



Ref. T1/2.04

MSC/Circ.1158  
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## UNIFIED INTERPRETATION OF SOLAS CHAPTER II-1

1 The Maritime Safety Committee, at its eightieth session (11 to 20 May 2005), with a view to providing assistance to the Administrations in the implementation of the requirements of the 1974 SOLAS Convention and in order to ensure the uniform application thereof, approved the unified interpretations of the Convention, as set out in the annex.

2 Member Governments are invited to:

- .1 take note of the annexed unified interpretations and use them when applying the relevant requirements of the 1974 SOLAS Convention; and
- .2 bring the annexed unified interpretations to the attention of all interested parties.

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## ANNEX

## UNIFIED INTERPRETATION OF SOLAS CHAPTER II-1

**Regulation II-1/22 – Stability information for passenger ships and cargo ships****Lightweight check**

- 1 A sister ship is a ship built by the same yard from the same plans.
- 2 A lightweight check is considered the acceptable means of being satisfied that the data from a lead sister ship's inclining test can be used for a subsequent ship. The Administration may request regular repeats of inclining tests and/or require each individual passenger ship to be inclined, as detailed below.
- 3 For any newly built sister ship with known differences from the lead sister ship, a detailed weights and centres calculation to adjust the lead ship's lightship properties should be carried out. The validity of the calculated lightship properties should be assessed by carrying out a lightweight check unless the implications regarding the stability of the ship indicate that an inclining test should be performed. The acceptable deviation of lightship displacement should be:

For $L \leq 50\text{m}$	2% of the lightship displacement of the lead ship.
For $L \geq 160\text{m}$	1% of the lightship displacement of the lead ship.
For intermediate length	by linear interpolation.

In addition, the deviation of lightship longitudinal centre of gravity should not exceed 0.5% of the LBP of the lead ship. Where the deviation exceeds either of these limits, an inclining test should be carried out. Where the deviation is within these limits the actual lightship weight and longitudinal centre of gravity derived from the lightship check should be used in conjunction with the higher of either the lead ship's vertical centre of gravity or the calculated value.

4 For a ship in service which undergoes alterations with calculable differences in lightship properties which materially affect the stability information supplied to the master, a detailed weights and centres calculation to adjust the lightship properties should be carried out. To avoid an inclining test, the deviation of lightship displacement should not exceed 2% of the original approved lightweight or 2 tonnes, whichever is greater, or that approved following the most recent major alteration or conversion. In addition, the deviation of lightship longitudinal centre of gravity from the original or that approved following the most recent major alteration or conversion should not exceed 1% of the LBP of the ship. Where the deviation exceeds either of these limits, an inclining test should be carried out. Where a ship is within these limits the calculated values of lightweight, lightship LCG and lightship VCG should be used in all subsequent stability information supplied to the master.

5 For all passenger ships, a lightship survey should be carried out at periodical intervals not exceeding five years to verify any changes in lightship displacement and longitudinal centre of gravity. The ship should be re-inclined whenever, in comparison with the originally approved stability information or that approved following the most recent major alteration or conversion, the deviation of the lightweight and/or lightship longitudinal centre of gravity exceeds the limits in paragraph 4 above. Where a ship is within these limits, the values of lightweight and lightship LCG derived from the lightship survey should be used in conjunction with the VCG derived from the most recent inclining experiment in all subsequent stability information supplied to the master.