INTER-GOVERNMENTAL MARITIME CONSULTATIVE ORGANIZATION

-COMMITTEE ON SUBDIVISION, ABILITY AND LOAD LINES -27th session Agenda item 13



STAB 27/13 28 April 1982

Original: ENGLISH

IMCO

REPORT TO THE MARITIME SAFETY COMMITTEE

1 GENERAL

- 1.1 The Sub-Committee held its twenty-seventh session from 8 to 12 March 1982 under the Chairmanship of Mr. E.H. Middleton (United States). The session took place jointly with the Sub-Committee on Safety of Fishing Vessels.
- 1.2 The session was attended by representatives from the following countries:

ARGENTINA LIBERIA BRAZIL MEXICO CANADA METHERLANDS CHILE ITORI AY CHIMA PAHAMA DENVIARK PEILIPPINES FINLAND PORTUGAL FRANCE REPUBLIC OF KOREA GABON ROMANIA GERMAN DEMOCRATIC REPUBLIC SPAIN GERMANY, FEDERAL REPUBLIC OF SEDEN CREECE USSR LIDIA UNITED KINGDOM TTALY UNITED STATES JAPAN YUGOSLAVIA

and observers from the following non-governmental organizations:

INTERNATIONAL CHAMBER OF SHIPPING (ICS)
INTERNATIONAL ASSOCIATION OF CLASSIFICATION SOCIETIES (IACS)
OIL COMPANIES INTERNATIONAL HARING FORUM (OCING)
INTERNATIONAL ASSOCIATION OF DRILLING CONTRACTORS (IADC)
ASSOCIATION OF MESTERN EUROPEAN SHIPBUILDERS (AMES)

- 1.3 The agenda adopted by the Sub-Committee, together with a list of documents issued for this session is given at Annex 1.
- 1.4 Agenda items 1 to 5 were considered jointly by this Sub-Committee and the Sub-Committee on Safety of Fishing Vessels, holding its twenty-fourth session in the same week, and the outcome of considerations of mutual interest are referred to in this report.

- 2 ARRANGEMENTS FOR JOINT SESSIONS OF THIS SUB-COMMITTEE AND THE SUB-COMMITTEE ON SAFETY OF FISHING VESSELS
- 2.1 Meeting together in a joint session, as requested by the Committee, the two Sub-Committees reviewed a proposal by the two Chairmen (STAB 27/2) for the arrangement of the session. The sessions were conducted in accordance with this proposal.
- 2.2 The Sub-Committee expressed the view that also in future there should be joint instead of alternate sessions. It was unanimously agreed to propose to the Committee the amalgamation of both sub-committees to one single body on the condition that the importance of the assigned work to the Sub-Committee on Safety of Fishing Vessels is recognized.
- 2.3 Questions regarding the safety of fishing vessels in respect of the 1977 Torremolinos Convention and the Code of Safety for Fishermen and Fishing Vessels in future will be considered by the new Sub-Committee. Items of mutual interest, such as stability, however, will be dealt with by the sub-committee or by ad hoc groups as appropriate. It was also stressed that co-operation with FAO and ILO in respect of the Code of Safety for Fishermen and Fishing Vessels should continue as previously. The representative of FAO agreed with this proposal. Hembers are invited to include necessary experts in their delegations on both the work on fishing vessels and on subdivision, stability and load lines, according to the items shown on the agendas of future sessions.
- 2.4 If the Committee concurs with such a proposal, the Sub-Committees propose that the name of this sub-committee be changed to the Sub-Committee on Stability and Load Lines and on Fishing Vessels Safety. The STAB session numbers will continue in future sessions with a new symbol SLF, and the PFV series will be discontinued.
- 2.5 The Sub-Committees elected unanimously Mr. E.H. Middleton (United States) as Chairman and Mr. B. Sjöholm (Sweden) as Vice-Chairman of the proposed new Sub-Committee for 1983.
- 3 STATUS OF IMPLEMENTATION OF IMCO INSTRUMENTS
- 3.1 The Sub-Committee noted the information provided to the Secretariat (STAB 27/4). This information is summarized as follows:

