

**Circular 128 / 2016**

**To: Vessel Managers, Masters, Officers, Deputy Registrars, Surveyors and Other Interested Parties**

**Subject: Icing considerations for cargo ships carrying timber deck cargoes – new formula for calculating ice accretion weight added to Intact Stability Code**

**Date: 15<sup>th</sup> April 2016**

### **Summary**

Maritime Cook Islands draws your attention to the circular below

A new paragraph has been added to the icing considerations contained in Part B, Chapter 6.2 of the International Code on Intact Stability, 2008.

This provides cargo ships carrying timber deck cargoes with an explicit formula for calculating the ice accretion weight, and stipulates the ways in which the ice should be distributed over the timber deck region.

The new formula considers the ship length, freeboard height and the length of the bow flare region.

Regulation 44(7) of the International Load Line Convention and the Codes of Safe Practice for Ships

Carrying Timber Deck Cargoes already have requirements to consider the effects of icing on the stability of the vessel, if applicable.

Owners of existing vessels carrying timber deck cargoes, intending to operate the ship in ice forming areas, should give consideration to having their vessel's stability manual reappraised, using this new more explicit ice accretion calculation.

**For further enquiries, please contact the Technical Department at [df@maritimecookislands.com](mailto:df@maritimecookislands.com)**

Please ensure this has been forwarded to interested parties.

**ANNEX 11**

**RESOLUTION MSC.398(95)  
(adopted on 5 June 2015)**

**AMENDMENTS TO PART B OF THE INTERNATIONAL  
CODE ON INTACT STABILITY, 2008 (2008 IS CODE)**

THE MARITIME SAFETY COMMITTEE,

RECALLING Article 28(b) of the Convention on the International Maritime Organization concerning the functions of the Committee,

RECALLING ALSO resolution MSC.267(85) by which it adopted the International Code on Intact Stability, 2008 (2008 IS Code),

NOTING the provisions regarding the procedure for amendments to part B (recommendatory part) of the 2008 IS Code, stipulated in paragraph 27.2 of regulation II-1/2 of the International Convention for the Safety of Life at Sea (SOLAS), 1974 (1974 SOLAS Convention), as amended by resolution MSC.269(85), and in paragraph (16).2 of regulation I/3 of the Protocol of 1988 relating to the International Convention on Load Lines, 1966 (1988 Load Lines Protocol), as amended by resolution MSC.270(85),

RECOGNIZING the need to include provisions regarding ice accretion on cargo ships carrying timber deck cargoes in the 2008 IS Code,

HAVING CONSIDERED, at its ninety-fifth session, the proposed amendments to part B of the 2008 IS Code, prepared by the Sub-Committee on Ship Design and Construction, at its second session,

1 ADOPTS amendments to part B of the 2008 IS Code, the text of which is set out in the annex to the present resolution;

2 RECOMMENDS Governments concerned to use the amendments to part B of the 2008 IS Code as a basis for relevant safety standards, unless their national stability requirements provide at least an equivalent degree of safety; and

3 INVITES Contracting Governments to the 1974 SOLAS Convention and Parties to the 1988 Load Lines Protocol to note that the above amendments to the 2008 IS Code will take effect on 5 June 2015.

ANNEX

AMENDMENTS TO PART B OF THE OF THE INTERNATIONAL  
CODE ON INTACT STABILITY, 2008 (2008 IS CODE)

PART B  
RECOMMENDATIONS FOR CERTAIN TYPES  
OF SHIPS AND ADDITIONAL GUIDELINES

CHAPTER 6  
ICING CONSIDERATIONS

6.2 Cargo ships carrying timber deck cargoes

1 A new paragraph 6.2.3 is added after the existing paragraph 6.2.2, as follows:

"6.2.3 Allowance for ice accretion

.1 The ice accretion weight,  $w$  (kg/m<sup>2</sup>), may be taken as follows:

$$w = 30 \cdot \frac{2.3(15.2L - 351.8)}{l_{FB}} \cdot f_{il} \cdot \frac{l_{bow}}{0.16L}$$

where:

- $f_{il}$  = timber and lashing factor = 1.2  
 $L$  = length of ship in m  
 $l_{FB}$  = freeboard height in mm  
 $l_{bow}$  = length of bow flare region in m, to be taken as the distance from the longitudinal position at which the maximum breadth occurs on a water line located 0.5 metres below the freeboard deck at side to the foremost point of the bow at that waterline.

.2 The ice accretion weight,  $w$  (kg/m<sup>2</sup>), over the timber deck region should be applied to each of the load cases as illustrated in figure 1:

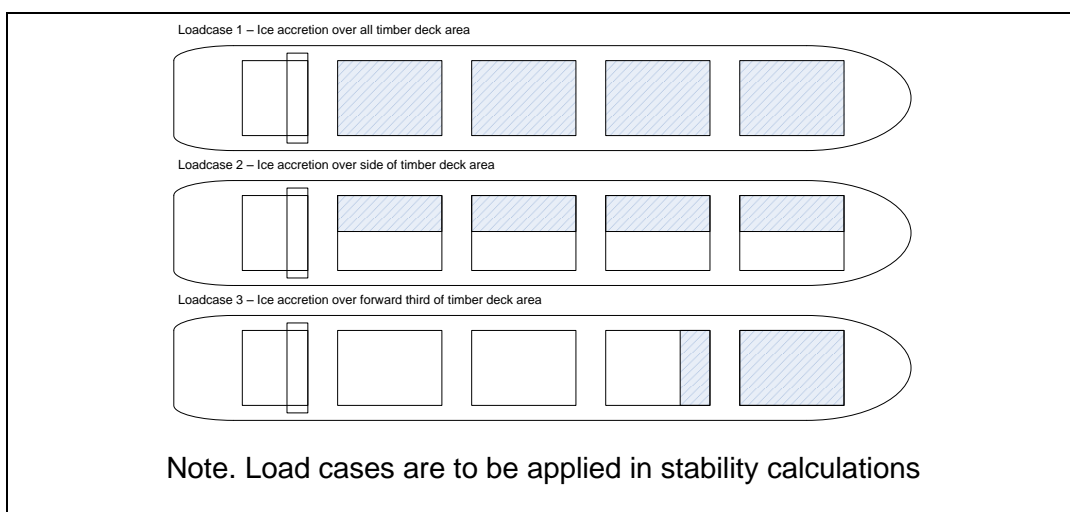


Figure 1 – Ice accretion load cases for timber deck cargoes"

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