

## 中国船级社 CHINA CLASSIFICATION SOCIETY

# 钢质海船入级与建造规范

RULES AND REGULATIONS
FOR THE CONSTRUCTION AND CLASSIFICATION
OF SEA-GOING STEEL SHIPS

修改通报 AMENDMENT

1998



#### CHINA CLASSIFICATION SOCIETY

# RULES AND REGULATIONS FOR THE CONSTRUCTION AND CLASSIFICATION OF SEA – GOING STEEL SHIPS

#### **AMENDMENT**

1998

Effective from 1 July 1998

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#### GENERAL PROVISIONS

Amend 6 in GENERAL PROVISIONS to read:

#### 6 Compensations and arbitration

- 6.1 When providing survey/certification or consultancy service(s), the Society, its employees or agents does not warrant the accuracy of any decision made or information or advice supplied.
- 6.2 The Society provides service(s) based on the contract, in no case shall the Society be liable for any loss of the party who has no direct contractual relations with the Society.
- 6.3 The Society shall be for the loss or damage arising out of negligent act attributed to the Society or its employees, agents or other parties acting on behalf on the Society, if such negligent act violates the standard of reasonable care; The Society's liability for the loss or damage is specially excluded, when such loss or damage arises out of an act
  - (1) by an employee of the Society acting outside the terms or scope of his/her employment; or
  - (2) by any agent or other party acting on behalf of the Society, when such act or omission exceeds the authority granted in writing by the Society to such agent or party.
- 6.4 The Society shall be liable only for loss or damage resulting directly from its negligent act. In no event shall the Society be liable for any indirect or consequential losses or damages.
- 6.5 Any liability of the Society shall be limited to two times of the fee(s) charged already by the Society in respect of the service(s) in question. And in no case shall the amount of this liability exceed 800,000 RMB.
- 6.6 Any claim for loss or damage set forth above must be made in writing within six months of the date the damage first discovered or loss occurred; failure of that will be deemed as an absolute waiver of this right.
- 6.7 Unless agreement made with the Society otherwise, any dispute arising out of or in connection with the service(s), decision(s), information and advice provided by the Society shall be submitted to China Maritime Arbitration Commission for arbitration in Beijing in accordance with the relevant laws of China and the existing arbitration rules of the commission. The arbitration award shall be final and binding upon the concerned parties.

**Table 2.3.2.1** 

#### PART ONE CLASSIFICATION AND SURVEYS

#### CHAPTER 2 SURVEYS AND CERTIFICATES

#### Section 1 GENERAL

#### Amend 2.1.2.4 to read:

2.1.2.4 For ships subject to longitudinal strength calculations, details of the loading information are to be listed in the Loading Manual for Masters, and in addition, loading computers as specified in Section 2, Chapter 2 of PART TWO are to be provided for ships of different types.

In case of modification implying changes in main data of the finished ship, the above-mentioned loading manual and computers are to be modified accordingly and submitted for approval by the Society.

Existing bulk carriers of 150 m and above in length are to be provided with a loading computer in accordance with Section 2, Chapter 2 of PART TWO at least on the date when the first intermediate survey or special survey commences after January 1, 1999.

#### Section 3 CHARACTERS OF CLASSIFICATION AND CLASS NOTATIONS

#### Amend 2.3.2.1 to read:

2.3.2.1 Except for general dry cargo ships, the class notations for ship's hull including equipment are to be affixed as shown in Table 2.3.2.1.

Class notations for hull of ships

Name Class notations Serial No. Passenger Ship 1 Passenger ship Ro/Ro Passenger Ship 2 Ro/Ro passenger ship Tanker 3 Oil Tanker, F.P. >60℃ 4 Oil tanker for carrying cargo oil with a flash point > 60°C Oil Tanker, F.P. ≤60°C Oil tanker for carrying cargo oil with a flash point ≤ 60°C 5 Chemical Tanker 6 Chemical tanker Liquefied Gas Carrier 7 Liquefied gas carrier Container Ship 8 Container ship Ro/Ro Cargo Ship Ro/Ro cargo ship Bulk Carrier 10 Bulk carrier Ore Carrier 11 Ore carrier Tug 12 Tug Offshore tug/supply ship Offshore Tug/Supply Ship 13 Offshore Supply Ship 14 Offshore supply ship Trailing Suction Dredger 15 Trailing suction dredger Cutter Suction Dredger 16 Cutter suction dredger Bucket Dredger 17 Bucket dredger Grab Dredger Grab dredger Reclamation Craft 19 Reclamation craft Dipper Dredger Dipper dredger 20

