 14—Performance standards

9. In paragraph 1, in the second sentence, the words "Subject to paragraph 2," are deleted.

10. Paragraph 2 is deleted.

CHAPTER V

SAFETY OF NAVIGATION

Regulation 21—International Code of Signals

11. The title of the regulation is replaced by the following:

"International Code of Signals and IAMSAR Manual"

12. The existing paragraph is numbered as paragraph 1.

13. A new paragraph 2 is added as follows:

"2. All ships shall carry an up-to-date copy of Volume III of the International Aeronautical and Maritime Search and Rescue (IAMSAR) Manual."

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[1]Treaty Series No. 46 (1980) Cmnd 7874.

CHAPTER VI

CARRIAGE OF CARGOES

Regulation 2—Cargo information

14. In existing paragraph 2.3, the words "regulation VII/2" are replaced by the words "the IMDG Code, as defined in regulation VII/1.1".

Regulation 5—Stowage and securing

15. In existing paragraph 1, the words "Cargo and cargo units" are replaced by the words "Cargo, cargo units and cargo transport units".

16. In existing paragraph 2, the words "cargo carried in cargo unit" are replaced by the words "cargo, cargo units and cargo transport units".

17. In existing paragraph 4, the words "cargo units" are replaced by the words "cargo units and cargo transport units" (in two places).

18. In existing paragraph 5, the word "Containers" is replaced by the words "Freight containers" and in the last line, after "(CSC)", at the end of the sentence, the words ", as amended" are added.

19. Existing paragraph 6 is replaced by the following:

> "All cargoes, other than solid and liquid bulk cargoes, cargo units and cargo transport units shall be loaded, stowed and secured throughout the voyage in accordance with the Cargo Securing Manual approved by the Administration. In ships with ro-ro spaces, as defined in regulation II-2/3.41, all securing of such cargoes, cargo units and cargo transport units, in accordance with the Cargo Securing Manual, shall be completed before the ship leaves the berth. The Cargo Securing Manual shall be drawn up to a standard at least equivalent to relevant guidelines developed by the Organization."

Regulation 6—Acceptability for shipment

20. In existing paragraph 3, the words "regulation V11/2" are replaced by the words "the IMDG Code, as defined in regulation V11/1.1".

CHAPTER VII

CARRIAGE OF DANGEROUS GOODS

21. Existing part A is replaced by the following new part A and part A-1:

"PART A

CARRIAGE OF DANGEROUS GOODS IN PACKAGED FORM

Regulation 1

Definitions

For the purpose of this chapter, unless expressly provided otherwise:

1. *IMDG Code* means the International Maritime Dangerous Goods (IMDG) Code adopted by the Maritime Safety Committee of the Organization by resolution MSC.122(75), as may be amended by the Organization, provided that such amendments are adopted, brought into force and take effect in accordance with the provisions of article VIII of the present Convention concerning the amendment procedures applicable to the annex other than chapter 1.

2. *Dangerous goods* mean the substances, materials and articles covered by the IMDG Code.

3. *Packaged form* means the form of containment specified in the IMDG Code.

Regulation 2

Application

1. Unless expressly provided otherwise, this part applies to the carriage of dangerous goods in packaged form in all ships to which the present regulations apply and in cargo ships of less than 500 gross tonnage.

2. The provisions of this part do not apply to ships' stores and equipment.

3. The carriage of dangerous goods in packaged form is prohibited except in accordance with the provisions of this chapter.

4. To supplement the provisions of this part, each Contracting Government shall issue, or cause to be issued, detailed instructions on emergency response and medical first aid relevant to incidents involving dangerous goods in packaged form, taking into account the guidelines developed by the Organization.

Regulation 3

Requirements for the carriage of dangerous goods

The carriage of dangerous goods in packaged form shall be in compliance with the relevant provisions of the IMDG Code.

Regulation 4

Documents

1. In all documents relating to the carriage of dangerous goods in packaged form by sea, the proper shipping name of the goods shall be used (trade names alone shall not be used) and the correct description given in accordance with the classification set out in the IMDG Code.

2. The transport documents prepared by the shipper shall include, or be accompanied by, a signed certificate or a declaration that the consignment, as offered for carriage, is properly packaged, marked, labelled or placarded, as appropriate, and in proper condition for carriage.

3. The person(s) responsible for the packing/loading of dangerous goods in a cargo transport unit shall provide a signed container/vehicle packing certificate stating that the cargo in the unit has been properly packed and secured and that all applicable transport requirements have been met. Such a certificate may be combined with the document referred to in paragraph 2.

4. Where there is due cause to suspect that a cargo transport unit in which dangerous goods are packed is not in compliance with the requirements of paragraph 2 or 3, or where a container/vehicle packing certificate is not available, the cargo transport unit shall not be accepted for carriage.

5. Each ship carrying dangerous goods in packaged form shall have a special list or manifest setting forth, in accordance with the classification set out in the IMDG Code, the dangerous goods on board and the location thereof. A detailed stowage plan, which identifies by class and sets out the locations of all dangerous goods on board, may be used in place of such a special list or manifest. A copy of one of these documents shall be made available before departure to the person or organization designated by the port State authority.

Regulation 5

Cargo Securing Manual

Cargo, cargo units and cargo transport units, shall be loaded, stowed and secured throughout the voyage in accordance with the Cargo Securing Manual approved by the Administration. The Cargo Securing Manual shall be drawn up to a standard at least equivalent to the guidelines developed by the Organization.

Regulation 6

Reporting of incidents involving dangerous goods

1. When an incident takes place involving the loss or likely loss overboard of dangerous goods in packaged form into the sea, the master, or other person having charge of the ship, shall report the particulars of such an incident without delay and to the fullest extent possible to the nearest coastal State. The report shall be drawn up based on general principles and guidelines developed by the Organization.

2. In the event of the ship referred to in paragraph 1 being abandoned, or in the event of a report from such a ship being incomplete or unobtainable, the company, as defined in regulation IX/1.2, shall, to the fullest extent possible, assume the obligations placed upon the master by this regulation.

PART A-1

CARRIAGE OF DANGEROUS GOODS IN SOLID FORM IN BULK

Regulation 7

Definitions

Dangerous goods in solid form in bulk means any material, other than liquid or gas, consisting of a combination of particles, granules or any larger pieces of material, generally uniform in composition, which is covered by the IMDG Code and is loaded directly into the cargo spaces of a ship without any intermediate form of containment, and includes such materials loaded in a barge on a barge-carrying ship.

Regulation 7-1

Application

1. Unless expressly provided otherwise, this part applies to the carriage of dangerous goods in solid form in bulk in all ships, to which the present regulations apply and in cargo ships of less than 500 gross tonnage.

2. The carriage of dangerous goods in solid form in bulk is prohibited except in accordance with the provisions of this part.

