

PART 15

A/AMAX CALCULATIONS

15.1 General

15.1.1 When it was agreed that all existing Ro-Ro passenger ships should comply with SOLAS 90 a simple and relatively quick method of ranking the ships in order of existing survivability standard was required. The method chosen was that included in IMO MSC/Circ.574, the text of which is reproduced at Appendix 4 together with interpretations agreed at the IMO and produced as MSC/Circ.649.

15.1.2 The original intention of the A/Amax calculation was for those ships constructed prior to 29 April 1990 and not complying with SOLAS 90. However, the same calculation is adopted in assessing phase in dates for compliance with the Merchant Shipping (Ro-Ro Passenger Ship Survivability) Regulations 1997 (the Stockholm Agreement). As the survivability index "s" is based on SOLAS 90 criteria, all ships known to satisfy SOLAS 90 will automatically have an A/Amax value of 100%. It should be noted however that due to the simplified nature of the calculation (one draught and trim) it does not follow that a pre 29 April 1990 ship with an A/Amax of 100% complies fully with SOLAS 90.

15.2 Interpretations (MSC/Circ.649)

15.2.1 The IMO document refers to the modified SOLAS 90 - MSC.26(60). This reduced standard was not accepted by the United Kingdom and has subsequently been replaced by SOLAS 90 (MSC.12(56)) in the 1995 SOLAS amendments.

15.2.2 The cut off value of A/Amax 95% in paragraph 6.1 of the circular was not accepted by the UK and it too has been removed from the SOLAS amendments.

15.2.3 The step increase allowed for in paragraph 6.2 is not allowed when considering the A/Amax in connection with the MS (Ro-Ro Passenger Ship Survivability) Regulations and should therefore be ignored. (See also paragraph 14.4 of these Instructions).

15.3 Calculations

Calculations need only be considered for spaces outboard of B/5 bulkheads, where they exist. However, damages inboard of such bulkheads may be considered if they give benefit to the index. It should be noted that if such inboard spaces are to be considered then all inboard spaces must be considered i.e. it is not acceptable to include only those spaces that provide benefit.

15.4 Surveys

The KG used in the calculation of A/A_{max} is the ship's operational KG at the subdivision draught. When undertaking surveys, surveyors are to check the stability records held onboard the ship to ensure that the ship is not operating at KG values greater than that assumed for the purpose of the A/A_{max} calculation, when operating at the subdivision draught. If the surveyor finds that a ship is operating outside these limits, Headquarters are to be advised and provided with details. The owner should also be advised of the surveyor's findings and requested to provide an explanation. Surveyors should note however that the A/A_{max} calculation is no longer valid when the ship complies fully with the requirements of the survivability standard referred to in Part 14 of these Instructions, and has evidence onboard to substantiate this.