Hopper Barge

Split Hopper Barge

21

22

Hopper barge

Split hopper barge

Table 2.3.2.1(Continued)

	Table 2.3.2.1(Continued)		
Serial No.	Name	Class notations	
23	Barge	Barge	
24	Oil barge	Oil Barge	
25	Pontoon barge	Pontoon Barge	
26	Floating crane	Floating Crane	
27	Floating dock	Floating Dock	
28	Live fish carrier	Live Fish Carrier	
29	Fishing vessel	Fishing Vessel	
30	Fish-factory ship	Fish-Factory Ship	
31	High speed craft	High Speed Craft	
32	Vehicle passenger ferry	Vehicle Passenger Ferry	
33	Train ferry	Train Ferry	
34	Refrigerated ship	Refrigerated Ship	
35	Oil recovery ship	Oil Recovery Ship	
36	Ore/oil Carrier	Ore/Oil/Carrier	
37	Ore/Bulk/Oil Carrier	Ore/Bulk/Oil Carrier	
38	Strengthened for heavy cargoes	Strengthened for Heavy Cargoes	
39	Strengthened for heavy cargoes hold Nos may be empty	Strengthened for Heavy Cargoes Hold Nos May be Empty	
40	Non container ship but equipped with container securing arrangements	Equipped with Container Securing Arrangements	
41	Rescue ship	Rescue Ship	
42	Salvage ship	Salvage Ship	
43	Ice breaker	Ice Breaker	
44	Timber carrier	Timber Carrier	
45	Barge carrier	Barge Carrier	
46	Car carrier	Car Carrier	
47	Special purpose ship	Special Purpose Ship	
48	Fire fighting ship for early stage fire fighting	Fire Fighting Ship 1	
49	Fire fighting ship for continuous fighting of large fires	Fire Fighting Ship 2	
50	Fire fighting ship for continuous fighting of large fires and oil fire-fighting	Fire Fighting Ship 3	
51	Research ship	Research Ship	
52	Training ship	Training Ship	
53	Specified route service e.g. Shanghai-Osaka	Shanghai-Osaka	
54	Greater coastal service	Greater Coastal Service	
55	Coastal service	Coastal Service	
56	Sheltered water service	Sheltered Water Service	
57	Strengthened for extreme ice conditions	Ice Class B1 *	
58	Strengthened for severe ice conditions	Ice Class Bi	
59	Strengthened for intermediate ice conditions	Ice Class B2	
60	Strengthened for light ice conditions	Ice Class B3	
61	Strengthened for draft ice other than large stationary ice	Ice Class B	
62	In-water survey	In-Water Survey	
63	Enhanced survey programme	ESP	

Table 2.3.2.1 (Continued)

Serial No.	Name	Class notations
64	Continuous hull surveys	CHS(Continuous Hull Surveys) <sup>①</sup>
65	Ship management system	SMS(Ship Management System) $^{\oplus}$
66	Loading computer to be used for hull strength calculation and check under various loading conditions	Loading Computer S
67	Loading computer to be used for stability calculation and check for carrying grains in bulk	Loading Computer G
68	Loading computer to be used for intact stability calculation and check	Loading Computer I
69	Loading computer to be used for damage stability calculation and check	Loading Computer D
70	Loading computer with the certain functions in 66 to 69	Loading Computer S.G.I.D

Note: 1 The English contents in brackets are the full names of the attached notations.