- 6.4 After discussion, the Sub-Committee decided to proceed by using a damage control plan as a base upon which to develop practicable information to the Haster. Henbers were requested to submit their comments on this proposal by 1 Movember 1982 so that the matter could be finalized if possible at the next session.
- 6.5 Having decided that agreement on information to the master as a general objective for cargo ships will be possible in the long term, the Sub-Committee briefly returned to the task originally received from the MSC to consider a subdivision standard for Ro/Ro ships. The Sub-Committee noted that this task is still before it and encouraged members to submit comments and proposals on subdivision of Ro/Ro ships by 1 Movember 1982, specifically on:
 - al subdivision approach (deterministic and empirical or probabilistic approach);
 - .2 methods of treating permeability of Ro/Ro ships;
 - .3 calculation methods;
 - .4 acceptable survivability limits.
- 7 MATTERS RELATED TO THE 1969 TONHAGE CONVENTION
- 7.1 The Sub-Committee had before it documents submitted by Italy (STAB 27/3/3), the Metherlands (STAB 27/8/2), Morway (STAB 27/8) and the summary of proposals to the correspondence group submitted by the United States (STAB 27/8/1).
- 7.2 The Sub-Committee continued developing harmonized interpretations of the Convention requirements, and was assisted for this purpose by a group of tonnage experts.
- 7.3 The Sub-Committee agreed that guidelines for the minimum number of sections and waterlines for calculation of hull volumes should not be considered until experience has shown that there is a clear need for such guidelines.
- 7.4 The delegation of France stated that in the interest of the uniform application of Regulations on Tonnage Measurement, IMCO should begin preparation of a manual on the application of the provisions of the Convention. The French delegation expressed the opinion that such a manual would be of great benefit, in particular to countries which have as yet no experience in the tonnage measurement of ships, and would, moreover, have the advantage of laying down uniform rules for measuring.

- 7.5 Japan stated its general view regarding unified interpretation that there are several items in the Convention which are left open to the consideration of Administrations, and any unified interpretation of such items need not be developed.
- 7.6 The Sub-Committee approved harmonized interpretations related to the Convention which supplement and update the interpretations in STAB XAVI/14, Annex 8 which are given at Annex 5. Bearing in mind the date of entry into force of the International Convention for Tonnage Measurement, 1969, the Sub-Committee requests the Committee to consider the additional interpretations at Annex 3 as a matter of urgency at its forty-sixth session. The Secretariat was requested to transmit Annex 3 and extracts from this section to the forty-sixth session of the Committee.
- 7.7 The Greek delegation reserved its position on paragraph 1 of the interpretation. In their opinion the sealing of a tomage opening, the reinforcement of frames and other structural members and minor improvements such as increasing door sill heights, substitutions of wooden by steel watertight doors, etc. should not be considered as structural modification for the purpose of this interpretation.
- 7.8 The delegation of Japan entered its reservation of paragraphs 3 and 4.2 of the interpretation.
- 7.9 The Sub-Committee considered the problem of "stepped deck" and came to the conclusion that at present there was no need for an interpretation of Regulation 2(1) since the text was considered to be sufficiently clear. The Sub-Committee agreed that the matter should be deferred until the Convention has come into force and experience of its implementation has shown that there is a need for an interpretation.
- 7.10 In considering the definition of terms used in the Annex of the Convention, the Sub-Committee also discussed whether dedicated clean ballast tanks should be treated in the same way as segregated ballast tanks and recalled the provisions of Regulation 13A of Annex I of the 1978 Protocol to the 1973 MARPOL Convention. It was noted that ships complying with this Regulation are required to be certified, indicating, inter alia, those tanks which have been designated solely to the carriage of clean ballast. On the basis of these requirements the Sub-Committee agreed that it might be reasonable to treat dedicated clean ballast tanks in the same way as segregated ballast tanks. The Sub-Committee agreed to consider this question at the next session.

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ANNEX 3

HARMONIZED INTERPRETATION OF THE INTERNATIONAL CONVENTION ON TONNAGE MEASUREMENT OF SHIPS, 1969

Application (Article 3(2)(b))

- 1.1 "Alterations or Modifications" are those which change the principal dimensions or involve structural changes. An existing ship may continue to operate under its existing tonnage without re-admeasurement in either an open or closed condition under resolution A.48(III).
- 1.2 If structural modifications are necessary to permit an open shelter-deck ship to become a closed shelter-deck ship, it should be considered as a new ship under this Convention.
- 1.3 It should be noted that the sealing of a tennage opening is not a structural modification for the purpose of this interpretation. Further reference is made to MSC/Circ.253 regarding existing ships which regularly alter load line and tonnage marks in order to change from higher to lower tonnage and <u>vice versa</u>.

Inspection (Article 12)

2 Some Administrations may consider it useful to provide a copy of the tonnage calculations together with the International Tonnage Certificate (ITC) to the ship's master. Although this is not a requirement, there is nothing in the Convention which would prevent Administrations from requesting this calculation to be provided to their own ships.

Definition of terms used in the Annexes

Upperdeck (Regulation 2(1))

In a ship with two or more decks having openings in the side of the ship below the uppermost deck, which are not closed but limited inboard by weathertight bulkheads and decks, the first deck below such openings should be considered the upperdeck. (See Figure 1.)

Enclosed Spaces (Regulation 2(4))

- 4.1 Tanks, permanently located on the upperdeck, provided with removable pipe connexions to the cargo system or the de-airing lines of the ship, should be included in the V.
- 4.2 The volume of weathertight steel pontoon covers on hatchway coamings should be included in the calculations of the total volume of the ship. Provided such covers are open on the underside this volume should also be included in the V_c .