3. To supplement the provisions of this part, each Contracting government shall issue, or cause to be issued, detailed instructions on the safe carriage of dangerous goods in solid form in bulk which shall include instructions on emergency response and medical first aid relevant to incidents involving dangerous goods in solid form in bulk, taking into account the guidelines developed by the Organization.

Regulation 7-2

Documents

1. In all documents relating to the carriage of dangerous goods in solid form in bulk by sea, the bulk cargo shipping name of the goods shall be used (trade names alone shall not be used).

2. Each ship carrying dangerous goods in solid form in bulk shall have a special list or manifest setting forth the dangerous goods on board and the location thereof. A detailed stowage plan, which identifies by class and sets out the location of all dangerous goods on board, may be used in place of such a special list or manifest. A copy of one of these documents shall be made available before departure to the person or organization designated by the port State authority.

Regulation 7-3

Stowage and segregation requirements

1. Dangerous goods in solid form in bulk shall be loaded and stowed safely and appropriately in accordance with the nature of the goods. Incompatible goods shall be segregated from one another.

2. Dangerous goods in solid bulk form, which are liable to spontaneous heating or combustion, shall not be carried unless adequate precautions have been taken to minimize the likelihood of the outbreak of fire.

3. Dangerous goods in solid form in bulk, which give off dangeorus vapours, shall be stowed in a well ventilated cargo space.

Regulation 7-4

Reporting of incidents involving dangerous goods

1. When an incident takes place involving the loss or likely loss overboard of dangerous goods in solid form in bulk into the sea, the master, or other person having charge of the ship, shall report the particulars of such an incident without delay and to the fullest extent possble to the nearest coastal State. The report shall be drawn up based on general principles and guidelines developed by the Organization.

2. In the event of the ship referred to in paragraph 1 being abandoned, or in the event of a report from such a ship being incomplete or unobtainable, the company, as defined in regulation IX/1.2, shall, to the fullest extent possible, assume the obligations placed upon the master by the regulation."

PART D

SPECIAL REQUIREMENTS FOR THE CARRIAGE OF PACKAGED IRRADIATED NUCLEAR FUEL, PLUTONIUM AND HIGH-LEVEL RADIOACTIVE WASTES ON BOARD SHIPS

Regulation 14–Definitions

22. Existing paragraph 2 is replaced by the following.

> "INF cargo means packaged irradiated nuclear fuel, plutonium and high-level radioactive wastes carried as cargo in accordance with class 7 of the IMDG Code."

23. Existing paragraph 6 is deleted.

APPENDIX

CERTIFICATES

Record of Equipment for the Passenger Ship Safety Certificate (Form P)

24. In section 3, items 7 and 8 and related footnotes are deleted.

Record of Equipment for the Cargo Ship Safety Radio Certificate (Form R)

25. In section 2, items 7 and 8 and related footnotes are deleted.

26. Section 4 is deleted.

2002 AMENDMENTS TO THE PROTOCOL OF 1998 RELATING TO THE INTERNATIONAL CONVENTION FOR THE SAFETY OF LIFE AT SEA, 1974[1]

(Resolution MSC.124(75))
(adopted on 24 May 2002)

APPENDIX

MODIFICATIONS AND ADDITIONS TO THE APPENDIX TO THE ANNEX TO THE INTERNATIONAL CONVENTION FOR THE SAFETY OF LIFE AT SEA, 1974

Record of Equipment for the Passenger Ship Safety Certificate (Form P)

1. In section 3, items 7 and 8 and related footnotes are deleted.

Record of Equipment for the Cargo Ship Safety Radio Certificate (form R)

2. In section 2, items 7 and 8 and related footnotes are deleted.

3. Section 4 is deleted.

Record of Equipment for the Cargo Ship Safety Certificate (Form C)

4. In section 3, items 7 and 8 and related footnotes are deleted.

2002 AMENDMENTS TO THE GUIDELINES ON THE ENHANCED PROGRAMME OF INSPECTIONS DURING SURVEYS OF BULK CARRIERS AND OIL TANKERS* (Resolution A.744(18))

(Adopted in accordance with article VIII of the International Convention for the Safety of Life at Sea, 1974)

* By virtue of the amendments adopted to the International Convention for the Safety of Life at Sea, 1974, by resolution 1 (Annex 1) of the Conference of Contracting Governments to the International Convention for the Safety of Life at Sea, 1974, on 24 May 1994, the Guidelines on the Enhanced Programme of Inspections during Surveys of Bulk Carriers and Oil Tankers are mandatory under the Convention.

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[1]Treaty Series No. 11 (2001) Cm 5044.

RESOLUTION MSC.125(75)
(adopted on 24 May 2002)

ANNEX A

GUIDELINES ON THE ENHANCED PROGRAMME OF INSPECTIONS DURING SURVEYS OF BULK CARRIERS

1. The "Contents" are amended as follows:

.1 the existing text of 1.3 is replaced by the following:

"1.3 Repairs";

.2 the following new item is added after the existing 3.5:

"3.6 Additional annual survey requirements for the foremost cargo hold of ships subject to SOLAS regulation XII/9.1";

.3 the existing text of 4 to 4.4 is replaced by the following:

"4. INTERMEDIATE ENHANCED SURVEY

4.1 General

4.2 Bulk carriers 5-10 years of age

4.3 Bulk carriers 10-15 years of age;

4.4 Bulk carriers exceeding 15 years of age";

.4 the existing text of 6 and 6.1 is deleted and 7, 8 and 9 are renumbered as 6, 7 and 8;

.5 the following new appendices 4 and 5 are added in annex 8 after appendix 3:

"Appendix 4 Ore carriers—Thickness measurement and typical transverse section indicating longitudinal and transverse members

Appendix 5 Ore carriers—Thickness measurement and close-up survey requirements";

.6 the following new annexes 11 and 12 are added after annex 10:

"Annex 11 Guidelines for the gauging of the vertically corrugated transverse watertight bulkhead between holds Nos. 1 and 2

Annex 12 Additional annual survey requirements for the foremost cargo hold of ships subject to SOLAS regulation XII/9.1"

2. The following new paragraphs 1.2.15 and 1.2.16 are added after the existing paragraph 1.2.14:

"1.2.15 *A prompt and thorough repair* is a permanent repair completed at the time of survey to the satisfaction of the surveyor, therein removing the need for the imposition of any associated condition of classification.

1.2.16 *Convention* means the International Convention for the Safety of Life at Sea, 1974, as amended."