#### Amend 2.3.2.3 as follows:

- 2.3.2.3 Enhanced Survey Programme (ESP) Notations: For the type of ships as defined below, ESP is to be affixed to the notation. Such a notation is not to be altered in the later services due to the change of service purpose except for those ships after special alteration.
  - (1) Oil tanker (Oil Tanker, F.P. > 60°C or Oil Tanker, F.P. ≤ 60°C )
    The class notation "Oil tanker, F.P. > 60°C or oil tanker, F.P. ≤ 60°C" is to be assigned to tankers having integral tanks and intended for the carriage of oil in bulk. This notation is to be assigned to tankers of both single and double hull construction as well as tankers with alternative structural arrangements, e.g., middeck designs. Typical midship sections of oil tankers are given as in Fig. 2.3.2.3(1):

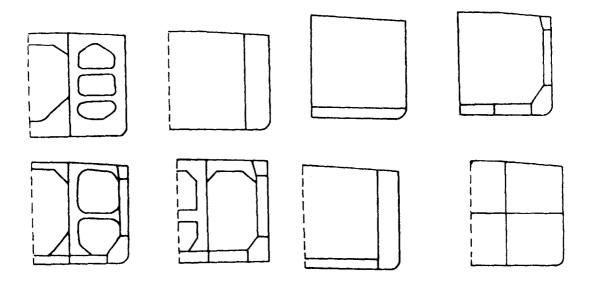


Fig. 2.3.2.3(1) Typical midship sections of oil tankers

(2) Bulk carrier (Bulk Carrier)

The ship type notation "Bulk Carrier" is to be assigned to single deck ships of single or double hull construction, with a double bottom, and with hopper side tanks and topside tanks fitted in cargo tank areas, and intended for the carriage of dry cargoes in bulk. Typical midship sections of bulk carriers are given in Fig. 2.3.2.3(2):

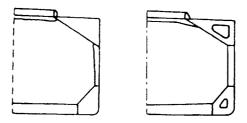


Fig. 2.3.2.3(2) Typical midship sections of bulk carriers

#### (3) Ore carrier (Ore Carrier)

The ship type notation Ore Carrier is to be assigned to single deck ships having two longitudinal bulkheads and a double bottom throughout the cargo region and intended for the carriage of ore cargoes in the centre holds only. Typical midship sections of ore carrier are given in Fig. 2.3.2.3(3):

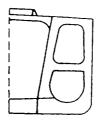


Fig. 2.3.2.3(3) Typical midship sections of ore carriers

#### (4) Combination carrier (Combination Carrier)

Combination carrier is a general term applied to ships intended for the carriage of both oil and dry cargoes in bulk but these cargoes are not carried simultaneously with the exception of oil retained in slop tanks. Combination carriers consist of ore/oil carrier and oil/bulk/ore carrier.

#### ① Ore/oil carrier (Ore/Oil Carrier)

The ship type notation Oil/Ore Carrier is to be assigned to sea-going single deck ships having two longitudinal bulkheads and a double bottom throughout the cargo region and intended for the carriage of ore cargoes in all or most of the centre holds, or of oil cargoes in wing tanks and in some centre holds. Typical midship sections of ore/oil carriers are given in Fig.2.3.2.3(4)①:

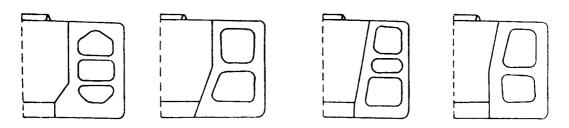


Fig. 2.3.2.3(4) Typical midship sections of ore or oil carriers

#### ② Oil/bulk/ore carrier (Oil / Bulk / Ore Carrier)

The ship type notation Ore/Bulk/Oil Carrier is to be assigned to single deck ships of double hull construction, with a double bottom, hopper side tanks and topside tanks fitted, and intended for the carriage of oils or dry cargoes, including ore, in bulk. Typical midship section of ore/bulk/oil Carrier carrier is given in Fig.2.3. 2.3(4)②:

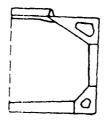


Fig. 2.3.2.3(4) Typical midship section of OBO carrier

#### Amend 2.3.2.4 to read:

2.3.2.4 Special purpose notations: to be assigned to ships engaged in special purposes, e.g.:

Special purpose	Class notation	
Research ship	Reseach Ship	
Training ship	Training Ship	

