

Resolution A.708(17)
Adopted on 6 November 1991
(Agenda item 10)

NAVIGATION BRIDGE VISIBILITY AND FUNCTIONS

THE ASSEMBLY,

RECALLING Article 15(j) of the Convention on the International Maritime Organization concerning the functions of the Assembly in relation to regulations and guidelines concerning maritime safety and the prevention and control of marine pollution from ships,

RECOGNIZING that the lack of adequate bridge visibility may adversely affect the safety of the ship and the safety of other ships and the marine environment,

CONSIDERING the need to ensure that the design of ships provides at all times adequate visibility from the navigation bridge for the purposes of safe navigation,

NOTING WITH CONCERN reports that some ships' navigation bridges are being used for purposes other than navigation, communications and other functions essential to the safe operation of the ship, its engines and cargo,

HAVING CONSIDERED the recommendation made by the Maritime Safety Committee at its fifty-ninth session,

1. URGES Governments to ensure that:
 - (a) the visibility from the navigation bridge of ships conforms to the guidelines on navigation bridge visibility set out in the annex to the present resolution;
 - (b) the ship's navigation bridge is not used for purposes other than navigation, communications and other functions essential to the safe operation of the ship, its engines and cargo;
2. INVITES the Maritime Safety Committee to consider developing relevant provisions to ensure an adequate standard of visibility from the ship's wheelhouse, by means of an appropriate amendment to the International Convention for the Safety of Life at Sea, 1974.

Annex

GUIDELINES ON NAVIGATION BRIDGE VISIBILITY

1 SCOPE

1.1 These guidelines have been developed to ensure that designs of ships provide adequate visibility from the navigation bridge.

2 APPLICATION

2.1 The guidelines apply to ships constructed after 2 January 1992 where bridge duty is regularly maintained. The Administration should urge designers and builders of ships to use these guidelines during a ship's design process.

2.2 When ships of unconventional design cannot comply with the guidelines, Administrations should consider arrangements that provide a level of visibility that is as near as possible to the level recommended in these guidelines.

2.3 Administrations should consider the application of 3.2 and 3.3 to existing ships as well. However, structural alterations or addition of equipment need not be required.

3 FIELD OF VISION

3.1 Every effort should be made to place the navigation bridge above all other decked structures, not including funnels, which are on or above the freeboard deck.

3.2 The view of the sea surface from the conning position should not be obscured by more than two ship lengths, or 500 m, whichever is less, forward of the bow to 10° on either side irrespective of the ship's draught, trim and deck cargo.

3.3 Blind sectors caused by cargo, cargo gear and other obstructions outside of the wheelhouse forward of the beam obstructing the view of the sea surface as seen from the conning position, should not exceed 10° each. The total arc of blind sectors should not exceed 20°. The clear sectors between blind sectors should be not less than 5°. However, in the view described in 3.2, each individual blind sector should not exceed 5°.

3.4 The height of the lower edge of the navigation bridge front windows above the deck should be kept as low as possible. In no case should the lower edge present an obstruction to the forward view as described in these guidelines.

3.5 The upper edge of the navigation bridge front windows should allow a forward view of the horizon, for a person with an eye height of 1,800 mm, at the conning position when the ship is pitching in heaving seas.

3.6 The horizontal field of vision from the conning position should extend over an arc from more than 22.5° abaft the beam on one side, through forward, to more than 22.5° abaft the beam on the other side.

3.7 From each bridge wing the field of vision should extend over an arc from at least 45° on the opposite bow through dead ahead and then aft to 180° from dead ahead.

3.8 From the main steering position the field of vision should extend over an arc from dead ahead to at least 60° on each side.

3.9 The ship's side should be visible from the bridge wing.

4 WINDOWS

4.1 Framing between navigation bridge windows should be kept to a minimum and should not be installed immediately forward of any workstation.

4.2 To help avoid reflections, the bridge front windows should be inclined from the vertical plane top out, at an angle of not less than 10° and not more than 25°.

4.3 Polarized and tinted windows should not be fitted.

4.4 A clear view through at least two of the navigation bridge front windows and, depending on the bridge configuration, through an additional number of clear view windows should be provided at all times regardless of weather conditions.