AMENDMENTS TO THE RECOMMENDATION ON INTACT STABILITY FOR PASSENGER AND CARGO SHIPS UNDER 100 METRES IN LENGTH (RESOLUTION A.167(ES.IV)) WITH RESPECT TO SHIPS CARRYING DECK CARGOES

The Assembly,

Noting Article 16(i) of the Convention on the Inter-Governmental Maritime Consultative Organization concerning the functions of the Assembly,

Recalling Resolution A.167(ES.IV) by which it adopted the Recommendation on Intact Stability for Passenger and Cargo Ships under 100 metres in Length,

Recalling further that ships carrying timber deck cargoes had been excluded from that Recommendation,

Recognizing the need to provide guidance concerning the stability of ships carrying deck cargoes,

Having considered the Recommendation by the Maritime Safety Committee at its twenty-third session,

Adopts the Amendments to the Recommendation on Intact Stability for Passenger and Cargo Ships under 100 metres in Length (Resolution A.167(ES.IV)) with respect to Ships Carrying Deck Cargoes, the text of which appears at Annex to this Resolution,

Invites all governments concerned to take appropriate steps to give effect to the amendments.

ANNEX

AMENDMENTS TO THE RECOMMENDATION ON INTACT STABILITY FOR PASSENGER AND CARGO SHIPS UNDER 100 METRES IN LENGTH (RESOLUTION A.167(ES.IV)) WITH RESPECT TO SHIPS CARRYING DECK CARGOES

- 1. Scope
 - 1.1 Delete in the second line "and ships carrying timber deck cargoes".
- 5. Recommended Criteria

Re-number 5.2 - 5.6 as 5.3 - 5.7 and add the following new paragraph 5.2:

5.2 For ships loaded with timber deck cargoes and provided that the cargo extends longitudinally between superstructures $^{(1)}$ transversely for the full beam of ship after due allowance for a rounded gunwale

⁽¹⁾ Where there is no limiting superstructure at the after end, the timber deck cargo shall extend at least to the after end of the aftermost hatchway.

not exceeding 4 per cent of the breadth of the ship and/or securing the supporting uprights and which remains securely fixed at large angle of heel, an Administration may apply the following criteria in substitution for criteria given in 5.1 above:

- (a) the area under the righting lever (GZ curve) should not be less than 0.08 metre-radians up to $\theta = 40^{\circ}$ or the angle of flooding if this angle is less than 40° .
- (b) the maximum value of the righting lever (GZ) should be at least 0.25 m.
- (c) at all times during a voyage the metacentric height GM_O should be positive after correction for the free surface effects of liquid in tanks and, where appropriate, the absorption of water by the deck cargo and/or ice accretion on the exposed surfaces. Additionally, in the departure condition the metacentric height should be not less than 0.10 m.

7. Stability Information

Add the following new sub-paragraphs to paragraph 7.2:

- (vi) For ships carrying timber deck cargoes the Administration may deem it necessary that the master be given information setting out the changes in deck cargo from that shown in the loading conditions, when the permeability of the deck cargo is significantly different from 25 per cent.
- (vii) For ships carrying timber deck cargoes conditions should be shown indicating the maximum permissible amount of deck cargo having regard to the lightest stowage rate likely to be met in service.

Appendix I

Add the following new Section:

4. Effect of timber deck cargo

In the case of ships carrying timber deck cargoes the Administration may allow account to be taken of the buoyancy of the deck cargo assuming that such cargo has a permeability of 25 per cent of the volume occupied by the cargo. Additional curves of stability may be required if the Administration considers it necessary to investigate the influence of different permeabilities and/or assumed effective height of the deck cargo.