#### Amend 2.3.2.5 to read:

2.3.2.5 Service restriction notations: to be assigned to ships which are permitted to navigate in restricted areas, e.g.:

Restricted service area	class notation	
Greater coastal service	Greater Coastal Service	
Coastal service	Coastal Service	
Sheltered water service	Sheltered Water Service	

#### Amend 2.3.2.7 to read:

2.3.2.7 Ice strengthening notations<sup>①</sup>: to be assigned to ships strengthened for navigating in ice in accordance with the requirements of the Rules, e.g.:

Strengthened for ice condition	class notation	
Strengthened for extreme ice condition	Ice Class B1 *	
Strengthened for severe ice condition	Ice Class B1	
Strengthened for intermediate ice condition	Ice Class B2	
Strengthened for light ice condition	Ice Class B3	
Strengthened for Draft ice other than large stationery ice	Ice Class	

#### Amend 2.3.2.8 to read:

2.3.2.8 In-water survey notations: In-Water Survey is to be assigned to ships in accordance with the requirements in 4.8.2 of this PART.

#### Amend 2.3.2.9 to read:

2.3.2.9 Loading computer notations: Loading Computer is to be assigned to ships fitted with loading computers, reference is made to the detail in Chapter 5 of PART TEN of the Rules.

#### Amend 2.3.2.10 to read:

2.3.2.10 Continuous hull survey notations: CHS (Continuous Hull Survey) is to be assigned to ships subject to continuous hull surveys.

#### Amend 2.3.2.11 to read:

2.3.2.11 Safety management system of ships notations: for ships with certifications in accordance with the requirements in the Certification Rules of the Management System for the Safe Operation of Ships and Pollution Prevention, notation SMS(Safety Management System) is to be affixed to the classification character.

#### Amend Table 2.3.3.1 to read:

	Machinery notations	<u>Table 2.3.3.1</u>
Serial No.	Description	Class notations
1	Propulsion installation to be operated with remote control from bridge control station and with centralized control station in machinery space periodically unattended	AUT – O
2	Propulsion installation to be operated from the centralized control station in machinery space	MCC
3	Propulsion installation to be operated with remote control from bridge control with the machinery space attended by watchkeeper(s)	BRC
4	Inert Gas System	IGS
5	Planned maintenance system	PMS(Planned Maintenance System) <sup>⊕</sup>
6	Screwshaft condition monitoring	SCM(Screwshaft Condition Monitoring) <sup>⊕</sup>
7	Continuous machinery surveys	CMS(Continuous Machinery Surveys) <sup>⊕</sup>
8	Engine Lub-oil Condition Monitoring	Engine Lub-oil Condition Monitoring

Note: 1 The English contents in brackets are the full names of the attached notations.

Delete the whole paragraph of "AUT -1..." in 2.3.3.2.

#### Add a new 2.3.3.3 to read:

2.3.3.3 For existing ships having been granted the notation "AUT -1", and a necessary equipment is added in accordance with the provisions in Chapter 3 of PART 7 of the Rules in the latest renewal of Class Certificate for Machinery, and the automation grade requirement of "AUT -0" are met, notation "AUT -0" is to be accorded. Otherwise notation "AUT -1" is to be replaced by "BRC + MCC".

#### Amend 2.3.5.1 and 2.3.5.1(1) to read:

- 2.3.5.1 The character of classification together with class notations (if any) assigned to the ship's hull including equipment and machinery including electrical installations is to be entered in the corresponding Certificate of Classification in an order as detailed above and for oil tankers and bulk carriers, notation ESP is to be added, e.g.:
  - (1) In the case of an unrestricted service oil tanker constructed under the supervision of the Society and intended for carrying cargo oil of flash point lower than 60°C, strengthened for light ice condition and having a 5-year interval of special survey, the character of classification and class notations for the hull including equipment are to be expressed as follows:

★CSA 5/5 Oil Tanker, F.P. ≤ 60°C, Ice Class B3, ESP

#### Add a new 2.3.5.1(2) to read:

- (2) In the case of an unrestricted service bulk carrier constructed under the supervision of the Society and strengthened for heavy cargoes and strengthened for light ice condition and having a 5-year interval of special survey, the character of classification and class notations for hull including equipment are to be expressed as follows:
  - ★CSA 5/5 Bulk Carrier, Strengthened for Heavey Cargoes, Ice Class B3, ESP

Renumber 2.3.5.1(2) as 2.3.5.1(3).