3. The existing text of section 1.3 is replaced by the following:

"**1.3 Repairs**

1.3.1 Any damage in association with wastage over the allowable limits (including buckling, grooving, detachment or fracture), or extensive areas of wastage over the allowable limits, which affects or, in the opinion of the

Administration, will affect the ship's structural, watertight or weathertight integrity, should be promptly and thoroughly repaired. Areas to be considered include:

.1 side shell frames, their end attachment or adjacent shell plating;

.2 deck structure and deck plating;

.3 bottom structure and bottom plating;

.4 watertight or oiltight bulkheads, and

.5 hatch covers or hatch coamings.

Where adequate repair facilities are not available, the Administration may allow the ship to proceed directly to a repair facility. This may require discharging the cargo and/or temporary repairs for the intended voyage.

1.3.2 Additionally, when a survey results in the identification of significant corrosion or structural defects, either of which, in the opinion of the Administration, will impair the ship's fitness for continued service, remedial measures should be implemented before the ship continues in service."

4. The following text is added at the end of paragraph 2.6.1:

"Annex 11 provides additional thickness measurement guidelines applicable to the vertically corrugated transverse watertight bulkhead between cargo hold Nos. 1 and 2 on ships subject to compliance with regulation XII/6.2 of the Convention."

5. The following new paragraph 3.6 is added after the existing paragraph 3.5.1:

"3.6 Additional annual survey of the foremost cargo hold of ships subject to regulation XII/9.1 of the Convention in accordance with the requirements of annex 12

Ships subject to regulation XII/9.1 of the Convention are those meeting all of the following conditions:

.1 bulk carrriers of 150 m in length and upwards of single side skin construction;

.2 carrying solid bulk cargoes having a density of 1,780 kg/m^3 and above;

.3 constructed before 1 July 1999; and

.4 constructed with an insufficient number of transverse watertight bulkheads to enable them to withstand flooding of the foremost cargo hold in all loading conditions and remain afloat in a satisfactory condition of equilibrium as specified in regulation XII/4.3 of the Convention."

6. The existing text of section 4 is replaced by the following:

"**4. INTERMEDIATE ENHANCED SURVEY**

4.1 General

4.1.1 Items that are additional to the requirements of the annual survey may be surveyed either at the second or third annual survey or between these surveys.

4.1.2 The extent of survey is dependent upon the age of the ship as specified in 4.2, 4.3 and 4.4.

4.2 **Bulk carriers of 5 to 10 years of age**

4.2.1 Ballast tanks

4.2.1.1 For spaces used for salt water ballast, an overall survey of representative spaces selected by the surveyor should be carried out. If such inspections reveal no visible structural defects, the examination may be limited to a verification that the protective coating remains efficient.

4.2.1.2 Where POOR coating condition, corrosion or other defects are found in salt water ballast spaces or where protective coating was not applied from the time of construction, the examination should be extended to other ballast spaces of the same type.

4.2.1.3 In salt water ballast spaces other than double bottom tanks, where a protective coating is found in POOR condition and it is not renewed, or where soft coating has been applied, or where a protective coating was not applied from the time of construction, the tanks in question should be examined and thickness measurements carrried out as considered necessary at annual intervals. When such breakdown of coating is found in salt water ballast double bottom tanks, where a soft coating has been applied, or where a coating has not been applied, the tanks in question should be examined at annual intervals. When considered necessary by the surveyor, or where extensive corrosion exits, thickness measurements should be carried out.

4.2.1.4 In addition to the requirements above, areas found to be suspect areas at the previous periodical survey should be overall and close-up surveyed.

4.2.2 Cargo holds

4.2.2.1 An overall survey of all cargo holds, including close-up survey of sufficient extent, minimum 25% of frames, should be carried out to establish the condition of:

.1 shell frames including their upper and lower end attachments, adjacent shell plating, and transverse bulkheads in the forward cargo hold and one other selected cargo hold; and

.2 areas found to be suspect areas at the previous peridocial survey.

4.2.2.2 Where considered necessary by the surveyor as a result of the overall and close-up survey as described in 4.2.2.1, the survey should be extended to include a close-up survey of all of the shell frames and adjacent shell plating of that cargo hold as well as a close-up survey of sufficient extent of all remaining cargo holds.

4.2.3 Extent of thickness measurement

4.2.3.1 Thickness measurement should be carried out to an extent sufficient to determine both general and local corrosion levels at areas subject to close-up survey as described in 4.2.2.1. The minimum requirement for thickness measurements at the intermediate enhanced survey are areas found to be suspect areas at the previous periodical survey.

4.2.3.2 Where substantial corrosion is found, the extent of thickness measurements should be increased in accordance with the requirements of annex 10.

4.2.3.3 The thickness measurement may be dispensed with provided the surveyor is satisfied by the close-up survey, that there is no structural diminution and the protective coating, where applied, remains effective.

4.2.3.4 Where the protective coating in cargo holds, as referred to in the explanatory note below, is found to be in GOOD condition, the extent

of close-up surveys and thickness measurements may be specially considered by the Administration.

Explanatory note:

At the time of new construction, all internal and external surfaces of hatch coamings and hatch covers, and all internal surfaces of the cargo holds, excluding the flat tank top areas and the hopper tanks sloping plating aproximately 300 mm below the side shell frame and brackets, should have an efficient protective coating (epoxy coating or equivalent) applied in accordance with the manufacturer's recommendation. In the selection of coating, due consideration should be given by the owner to intended cargo conditions expected in service. For existing bulk carriers, where owners may elect to coat or recoat cargo holds as noted above, consideration may be given to the extent of the close-up and thickness measurement surveys. Prior to the coating of cargo holds of existing ships, scantlings should be ascertained in the presence of a surveyor.

4.3 Bulk carriers 10–15 years of age

4.3.1 Ballast tanks

4.3.1.1 For bulk carriers;

All salt water ballast tanks should be examined. If such inspections reveal no visible structural defects, the examination may be limited to a verification that the protective coating remains efficient.

4.3.1.2 For ore carriers:

.1 all web frame rings – in one ballast wing tank;

.2 one deck transverse – in each of the remaining ballast wing tanks;

.3 both transverse bulkheads – in one ballast wing tank;

.4 one transverse bulkhead – in each remaining ballast wing tank.

4.3.1.3 In addition, the requirements described in 4.2.1.2 to 4.2.1.4 apply.

4.3.2 Cargo holds

4.3.2.1 An overall survey of all cargo holds, including close-up survey of sufficient extent, minimum 25% of frames, should be carried out to establish the condition of:

.1 shell frames including their upper and lower end attachments, adjacent shell plating, and transverse bulkheads of all cargo holds; and

.2 areas found to be suspect areas at the previous periodical survey.

4.3.2.2 Where considered necessary by the surveyor as a result of the overall and close-up survey as described in 4.3.2.1, the survey should be extended to include a close-up survey of all of the shell frames and adjacent plating of all cargo holds.