Excluded Spaces (Regulation 2(5))

- 5.1 The space between the side longitudinal bulkhead of a deckhouse and the bulwark below a deck extending from side to side supported by stanchions or vertical plates connected to the bulwarks, is considered as excluded space in accordance with Regulation 2(5)(b) and (c). (See Figure 2.)
- 5.2 In the case of a Ro/Ro ship, for example, the bridge of which is open in accordance with the provisions of Regulation 2(5)(a)(i), but the space located within is fitted with means for securing cargo, the space should be included in V in accordance with the first condition of Regulation 2(5).

Passenger (Regulation 2(6))

6 N₁ and N₂ should be obtained from the ship's passenger certificate issued by the Administration.

Cargo Spaces (Regulation 2(7))

- 7.1 The volume of the segregated ballast tanks should not be included in V.
- 7.2 The volume of slop oil tanks for cargo residues should be included in V.
- 7.3 In fishing vessels, fish processing shops, fishmeal, liver oil and canning shops, tanks for re-cooling fish, wet fish bunkers, stores for salt, spices, oil and tare should be treated as cargo spaces. Fishing gear stores should be excluded from V_c .
- 7.4 Refrigerating machinery associated with the refrigerated cargoes and situated within the steel boundaries within the cargo spaces concerned should be considered as cargo spaces.
- 7.5 Mail rooms and bonded stores for passengers should be considered as cargo spaces but provision rooms for crew or passengers and bonded stores for crew should not be treated as cargo spaces.
- 7.6 Ore/oil carriers which are engaged in the carriage of ore only, and where the owners request to have the dual purpose oil/ballast tanks excluded from the V_c, should be required to have those tanks permanently disconnected from the oil cargo system and not used for the carriage of cargo of any sort. The ship should then be re-measured in accordance with Regulation 5(3) in this condition. The conditions for ballast tanks not to be included in V_c should be that they should be solely allocated to ballast, connected to the ballast system and not used to carry any cargo.

7.7 When measuring cargo spaces, no account should be taken for insulation, sparring or ceiling which is fitted within the steel boundaries of the space concerned. For ships which have permanent independent cargo tanks constructed within the ship, e.g. gas tankers, the volume to be included in $V_{\rm C}$ should be calculated to the structural boundary of the tank, irrespective of insulation which may be fitted on the inside or outside of the tank boundary.

Gross and Net Tonnage (Regulations 3 and 4)

8 The K_1 and K_2 coefficient used in the gross and net tonnage and calculations may be derived from either the table in Appendix 2 of the Convention or from the formula in Regulation 3 or 4 respectively at the discretion of the Administration.

Net Tonnage (Regulation 4)

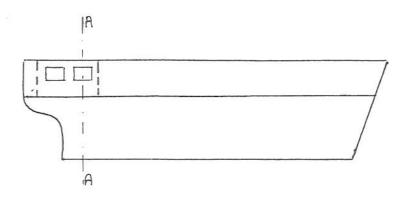
- 9.1 Segregated ballast tanks should not be considered cargo spaces and should not be included in the $V_{\rm c}$ of tankers.
- 9.2 The volume of slop oil tanks for cargo residues should be included in Vc.
- 9.3 Spaces allocated to passenger luggage, provided they are separated from passenger spaces, should be included in V_{α} .
- 9.4 Spaces allocated to passenger automobiles should be included in $V_{\rm c}$.

Change of Net Tonnage (Regulation 5)

An existing ship during the Convention transition period is not required to be measured under the Convention rules until 1994. The ship may be remeasured under existing national rules if it is modified, but only to the extent of affecting the net tonnage.

Calculation of Volumes (Regulation 6)

- 11.1 Continuous ceiling fitted directly on floors or frames should not be considered to constitute a "structural boundary plating".
- 11.2 Bulbs, fair waters, propeller shaft bossings or other structures should be treated as appendages.
- 11.3 Hawse pipes, sea-valve recesses, thruster tunnels, stern chutes in fishing vessels, dredging wells in dredgers and other similar spaces fitted in the ship's hull should be dealt with as spaces open to the sea.



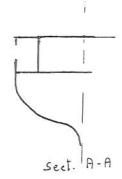
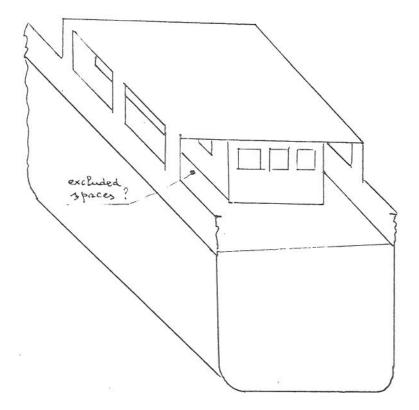


FIGURE 1



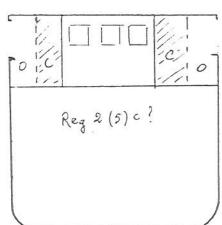


FIGURE 2 "