#### Section 5 AUTHORIZED STATUTORY SURVEYS AND CERTIFICATES

#### Amend 2.5.1.1 to read:

2.5.1.1 When authorized by the Administration of flag State the Society will carry out part or whole statutory surveys, on behalf of the Administration, for ships flying the State flag in accordance with the requirements of the authorizing State.

#### CHAPTER 3 CLASSIFICATION SURVEYS

# Section 3 CLASSIFICATION SURVEY OF SHIPS CONSTRUCTED NOT UNDER THE SUPERVISION OF THE SOCIETY

Amend the whole 3.3.4 to read:

- 3.3.4 Surveys regarding transfer of class for existing ships from other IACS members.
- 3.3.4.1 For existing ships applying for survey regarding transfer of class, shipowners are to submit at least one copy of the following plans to the Society for approval:
  - (1) Hull:
    - ① General arrangement;
    - ② Capacity plan;
    - 3 Hydrostatic curves;
    - 4 Loading manual (if required);
    - Midship section;
    - 6 Construction profile;
    - Deck plans;
    - Shell expansion;
    - (9) Transverse bulkhead;
    - Rudder and rudder stock;
    - 1 Hatch covers.
  - (2) Machinery (including electrical installations):
    - ① Engine room arrangement;
    - ② Intermediate shaft, thrust shaft and Propeller shaft;
    - ③ Propeller;
    - Main machinery, main propulsion gears and clutch systems (or manufacturer, model and specifications); in addition, main boiler, superheater, economizers (or manufacturer, model and specifications) and steam piping for steam turbine ships;
    - Bilge and ballast piping diagram;
    - 6 Cable laying;
    - Steering gear piping system, manufacturer and model;
    - 8 Torsional vibration calculations for shafting (only for ships of less than 2 years of age);
  - (3) Additional plans required for ships with ice class notation:
    - ① main propulsion shafting;
    - 2 reduction gearboxes and clutch system.
  - (4) Additional plans required for oil tankers:
    - ① Pumping arrangement at the forward and after ends and drainage of cofferdams and pump rooms;
    - ② General arrangement of cargo oil piping in tanks and on decks.
  - (5) Additional plans required for periodically unattended machinery space:
    - (1) Operation instruction and block diagram of the control system;
    - Wiring diagrams of the control system for:
      - a) Main propulsion machinery and essential auxiliaries;
      - b) Bilge level system;
      - c) Cargo pumps for tankers;
      - d) Control of boiler;
      - e) Fire detection system;
      - f) Fire prevention system including details in way of fuel oil pressure pipes;
      - g) General alarm system including test procedure.
  - (6) Miscellaneous
    - ① Additional plans and information required by the flag State(e.g. fire control plan).
    - ② Alternative technical information may be accepted by the Society in lieu of specific items of the listed documentations not being available at the time of transfer of class.
  - 3.3.4.2 Stability information and loading manual not approved by the Administration of flag State are to be submitted to the Society for approval.
  - 3.3.4.3 The Surveyors are to carry out the inspection to the ship in accordance with the applied character of

classification, class notation and service area as to confirm that the ship is under good working conditions or to required to alter or repair or to change the service area and to report to the Headquarters.