4.3.3 Extent of thickness measurement

4.3.3.1 Thickness measurement should be carried out to an extent sufficient to determine both general and local corrosion levels at areas subject to close-up survey as described in 4.3.2.1. The minimum requirement for thickness measurements at the intermediate enhanced survey are areas found to be suspect areas at the previous periodical survey.

4.3.3.2 In addition, the requirements described in 4.2.3.2 to 4.2.3.4 apply.

4.4 Bulk carriers exceeding 15 years of age

4.4.1 The requirements of the intermediate enhanced survey should be to the same extent as the previous periodical survey required in 2 and 5.1. However, pressure testing of tanks and cargo holds used for ballast is not required unless deemed necessary by the attending surveyor.

4.4.2 In application of 4.4.1, the intermediate enhanced survey may be commenced at the second annual survey and be progressed during the succeeding year with a view to completion at the third annual survey in lieu of the application of 2.1.1."

7. The existing text of paragraph 5.2.2 is replaced by the following:

"5.2.2 Tanks and spaces should be safe for access, ie gas-freed, ventilated, and illuminated."

8. The text of chapter 6 is deleted and the following chapters 7, 8 and 9 are renumbered accordingly.

9. The following new subparagraph 5 is added at the end of existing paragraph 7.3.1 (renumbered paragraph 6.3.1):

".5 survey programme as required by 5.1 until such time as the periodical survey has been completed."

10. The existing test of section 8.1 (renumbered section 7.1) is replaced by the following:

"7.1 General

7.1.1 The required thickness measurements, if not carried out by the recognised organization acting on behalf of the Administration, should be witnessed by a surveyor of the recognised organization. The surveyor should be on board to the extent necessary to control the process.

7.1.2 The thickness measurement company should be part of the survey planning meeting to be held prior to commencing the survey.

7.1.3 In all cases the extent of the thickness measurements should be sufficient as to represent the actual average condition."

11. The table in annex 2 is amended as follows:

.1 In the second column "$5 < AGE \leq 10$", the existing text of item 6 is replaced by the following:

"6. Wind and water strakes in way of transverse sections considered under point 2 above."

.2 In the third column "$10 < AGE \leq 15$", the following new item 8 is added at the end:

"8. As required by annex 12 for ships subject to compliance with regulation XII/6.2 of the Convention."

12. In annex 7, the table headed "Extract of thickness measurements" is amended as follows:

.1 The existing text of the heading of the first column is replaced by the following:

"Position of susbtantially corroded tanks/areas or areas with deep pitting"

.2 The following new note is added at the end of the table:

"3. Any bottom plating with a pitting intensity of 20% or more, with wastage in the substantial corrosion range or having an average depth of pitting of 1/3 or more of actual plate thickness should be noted."

13. In annex 8, General, the following new appendices are added to the list of appendices:

"Appendix 4 Ore carriers–Thickness measurement and typical transverse section indicating longitudinal and transverse members

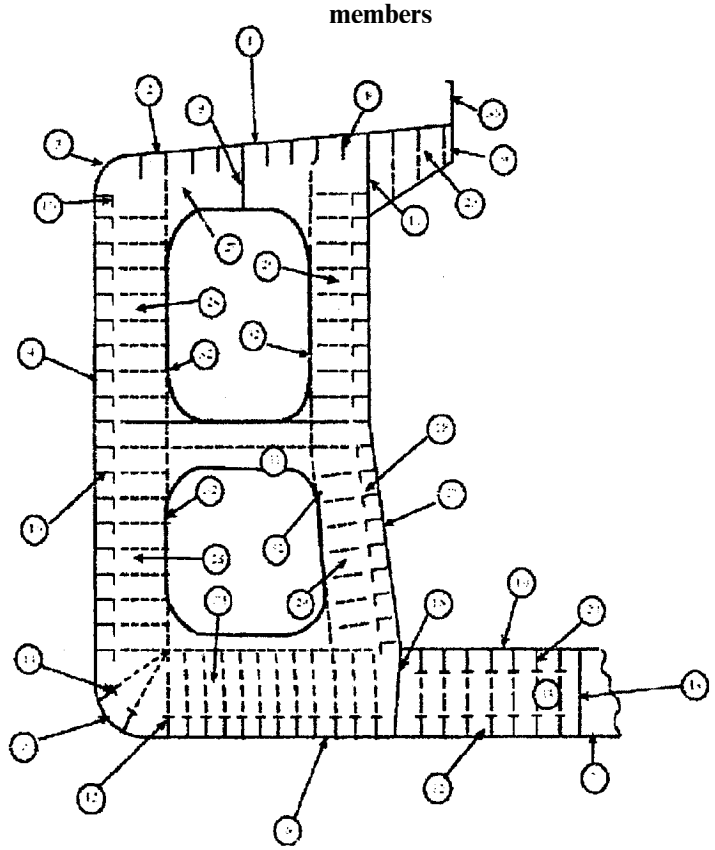
Appendix 5 Ore carriers–Thickness measurement and close-up survey requirements";

14. In annex 8, the following new appendices 4 and 5 are added after appendix 3:

"Appendix 4

Ore carriers

Thickness measurement and typical transverse section indicating longitudinal and transverse members



Report on TM2-BC (1) and (2)
1. Strength deck plating
2. Stringer plate
3. Sheerstrake
4. Side shell plating
5. Bilge plating
6. Bottom shell plating
7. Keel plate

Report on TM3-BC
8. Deck longitudinals
9. Deck girders
10. Sheerstrake longitudinals
11. Longitudinal bulkhead top strake
12. Bottom longitudinals
13. Bottom girders
14. Bilge longitudinals
15. Longitudinal bulkhead lower strake
16. Side shell longitudinals
17. Longitudinal bulkhead plating (remainder)
18. Longitudinal bulkhead longitudinals
19. Inner bottom plating
20. Inner bottom longitudinals

Report on TM4-BC
25. Deck transverse centre tank
26. Bottom transverse centre tank
27. Deck transverse wing tank
28. Side shell vertical web
29. Longitudinal bulk-head vertical web
30. Bottom transverse wing tank
31. Struts
32. Transverse web face plate
33. D.b. floors

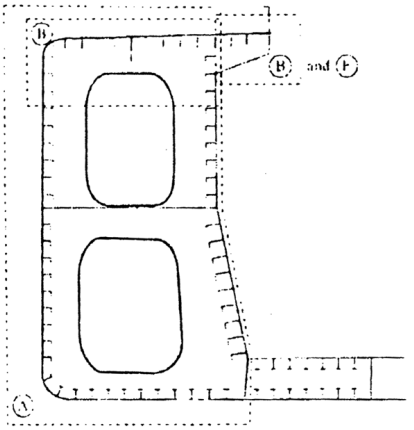
Report on TM6-BC
36. Hatch coamings
37. Deck plating between hatches
38. Hatch covers

Appendix 5

Ore carriers

Thickness measurement and close-up survey requirements

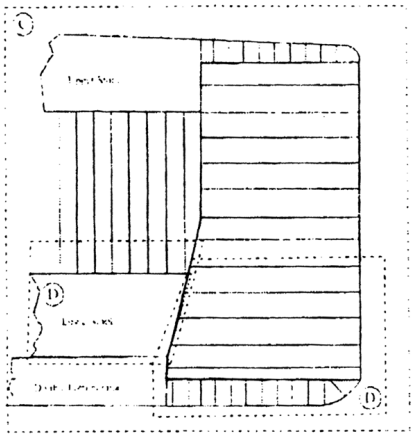
Typical transverse section close-up survey



Thickness to be reported on TM3-T of Annex B and TM4-T of Annex B as appropriate

Close-up survey area

Typical transverse bulkhead



Thickness to be reported on TM5-T of Annex B

Recommendations for the extent and patterm of gaugings are indicated in Annex 10.