Appendix II

1. Loading Conditions

Add the following sub-section:

- (3) Cargo ships intended to carry deck cargoes
 - (i) ship in the fully loaded departure condition with cargo homogeneously distributed in the holds and with cargo specified in extension and weight on deck, with full stores and fuel;

AMENDMENTS TO THE RECOMMENDATION ON INTACT STABILITY FOR PASSENGER AND CARGO SHIPS UNDER 100 METRES IN LENGTH (RESOLUTION A.167(ES.IV)) WITH RESPECT TO SHIPS CARRYING DECK CARGOES

The Assembly,

Noting Article 16(i) of the Convention on the Inter-Governmental Maritime Consultative Organization concerning the functions of the Assembly,

Recalling Resolution A.167(ES.IV) by which it adopted the Recommendation on Intact Stability for Passenger and Cargo Ships under 100 metres in Length,

Recalling further that ships carrying timber deck cargoes had been excluded from that Recommendation,

Recognizing the need to provide guidance concerning the stability of ships carrying deck cargoes,

Having considered the Recommendation by the Maritime Safety Committee at its twenty-third session,

Adopts the Amendments to the Recommendation on Intact Stability for Passenger and Cargo Ships under 100 metres in Length (Resolution A.167(ES.IV)) with respect to Ships Carrying Deck Cargoes, the text of which appears at Annex to this Resolution,

Invites all governments concerned to take appropriate steps to give effect to the amendments.

ANNEX

AMENDMENTS TO THE RECOMMENDATION ON INTACT STABILITY FOR PASSENGER AND CARGO SHIPS UNDER 100 METRES IN LENGTH (RESOLUTION A.167(ES.IV)) WITH RESPECT TO SHIPS CARRYING DECK CARGOES

- 1. Scope
 - 1.1 Delete in the second line "and ships carrying timber deck cargoes".
- 5. Recommended Criteria

Re-number 5.2 - 5.6 as 5.3 - 5.7 and add the following new paragraph 5.2:

5.2 For ships loaded with timber deck cargoes and provided that the cargo extends longitudinally between superstructures $^{(1)}$ transversely for the full beam of ship after due allowance for a rounded gunwale

⁽¹⁾ Where there is no limiting superstructure at the after end, the timber deck cargo shall extend at least to the after end of the aftermost hatchway.

not exceeding 4 per cent of the breadth of the ship and/or securing the supporting uprights and which remains securely fixed at large angle of heel, an Administration may apply the following criteria in substitution for criteria given in 5.1 above:

- (a) the area under the righting lever (GZ curve) should not be less than 0.08 metre-radians up to $\theta = 40^{\circ}$ or the angle of flooding if this angle is less than 40° .
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Add the following new sub-paragraphs to paragraph 7.2:

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Appendix II

1. Loading Conditions

Add the following sub-section:

- (3) Cargo ships intended to carry deck cargoes
 - (i) ship in the fully loaded departure condition with cargo homogeneously distributed in the holds and with cargo specified in extension and weight on deck, with full stores and fuel;

- (ii) ship in the fully loaded arrival condition with cargo homogeneously distributed in holds and with a cargo specified in extension and weight on deck, with 10 per cent stores and fuel.
- 2. Assumptions for Calculating Loading Conditions
 - (1) First line of paragraph (1), delete "and" and after 2(ii) add "3(i) and 3(ii)".
 - (2) Third line of paragraph (2), after "summer load line" insert "or if intended to carry a timber deck cargo, to the summer timber load line".
 - (3) First line of paragraph (4), insert after "cargo", "in holds".

Re-number (6) to (9) as (8) to (11) and add new paragraphs (6) and (7):

- (6) Where timber deck cargoes are carried, the amount of cargo and ballast should correspond to the worst service condition in which all the relevant stability criteria in Section 5 are met. In the arrival condition it should be assumed that the weight of the deck cargo has increased by 10 per cent due to water absorption.
- (7) When timber deck cargoes are carried and it is anticipated that some formation of ice will take place an allowance should be made in the arrival condition for the additional weight.

12 October 1971 Agenda item 8

RESOLUTION A.207(VII)

RECOMMENDATION FOR AN INTERIM SIMPLIFIED STABILITY CRITERION FOR DECKED FISHING VESSELS UNDER 30 METRES IN LENGTH

The Assembly,

Noting Article 16(i) of the Convention on the Inter-Governmental Maritime Consultative Organization concerning the functions of the Assembly,

Noting also Recommendation 7 of the International Conference on Safety of Life at Sea, 1960, concerning intact stability of passenger ships, cargo ships and fishing vessels,

Recalling Resolution A.168(ES.IV) concerning the Recommendation on Intact Stability of Fishing Vessels,

Recognizing the need to provide internationally a simple stability criterion for small fishing vessels for which no stability data or lines drawings are available,

Having considered the Recommendation by the Maritime Safety Committee at its twenty-second session,