- 3.3.4.4 Class transfer survey is to be carried out according to the ship's age and losing class status. Notwithstanding the records indicating that all surveys are up-to-date, the extent of surveys is to include the following:
  - (1) Hull survey:
    - ① For ships of less than 5 years, an Annual Survey is to be carried out.
    - ② For ships of between 5 and 10 years, an Annual Survey is to be carried out, as well as an inspection for a number of representative ballast tanks.
    - 3 For bulk carriers or oil tankers of 10 years and over, an Annual Survey is to be carried out, as well as an inspection for a number of representative cargo holds of bulk carriers or cargo tanks of tankers.
    - ④ For the losing class of ships, the latest drydock survey report which indicates the actual condition complies with the Rules concerned may be accepted by the Society.
  - (2) Machinery (including electrical installations) survey:
    - ① Adjustment of safety valves for boiler, economizer and steam generator is to be verified and oil fuel burning equipment examined under working conditions.
    - 2) All pressure vessels are to be identified with the submitted plans and/or certificates.
    - 3 Insulation resistance, generator circuit breakers, preference tripping relays and generator prime mover governors are to be tested, and paralleling and load sharing to be verified.
    - 4 Navigation lights and indicators are to be examined, and change-over source of supply verified.
    - Bilge system, oil combusting installation and emergency fire pump and remote controls for oil valve, fuel oil pump, lubricating oil pumps and forced draught fans are to be examined and tested under working conditions.
    - 6 For ships with ice class notation, ice removing arrangements and facilities for recirculation of cooling water are to be verified as conforming to the Rules.
    - Main, auxiliary machinery and necessary maneuvering equipment for operation of the ship at sea together with essential controls and steering gear are to be tested under working conditions. Alternative means of steering are to be tested. Also sea trial is to be made at the Surveyors' discretion if the ship has been laid up for a long period.
    - (8) Initial start arrangements are to be verified.
    - In the case of oil tankers, cargo oil system and electrical installations in hazardous area are to be checked for compliance with the Rules. Where intrinsically safe equipment is installed, the Surveyors are to satisfy themselves that such equipment has been approved by a recognized authority. Safety devices, alarms and essential instruments of inert gas system are to be verified and the plant generally examined to ensure that it does not constitute a hazard to the ship.
  - (3) Where items are in doubt, the extent of the survey is to be enlarged.
- 3.3.4.5 Relevant certificates and information are to be complied with in accordance with the requirements of 3.2.3.9 of this Chapter.

#### CHAPTER 4 MAINTENANCE OF CLASSIFICATION SURVEY

#### Section 1 GENERAL

Amend 4.1.5.1.(1) to read:

4.1.5.1(1) When it is not submitted for surveys within the period of time stipulated in the Rules or the surveys specified have not been completed, and an extension not granted as defined, the shipowner is to be informed of the suspension of the certificates. Where the ship's class is recovered, the next surveys are to be dated from the previous due date.

Amend 4.1.5.1(4) to read:

4.1.5.1(4) When outstanding recommendations or class conditions are not dealt with or an extension not granted by the specified date, the shipowner is to be informed of the suspension of the ship's class. Where the ship's class is recovered, the next surveys are to be dated from the previous due date.

#### Section 3 HULL SURVEYS

Add a new 4.3.2.2(1) 1 to read:

4.3.2.2(1) Where required according to the results of the special and intermediate survey, ballast tanks are to be surveyed. Thickness measurement is to be carried out where necessary.

Amend 4.3.3.2(1) 3 to read:

4.3.3.2(1)③ In salt water ballast spaces other than double bottom tanks, where a protective coating is found to have deteriorated and it is not renewed, or where a soft coating was applied or a protective coating was not applied from the time of construction, maintenance of class is to be subject to the spaces in question being internally examined at annual intervals; where necessary, thickness measurement is to be carried out. Where peeling of protective coating is found in salt water ballast double bottom tanks, or where a soft coating was applied or protective coating was not applied from the time of construction, maintenance of class may be subject to the spaces in question being internally examined at annual intervals.

Amend 4.3.3.2(2)② to read:

4.3.3.2(2)② In salt water ballast spaces other than double bottom tanks, where a protective coating is found to have deteriorated and it is not renewed, or where a soft coating was applied or a protective coating was not applied from the time of construction, maintenance of class is to be made subject to the spaces in question being internally examined at annual intervals; where necessary, thickness measurement is to be carried out. Where peeling of protective coating is found in salt water ballast double bottom tanks or where a soft coating was applied or protective coating was not applied from the time construction, maintenance of class may be subject to the spaces in question being internally examined at annual intervals.

