

PART 14

MERCHANT SHIPPING (RO-RO PASSENGER SHIP SURVIVABILITY) REGULATIONS 1997 (STATUTORY INSTRUMENT 1997 NO 647)

14.1 General

14.1.1 These regulations implement a Regional Agreement (IMO Circular letter 1891 in accordance with SOLAS 1995 Conference Resolution 14 refers) entitled "Agreement Concerning Specific Stability Requirements for Ro-Ro Passenger Ships Undertaking Regular Scheduled Voyages Between or to or from Designated Ports in North West Europe and the Baltic Sea".

14.1.2 The general requirement is that all Ro-Ro passenger ships will comply with SOLAS 90 and consider the effects of water on the vehicle deck, the amount being dependent on the freeboard after assumed side damage and the Significant Wave Height in the area of intended operation.

14.1.3 References to regulation numbers in this Part refer to regulation numbers of the above regulations.

14.1.4 The Agreement, commonly known as the "Stockholm Agreement", is reproduced in Merchant Shipping Notice MSN 1673(M) and contains the technical requirements to be complied with. See also paragraph 14.8 of these Instructions.

14.1.5 Signatories to the Agreement prepared "guidance notes on the annexes of the Agreement" which were presented in a paper to the International Maritime Organisation (IMO). The text of the two annexes to the paper, SLF 40/INF.14, are reproduced in Appendix 3 of these Instructions.

14.2 Interpretation (Regulation 2)

This Regulation provides definition of terms used in the regulations one of which establishes to which ships the regulations apply, that is those operating a "regular scheduled service".

14.3 Value of A/Amax (Regulation 5)

A/Amax calculations are to be submitted to Headquarters for approval. The method to be used for obtaining the values is considered by Part 15 of these Instructions.

14.4 Construction (Regulation 6)

The date by which a ship is to fully comply with the requirements of the Agreement is determined by the value of the A/Amax. This compliance date is fixed and no extension will be allowed by partial modifications to enhance the A/Amax value.

14.5 Seasonal Operation (Regulation 7)

The Significant Wave Heights to be considered in the Agreement are for “year round operations”. This regulation allows for a reduction in the wave height where it can be justified for the restricted period of operation, e.g. summer operation only.

14.6 Significant Wave Heights for Domestic Routes (Regulation 8)

The wave heights for international voyages may be considered excessive for certain domestic routes and this regulation allows for reduced heights to be considered where they can be justified.

14.7 Certificates

14.7.1 For those ships not yet complying fully with the requirements of the Agreement a certificate entitled Evidence of Compliance 1 Document is issued. This document indicates the ships A/Amax value.

14.7.2 Those ships fully complying with the requirements of the Agreement are issued with a certificate entitled Evidence of Compliance 2 Document. This document states the Significant Wave Height that the ship may operate in. The Passenger Safety Certificate or Passenger Certificate will be endorsed to show this Significant Wave Height, together with any restrictions which may have been imposed, e.g. restricted period of operation. Surveyors should note that the Significant Wave Height stated should not be lower than that required for the area of operation of the ship.

14.8 Stockholm Agreement (MSN 1673 (M))

14.8.1 Guidance notes

Annexes 1 and 2 of IMO document SLF 40/INF.14 are appropriate notes on the uniform application of Annexes 1 and 2 of the Agreement. Annex 1 deals with the stability requirements pertaining to the Agreement while Annex 2 deals with the Model Test Method. Both annexes of the IMO document are reproduced at Appendix 3 of these Instructions.

14.8.2 Required submissions

14.8.2.1 *Calculations*

Where calculations are the decided method to show compliance, the submission should include, for a new ship, the requirements of paragraph 5.6.2 of these Instructions. In addition to quoting the Significant Wave Height on which the calculations are based, the summary of the damage case calculations is to indicate the freeboards after damage and the amount of water on deck that has been considered in each case. For a ship which has previously been submitted to the certifying authority, those details referred to in paragraph 5.6.2 of these Instructions may not be required. For the ship in question, the surveyor will advise the owner/consultant, referring to Headquarters for advice if necessary.

14.8.2.2 *Model test*

Where it has been decided that model tests are to be undertaken, calculations are to be submitted which show the worst SOLAS damage (defined in paragraph 3.5 of Annex 2 of Appendix 3 of these Instructions) required by the regulations. However, if this damage is outside of $\pm 10\%L$ from midships the worst midship damage with regard to freeboard is also to be submitted. The extent and degree of modelling and the model test program together with the calculation results are to be agreed by the Certifying Authority.

14.8.2.3 *Model details*

Regarding modelling of double bottom tanks, the following rules should be obeyed:-

- (i) Where these tanks are included in the damage case, they are to be accurately modelled with particular attention paid to the damage opening, where both the inner and outer bottom should include a sharp edged V cut-out full SOLAS penetration.
 - (a) Where these tanks are intentionally omitted from the damage case, to give a worse "lesser" damage case, then they may be modelled as a solid block.
 - (b) Where these tanks are permanently filled with ballast etc, but lie within the SOLAS extent of damage, they should be modelled as in (a) above except that their contents should be included as a weight in the intact condition. This weight shall be removed upon opening of the damage in the model side and flooding of the space takes place.

14.8.3 Approval after model testing

Two copies of the test report and videos are required for retention by the Certifying Authority. All details and reports are to be held on the CM 18/03 file.