15. In annex 10, in the table headed "Deck structure including cross strips, main cargo hatchways, hatch covers, coamings and top side tanks", the existing text of item "a", in the column headed "Extent of measurement", across from the entry "3. Hatch covers" in the column headed "Structural members" is replaced by the following:

"a. Side and end skirts, each 3 locations".

16. The following new annexes 11 and 12 are added after existing annex 10:

"ANNEX 11

GUIDELINES FOR THE GAUGING OF THE VERTICALLY CORRUGATED TRANSVERSE WATERTIGHT BULKHEAD BETWEEN HOLDS Nos. 1 AND 2

1. Gauging is necessary to determine the general condition of the structure and to define the extent of possible repairs and/or reinforcements of the vertically corrugated transverse watertight bulkhead for verification of the compliance with the Bulk carrier bulkhead and double bottom strength standards, defined in regulation XII/1.5 of the Convention.

2. Taking into account the buckling model specified in the Bulk carrier bulkhead and double bottom strength standards, defined in regulation XII/1.5 of the Convention, in the evaluation of strength of the bulkhead, it is essential to determine the thickness diminution at the critical levels shown in figures 1 and 2 of this annex.

3. The gauging should be carried out at the levels as described below. To adequately assess the scantlings of each individual vertical corrugation, each corrugation flange, web, shedder plate and gusset plate within each of the levels given below should be gauged.

Level (a) Ships without lower stool (see figure 1):

Locations:

— The mid-breadth of the corrugation flanges at approximately 200 mm above the line of shedder plates;

— The middle of gusset plates between corrugation flanges, where fitted;

— The middle of the shedder plates;

— The mid-breadth of the corrugation webs at approximately 200 mm above the line of shedder plates.

Level (b) Ships with lower stool (see figure 2):

Locations:

— The mid-breadth of the corrugation flanges at approximately 200 mm above the line of shedder plates;

— The middle of gusset plates betwen corrugation flanges, where fitted;

— The middle of the shedder plates;

— The mid-breadth of the corrugation webs at approximately 200 mm above the line of shedder plates.

Level (c) Ships with or without lower stool (see figures 1 and 2):

Locations:

— The mid-breadth of the corrugation flanges and webs at about the mid-height of the corrugation.

4. Where the thickness changes within the horizontal levels, the thinner plate should be gauged.

5. Steel renewal and/or reinforcement should comply with the Bulk carrier bulkhead and double bottom strength standards, defined in regulation XII/1.5 of the Convention.

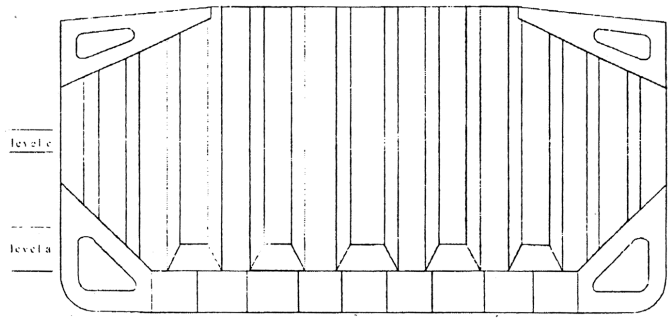


Figure 1. Ships without lower stool

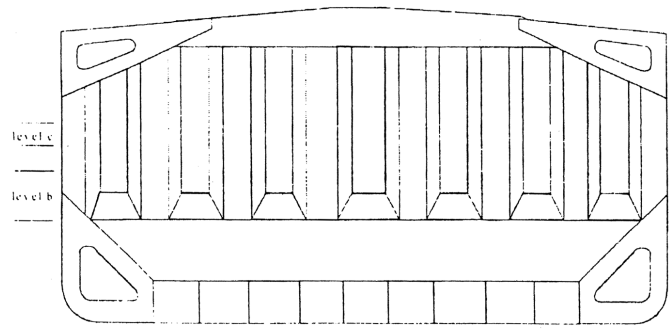


Figure 2. Ships with lower stool

ANNEX 12

ADDITIONAL ANNUAL SURVEY REQUIREMENTS FOR THE FOREMOST CARGO HOLD OF SHIPS SUBJECT TO SOLAS REGULATIONS XII/9.1

1. General

In the case of bulk carriers over 5 years of age, the annual survey should include, in addition to the requirements of the annual surveys prescribed in chapter 3 of the present Guidelines, an examination of the following items.

2. Extent of survey

2.1 For bulk carriers of 5–15 years of age:

2.1.1 An overall survey of the foremost cargo hold, including close-up survey of sufficient extent, minimum 25% of frames, should be carried out to establish the condition of:

.1 shell frames including their upper and lower end attachments, adjacent shell plating, and transverse bulkheads; and

.2 areas found to be suspect areas at the previous periodical survey.

2.1.2 Where considered necessary by the surveyor as a result of the overall and close-up survey as described in 2.1.1 above, the survey should be extended to include a close-up survey of all of the shell frames and adjacent shell plating of the cargo hold.

2.2 For bulk carriers exceeding 15 years of age:

An overall survey of the foremost cargo hold, including close-up survey should be carried out to establish the condition of:

.1 all shell frames including their upper and lower end attachments, adjacent shell plating, and transverse bulkheads; and

.2 areas found to be suspect areas at the previous periodical survey.

3. Extent of thickness measurement

3.1 Thickness measurement should be carried out to an extent sufficient to determine both general and local corrosion levels at areas subject to close-up survey, as described in 2.1 and 2.2. The minimum requirement for thickness measurements are areas found to be suspect areas at the previous periodical survey. Where substantial corrosion is found, the extent of thickness measurements should be increased with the requirements of annex 10.

3.2 The thickness measurement may be dispensed with provided the surveyor is satisfied by the close-up survey, there is no structural diminution and the protective coating, where applied, remains effective.

4. Special consideration

Where the protective coating, as referred to in the explanatory note below, in the foremost cargo hold is found to be in GOOD condition, the extent of close-up surveys and thickness measurements may be specially considered.

Explanatory note:

At the time of new construction, all internal and external surfaces of hatch coamings and hatch covers, and all internal surfaces of the cargo holds, excluding the flat tank top areas and the hopper tanks sloping plating aproximately 300 mm below the side shell frame and brackets, should have an efficient protective coating (epoxy coating or equivalent) applied in accordance with the manufacturer's recommendation. In the selection of coating, due consideration should be given by the owner to intended cargo conditions expected in service.

For existing bulk carriers, where owners may elect to coat or recoat cargo holds as noted above, consideration may be given to the extent of the close-up and thickness measurement surveys. Prior to the coating of cargo holds of existing ships, scantlings should be ascertained in the presence of a surveyor.

ANNEX B

GUIDELINES ON THE ENHANCED PROGRAMME OF INSPECTIONS DURING SURVEYS OF OIL TANKERS

17. The "Contents" are amended as follows:

.1 The existing text of 1.3 is replaced by the following:

"1.3 Repairs"

.2 The existing text of 4 to 4.4 is replaced by the following:

"4 INTERMEDIATE ENHANCED SURVEY

4.1 General

4.2 Oil tankers 5–10 years of age

4.3 Oil tankers 10-15 years of age

4.4 Oil tankers exceeding 15 years of age"

18. The following new paragraph 1.2.13 is added after the existing paragraph 1.2.12:

"1.2.13 *A prompt and thorough repair* is a permanent repair completed at the time of survey to the satisfaction of the surveyor, therein removing the need for the imposition of any associated condition of classification."

19. The existing text of section 1.3 is replaced by the following:

"1.3 Repairs

1.3.1 Any damage in association with wastage over the allowable limits (including buckling, grooving, detachment or fracture), or extensive areas of wastage over the allowable limits, which affects or, in the opinion of the Administration, will affect the ship's structural, watertight or weathertight integrity, should be promptly and thoroughly repaired. Areas to be considered include:

.1 side shell frames, their end attachments or adjacent shell plating:

.2 deck structure and deck plating:

.3 bottom structure and bottom plating;

.4 watertight or oiltight bulkheads; and

.5 hatch covers or hatch coamings.

Where adequate repair facilities are not available, the Administration may allow the ship to proceed directly to a repair facility. This may require discharging the cargo and/or temporary repairs for the intended voyage.

1.3.2 Additionally, when a survey results in the identification of significant corrosion or structural defects, either of which, in the opinion of the Administration, will impair the ship's fitness for continued service, remedial measures should be implemented before the ship continues in service."

20. In existing paragraph 2.1.3 the words ", as required in 2.1.5," are inserted between the words "piping" and "is in a satisfactory condition".

21. The existing text of paragraph 2.1.5 is replaced by the following:

"2.1.5 Cargo piping on deck, including crude oil washing (COW) piping, and cargo and ballast piping within the above tanks and spaces should be examined and operationally tested to working pressure to attending surveyor's satisfaction to ensure that tightness and condition remain satisfactory. Special attention should be given to any ballast piping in cargo tanks and cargo piping in ballast tanks and void spaces, and surveyors should be advised on all occasions when this piping, including valves and fittings, are open during repair periods and can be examined internally."

22. The existing text of paragraph 2.3.1 is replaced by the following:

"Where provided, the condition of the corrosion prevention system of cargo tanks should be examined. A ballast tank where a protective coating is found in POOR condition and it is not renewed, or where soft coating has been applied, or where a protective coating has not been applied from the time of construction, the tank in question should be examined at annual intervals. Thickness measurements should be carried out as deemed necessary by the surveyor."

23. The following new paragraph is added after the end of the existing paragraph 3.5.2:

"3.5.3 For oil tankers exceeding 15 years of age, all ballast tanks adjacent to (i.e with a common plane boundary) a cargo tank with any means of heating should be examined internally. When considered necessary by the surveyor, thickness measurements should be carried out and if the results of these thickness measurements indicate that substantial corrosion is found, the extent of thickness measurements should be increased in accordance with the requirements of annex 4.

Tanks or areas where coating was found to be in GOOD condition at the previous intermediate or periodical survey may be specially considered by the Administration."

24. The existing text of paragraphs 4 to 4.4.2 is replaced by the following:

"4. INTERMEDIATE ENHANCED SURVEY

4.1 General

4.1.1 Items that are additional to the requirements of the annual survey may be surveyed either at the second or third annual survey or between these surveys.

4.1.2 The survey extent of cargo and ballast tanks dependent on the age of the ship is specified in 4.2, 4.3 and 4.4

4.1.3 For weather decks, an examination as far as applicable of cargo, crude oil washing, bunker, ballast, steam and vent piping systems as well as vent masts and headers. If upon examination there is any doubt as to the condition of the piping, the piping may be required to be pressure tested, thickness measured or both.

4.2 Oil tankers of 5 to 10 years of age

4.2.1 The requirements of 4.1.3 apply.

4.2.2 For tanks used for salt water ballast, an overall survey of representative tanks selected by the surveyor should be carried out. If such inspections reveal no visible structural defects, the examination may be limited to a verification that the protective coating remains efficient.

4.2.3 Where POOR coating condition, corrosion or other defects are found in salt water ballast tanks or where a protective coating was not applied from the time of construction, the examination should be extended to other ballast tanks of the same type.

4.2.4 In salt water ballast tanks where a protective coating is found in POOR condition and it is not renewed, or where soft coating has been applied, or where a protective coating was not applied from the time of construction, the tanks in question should be examined and thickness measurements carried out as considered necessary at annual intervals.

4.3 Oil tankers of 10 to 15 years of age

4.3.1 The requirements of 4.2 apply.

4.3.2 An overall survey of at least two representative cargo tanks should be carried out.

4.3.3 For tanks used for salt water ballast including combined cargo/ballast tanks, an overall survey of all such tanks shoud be carried out. If such survey reveals no visible structural defects, the survey may be limited to a verification that the protective coatings remain efficient.

4.3.4 Extent of close-up survey:

.1 Ballast tanks: To the same extent as previous periodical survey.

.2 Cargo tanks: Two combined cargo/ballast tanks. The extent of survey should be based on the record of the previous periodical suvey, and repair history of the tanks.

The extent of close-up surveys may be extended as stated in 2.4.3. For areas in tanks where coatings are found to be in GOOD condition, the extent of the close-up surveys may be specially considered by the Administration.

4.3.5 Extent of thickness measurement

The minimum requirements for thickness measurements at the intermediate survey are areas found to be suspect areas at the previous perodical survey. Where substantial corrosion is found, the extent of the thickness measurements should be increased in accordance with the requirements of annex 4.