Amend 4.3.4.4(1) (5) to read:

4.3.4.4(1) For spaces used for salt water ballast excluding double bottom tanks, where a protective coating was found to have deteriorated and it is not renewed, or where a soft coating is applied or a protective coating was not applied from the time of construction, for the purpose of maintenance of class, such spaces are to be internally examined at annual intervals. If necessary, thickness gauging is to be carried out. Where peeling of protective coating is found in salt water ballast double bottom tanks or where a soft coating was applied or protective coating was not applied from the time construction, maintenance of class may be subject to the spaces in question being internally examined at annual intervals.

Amend 4.3.4.5(1) 4 to read:

4.3.4.5(1) The side plating in way of the two transverse sections between light and loaded load lines.

Add a new 4.3.4.5(1) 5 to read:

4.3.4.5(1) Any other areas deemed necessary by the Surveyors.

Amend 4.3.4.5(2) 4 to read:

4.3.4.5(2) The side plating in way of 0.5L amidships between the light and loaded load lines.

#### Amend 4.3.4.6 to read:

4.3.4.6 For special surveys of passenger ships, in addition to complying with the requirements in 4.3.2.3, 4.3.4.3, 4.3.4.4 and 4.3.4.5 of this Section and the provisions in 4.8.1 of this Chapter, the following items are to be inspected:

#### Section 4 HULL SURVEYS FOR OIL TANKERS

#### Amend 4.4.2.9 to read:

4.4.2.9 Protective coating is usually to be a hard coating. Other coating system may be considered acceptable as alternatives provided that they are applied and maintained in compliance with the manufacturer's specification. Where soft coating is applied, safe access is to be provided for Surveyors to make certain the efficiency of the coating; part of the coating may be cleaned up in order to evaluate the inner structure. Where provision of safe access proves impossible, soft coating is to be cleaned up.

#### Amend 4.4.2.11 to read:

4.4.2.11 Cargo areas are cargo oil tank, sludge tank, cargo/ballast pump tank, cofferdams, ballast tanks and voild spaces adjacent to cargo oil tank and the whole length and breadth of the deck area above the aforesaid areas.

#### Amend 4.4.3.5 to read:

4.4.3.5 Examination of ballast tanks is to be carried out when required depending upon the results of the special survey and intermediate survey. When necessary, thickness measurement is to be carried out and if the result of these thickness measurements indicate that substantial corrosion is found, the scope of thickness measurements is to be carried out in accordance with the requirements from Table 4.4.6.3(1) to 4.4.6.3(4).

#### Amend 4.4.4.3(3) to read:

4.4.4.3(3) In salt water ballast spaces, where a protective coating is found in poor condition as defined in 4.4.2.10, and it is not renewed, or where soft coating is applied or where a protective coating was not applied from the time of construction, maintenance of class is to be subjected to the examination of the tanks in question at annual intervals and thickness measurements are to be carried out where necessary.

#### Amend 4.4.4.5(4) to read:

4.4.5(4) The requirements for thickness measurements at the intermediate survey are to measure the areas found to be suspect at the previous special survey. The scope of measurement is to comply with the requirements from Tables 4.4.6. 3(1) to (4) of this Section where corrosion is in clear existence.

#### Add a new 4.4.4.5(5) to read:

4.4.4.5(5) Where the coating is in good condition within liquid tanks (refer to the definition in 4.4.2.10), scope of close-up surveys may be specially considered by the Society.

#### Amend 4.4.5.4(2) to read as follows:

4.4.5.4(2) For tanks used for salt water ballast, where protective coating is found in poor condition as defined in 4.4. 2.10 of this Section, and not renewed, or where soft coating is applied or where a protective coating was not applied from the time of construction, maintenance of class is to be made subject to the tanks in question being examined at annual intervals. Thickness measurement to be carried out where necessary.

#### Amend 4.4.6.3 to read:

4.4.6.3 The extent of thickness measurement in areas of substantial corrosion (defined in 4.4.2.8 of this Section) is to be in compliance with the requirements in Tables 4.4.6.3(1) to 4.4.6.3(4).

#### Amend Tab. 4.4.6.3(1) to read: