



Ref. T4/4.01

MSC.1/Circ.1234  
31 October 2007

**DRAINAGE OF FIRE-FIGHTING WATER FROM ENCLOSED VEHICLE AND  
RO-RO SPACES AND SPECIAL CATEGORY SPACES FOR  
PASSENGER AND CARGO SHIPS**

1 The Committee, at its eighty-third session (3 to 12 October 2007), recognizing that there was an urgent need to enhance the relevant regulations of SOLAS chapters II-1 and II-2 to improve the safety of closed vehicle and ro-ro spaces and special category spaces against the accumulation of large quantities of water, in light of the tragic loss of life on the passenger ship **Al Salam Boccaccio 98**, agreed that the draft amendments to SOLAS regulations II-1/35-1 and II-2/20, as set out in the annex, should be included in future amendments to chapters II-1 and II-2 of the 1974 SOLAS Convention.

2 Member Governments are invited to note the proposed amendments and the development of the associated guidelines to enhance the safety of closed vehicle and ro-ro spaces and special category spaces for passenger and cargo ships following adoption and entry into force of the proposed amendments under the provisions of the Convention.

3 Member Governments are urged to bring the aforementioned information to the attention of all interested parties.

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## ANNEX

**DRAFT AMENDMENTS TO CHAPTER II OF THE INTERNATIONAL CONVENTION  
FOR THE SAFETY OF LIFE AT SEA, 1974****CHAPTER II-1  
CONSTRUCTION – STRUCTURE, SUBDIVISION AND STABILITY,  
MACHINERY AND ELECTRICAL INSTALLATIONS****Regulation 35-1 – Bilge pumping arrangements**

1 The following new paragraph 2.6.3 is added after the existing paragraph 2.6.2:

“2.6.3 Provisions for the drainage of closed vehicle and ro-ro spaces and special category spaces shall also comply with regulations II-2/20.6.1.4 and II-2/20.6.1.5.”

**CHAPTER II-2  
CONSTRUCTION – FIRE PROTECTION, FIRE DETECTION AND  
FIRE EXTINCTION****Regulation 20 – Protection of vehicle, special category and ro-ro spaces**

2 The existing paragraph 6.1.4 is replaced by the following:

“6.1.4 When fixed pressure water-spraying systems are provided, in view of the serious loss of stability which could arise due to large quantities of water accumulating on the deck or decks during the operation of the fixed pressure water-spraying system, the following arrangements shall be provided:

- .1 in passenger ships:
  - .1.1 in the spaces above the bulkhead deck, scuppers shall be fitted so as to ensure that such water is rapidly discharged directly overboard, [to the satisfaction of the Administration,] taking into account the guidelines developed by the Organization\*;
  - .1.2.1 in ro-ro passenger ships discharge valves for scuppers, fitted with positive means of closing operable from a position above the bulkhead deck in accordance with the requirements of the International Convention on Load Lines in force, shall be kept open while the ships are at sea;
  - .1.2.2 any operation of valves referred to in paragraph 6.1.4.1.2.1 shall be recorded in the log-book;
  - .1.3 in the spaces below the bulkhead deck, the Administration may require pumping and drainage facilities to be provided additional to the requirements of regulation II-1/35-1. In such case, the drainage system shall be sized to remove no less than 125% of the combined capacity of

both the water spraying system pumps and the required number of fire hose nozzles, [to the satisfaction of the Administration,] taking into account the guidelines developed by the Organization\*. The drainage system valves shall be operable from outside the protected space at a position in the vicinity of the extinguishing system controls. Bilge wells shall be of sufficient holding capacity and shall be arranged at the side shell of the ship at a distance from each other of not more than 40 m in each watertight compartment;

- .2 in cargo ships, the drainage and pumping arrangements shall be such as to prevent the build-up of free surfaces. In such case, the drainage system shall be sized to remove no less than 125% of the combined capacity of both the water spraying system pumps and the required number of fire hose nozzles, [to the satisfaction of the Administration,] taking into account the guidelines developed by the Organization\*. The drainage system valves shall be operable from outside the protected space at a position in the vicinity of the extinguishing system controls. Bilge wells shall be of sufficient holding capacity and shall be arranged at the side shell of the ship at a distance from each other of not more than 40 m in each watertight compartment. If this is not possible the adverse effect upon stability of the added weight and free surface of water shall be taken into account to the extent deemed necessary by the Administration in its approval of the stability information.\*\* Such information shall be included in the stability information supplied to the master as required by regulation II-1/5-1.

The requirement of this paragraph shall apply to ships constructed on or after [date of entry into force]. Ships constructed on or after 1 July 2002 and before [date of entry into force] shall comply with the previously applicable requirements of paragraph 6.1.4, as amended by resolution MSC.91(72).

6.1.5 In addition to provisions in paragraph 6.1.4 for closed vehicles and ro-ro spaces and special category spaces, [measures shall be taken] to prevent the blockage of drainage arrangements, [to the satisfaction of the Administration,] taking into account the guidelines developed by the Organization\*. Ships constructed before [date of entry into force] shall comply with the requirements of this paragraph by the first survey after [date of entry into force].”

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\* Refer to the Guidelines for drainage systems in closed vehicle and ro-ro spaces and special category spaces (to be developed).

\*\* Refer to the Recommendation on fixed fire-extinguishing systems for special category spaces adopted by the Organization by resolution A.123(V).