4.4 Oil tankers exceeding 15 years of age

4.4.1 The requirements of the intermediate survey should be to the same extent as the previous periodical survey as required in 2 and 5.1. However, pressure testing of cargo and ballast tanks is not required unless deemed necessary by the attending surveyor.

4.4.2 In application of 4.4.1, the intermediate enhanced survey may be commenced at the second annual survey and be progressed during the succeding year with a view to completion at the third annual survey in lieu of the application of 2.1.1."

25. The existing text of paragraph 5.2.2 is replaced by the following:

"5.2.2 Tanks and spaces should be safe for access, i.e gas-freed, ventilated and illuminated."

26. The following new subparagraph .6 is added after subparagraph .5 of existing paragraph 6.3.1:

".6 survey programme as required by 5.1 until such time as the periodical survey has been completed,".

27. The existing text of paragraph 7.1.1 is replaced by the following:

"7.1.1 The required thickness measurements, if not carried out by the recognised organization acting on behalf of the Administration, should be witnessed by a surveyor of the recognised organization. The surveyor should be on board to the extent necesary to control the process.

7.1.2 The thickness measurement company should be part of the survey planning meeting to be held prior to commencing the survey.

7.1.3 In all cases the extent of the thickness measurements should be sufficient as to represent the actual average condition."

28. Annex 9 is amended as follows:

.1 In the Condition evaluation report under the heading "Contents of condition evaluation report" after the existing Part 3, the following new Part 4 is inserted:

"Part 4-Cargo and ballast piping system:—Examined
—Operationally tested"

and the existing parts 4 to 9 are renumbered as parts 5 to 10;

.2 The table headed "Extract of thickness measurements" is amended as follows:

.1 The existing text of the heading of the first column is replaced by the following:

"Position of susbtantially corroded tanks/areas or areas with deep pitting"

.2 The following new note is added at the end of the table:

"3 Any bottom plating with a pitting intensity of 20% or more, with wastage in the substantial corrosion range or having an average depth of pitting of 1/3 or more of actual plate thickness should be noted."

29. In annex 11, the fourth sentence of the existing paragraph 3.1 is replaced by the following:

"The approach is basically an evaluation of the risk based on the knowledge and experience related to design and corrosion."

2002 AMENDMENTS TO THE INTERNATIONAL CONVENTION FOR THE SAFETY OF LIFE AT SEA, 1974, AS AMENDED

(Resolution MSC.234(76))
(adopted on 12 December 2002)

CHAPTER II-1

CONSTRUCTION — STRUCTURE, SUBDIVISION AND STABILITY, MACHINERY AND ELECTRICAL INSTALLATIONS

PART A-1

STRUCTURE OF SHIPS

1. The following new regulation 3-6 is added after existing regulation 3-5:

"Regulation 3-6

Access to and within spaces in the cargo area of oil tankers and bulk carriers

1. Application

1.1 Except as provided for in paragraph 1.2, this regulation applies to oil tankers of 500 gross tonnage and over and bulk carriers, as defined in regulation IX/1, of 20,000 gross tonnage and over, constructed on or after 1 January 2005.

1.2 Oil tankers of 500 gross tonnage and over constructed on or after 1 October 1994 but before 1 January 2005 shall comply with the provisions of regulations II-1/12-2 adopted by resolution MSC.27(61).

2. Means of access to cargo and other spaces

2.1 Each space within the cargo area shall be provided with a permanent means of access to enable, throughout the life of a ship, overall and close-up inspections and thickness measurements of the ship's structures to be carried out by the Administration, the company, as defined in regulation IX/1, and the ship's personnel and others as necessary. Such means of access shall comply with the requirements of paragraph 5 and with the Technical provisions for means of access for inspections, adopted by the Maritime Safety Committee by resolution MSC.133(76), as may be amended by the Organization, provided that such amendments are adopted, brought into force and take effect in accordance with the provisions of article VIII of the present Convention concerning the amendment procedures applicable to the Annex other than chapter 1.

2.2 Where a permanent means of access may be susceptible to damage during normal cargo loading and unloading operations or where it is impracticable to fit permanent means of access, the Administration may allow in lieu thereof, the provision of movable or portable means of access, as specified in the Technical provisions, provided that the means of attaching, rigging, suspending or supporting

the portable means of access forms a permanent part of the ship's structure. All portable equipment shall be capable of being readily erected or deployed by ship's personnel.

2.3 The construction and materials of all means of access and their attachment to the ship's structure shall be to the satisfaction of the Administration. The means of access shall be subject to survey prior to, or in conjunction with, its use in carrying out surveys in accordance with regulation 1/10.

3. Safe access to cargo holds, cargo tanks, ballast tanks and other spaces

3.1 Safe access[1] to cargo holds, cofferdams, ballast tanks, cargo tanks and other spaces in the cargo area shall be direct from the open deck and such as to ensure their complete inspection. Safe access[1] to double bottom spaces may be from a pump-room deep cofferdam, pipe tunnel, cargo hold, double hull space or similar compartment not intended for the carriage of oil or hazardous cargoes.

3.2 Tanks, and subdivision of tanks, having a length of 35 m or more, shall be fitted with at least two access hatchways and ladders, as far apart as practicable. Tanks less than 35 m in length shall be served by at least one access hatchway and ladder. When a tank is subdivided by one or more swash bulkheads or similar obstructions which do not allow ready means of access to the other parts of the tank, at least two hatchways and ladders shall be fitted.

3.3 Each cargo hold shall be provided with at least two means of access as far apart as practicable. In general, these accesses should be arranged diagonally, for example one access near the forward bulkhead on the port side, the other one near the aft bulkhead on the starboard site.

4. Ship structure access manual

4.1 A ship's means of access to carry out overall and close-up inspections and thickness measurements shall be described in a Ship structure access manual approved by the Administration, an updated copy of which shall be kept on board. The Ship structure access manual shall include the following for each space in the cargo area:

.1 plans showing the means of access to the space, with appropriate technical specifications and dimension;

.2 plan showing the means of access within each space to enable an overall inspection to be carried out, with appropriate technical specifications and dimensions. The plans shall indicate from where each area in the space can be inspected.

.3 plans showing the means of access within the space to enable close-up inspections to be carried out, with appropriate technical specifications and dimensions. The plans shall indicate the positions of critical structural areas, whether the means of access is permanent or portable and from where each area can be inspected;

.4 instructions for inspecting and maintaining the structural strength of all means of access and means of attachment, taking into account any corrosive atmosphere that may be within the space;

.5 instructions for safety guidance when rafting is used for close-up inspections and thickness measurements

.6 instructions for the rigging and use of any portable means of access in a safe manner;

[1]Refer to the Recommendations for entering enclosed spaces aboard ships, adopted by the Organization by resolution A.864(20).

.7 an inventory of all portable means of access; and

.8 records of periodical inspections and maintenance of the ship's means of access.

4.2 For the purposes of this regulation "critical structural areas" are locations which have been identified from calculations to require monitoring or from the service history of similar or sister ships to be sensitive to cracking, buckling, deformation or corrosion which would impair the structural integrity of the ship.

5. General technical specifications

5.1 For access through horizontal openings, hatches or manholes, the dimensions shall be sufficient to allow a person wearing a self-contained air-breathing apparatus and protective equipment to ascend or descend any ladder without obstruction and also provide a clear opening to facilitate the hoisting of an injured person from the bottom of the space. The minimum clear opening shall not be less than 600 mm x 600 mm. When access to a cargo hold is arranged through the cargo hatch, the top of the ladder shall be placed as close as possible to the hatch coaming. Access hatch coamings having a height greater than 900 mm shall also have steps on the outside in conjunction with the ladder.

5.2 For access through vertical openings, or manholes, in swash bulkheads, floors, girders and web frames providing passage through the length and breadth of the space, the minimum opening shall be not less than 600 mm x 800 mm at a height of not more than 600 mm from the bottom shell plating unless gratings or other foot holds are provided.

5.3 For oil tankers of less than 5,000 tonnes deadweight, the Administration may approve, in special circumstances, smaller dimensions for the openings referred to in paragraphs 5.1 and 5.2, if the ability to traverse such openings or to remove an injured person can be proved to the satisfaction of the Administration."

PART B

SUBDIVISION AND STABILITY

Regulation 12-2-Access to spaces in the cargo area of oil tankers

2. The existing regulation 12-2 is deleted.

PART C

MACHINERY INSTALLATIONS

Regulation 31-Machinery control

3. The following new sub-paragraph .10 is added to paragraph 2 of the regulation:

".10 automation systems shall be designed in a manner which ensures that threshold warning of impending or imminent slowdown or shutdown of the propulsion system is given to the officer in charge of the navigational watch in time to assess navigational circumstances in an emergency. In particular, the systems shall control, monitor, report, alert and take safety action to slow down or stop propulsion while providing the officer in charge of the navigational watch an opportunity to manually intervene, except for those cases where manual intervention will result in total failure of the engine and/or propulsion equipment within a short time, for example in the case of overspeed."

CHAPTER II-2

CONSTRUCTION — FIRE PROTECTION, FIRE DETECTION AND FIRE EXTINCTION

Regulation 3 — Definitions

4. In paragraph 20, the words "regulation VII/2" are replaced by the words "the IMDG Code, as defined in regulation VII/1.1".

Regulation 19 — Carriage of dangerous goods

5. In table 19.3, in vertical columns 7 and 8 (concerning flashpoints of class 3), the numbers "3.1, 3.2" and "3.3", respectively, are replaced by the number "3".

6. In table 19.3, in vertical column 13 (concerning class 5.2), the character "X" in rows 15 (concerning paragraph 3.10.1) and 16 (concerning paragraph 3.10.2) is replaced by the character "X[16]" and a new note 16 is added as follows:

> "[16] Under the provisions of the IMDG Code, as amended, stowage of class 5.2 dangerous goods under deck or in enclosed ro-ro spaces is prohibited."

CHAPTER III

LIFE-SAVING APPLIANCES AND ARRANGEMENTS

Regulation 26 — Additional requirements for ro-ro passenger ships

7. The following new subparagraph .4 is added at the end of paragraph 1:

> ".4 before 1 July 2004 shall comply with the requirements of paragraph 2.5 not later than the first survey on or after that date."

8. The following new subparagraph .5 is added at the end of paragraph 2:

> ".5 Liferafts carried on ro-ro passenger ships shall be fitted with a radar transponder[1] in the ratio of one transponder for every four liferafts. The transponder shall be mounted inside the liferaft so its antenna is more than one metre above the sea level when the liferaft is deployed, except that for canopied reversible liferafts the transponder shall be so arranged as to be readily accessed and erected by survivors. Each transponder shall be arranged to be manually erected when the liferaft is deployed. Containers of liferafts fitted with transponders shall be clearly marked.

CHAPTER XII

ADDITIONAL SAFETY MEASURES FOR BULK CARRIERS

9. The following new regulations 12 and 13 are added after existing regulation 11:

"Regulation 12

Hold, ballast and dry space water level detectors

(This regulation applies to bulk carriers regardless of their date of construction)

1. Bulk carriers shall be fitted with water level detectors:

.1 in each cargo hold, giving audible and visual alarms, one when the water level above the inner bottom in any hold reaches a height of 0.5 m and another at a height not less than 15% of the depth of the cargo hold but not more than 2 m. On bulk carriers to which regulation 9.2 applies, detectors

[1]Refer to the Performance standards for survival craft radar transponders for use in search and rescue operations, adopted by the Organization by resolution A.802(19)."

with only the latter alarm need be installed. The water level detectors shall be fitted in the aft end of the cargo holds. For cargo holds which are used for water ballast, an alarm overriding device may be installed. The visual alarms shall clearly discriminate between the two different water levels detected in each hold;

.2 in any ballast tank forward of the collision bulkhead required by regulation II-1/11, giving an audible and visual alarm when the liquid in the tank reaches a level not exceeding 10% of the tank capacity. An alarm overriding device may be installed to be activated when the tank is in use; and

.3 in any dry or void space other than a chain cable locker, any part of which extends forward of the foremost cargo hold, giving an audible and visual alarm at a water level of 0.1 m above the deck. Such alarms need not be provided in enclosed spaces the volume of which does not exceed 0.1% of the ship's maximum displacement volume.

2. The audible and visual alarms specified in paragraph 1 shall be located on the navigation bridge.

3. Bulk carriers constructed before 1 July 2004 shall comply with the requirements of this regulation not later than the date of the annual, intermediate or renewal survey of the ship to be carried out after 1 July 2004, whichever comes first.

Regulation 13

Availability of pumping systems

(This regulation applies to bulk carriers regardless of their date of construction)

1. On bulk carriers, the means for draining and pumping ballast tanks forward of the collision bulkhead and bilges of dry spaces an part of which extends forward of the foremost cargo hold, shall be capable of being brought into operation from a readily accessible enclosed space, the location of which is accessible from the navigation bridge or propulsion machinery control position without traversing exposed freeboard or superstructure decks. Where pipes serving such tanks or bilges pierce the collision bulkhead, valve operation by means of remotely operated actuators may be accepted, as an alternative to the valve control specified in regulation II-1/11.4, provided that the location of such valve controls complies with this regulation.

2. Bulk carriers constructed before 1 July 2004 shall comply with the requirements of this regulation not later than the date of the first intermediate or renewal survey of the ship to be carried out after 1 July 2004, but in no case later than 1 July 2007."

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