INTER-GOVERNMENTAL MARITIME CONSULTATIVE ORGANIZATION

ASSEMBLY - 12th session
Agenda item 10(b)

Distr.
GENERAL

A XII/Res.478
15 January 1982

Original: ENGLISH

IMCO

RESOLUTION A.478(XII)

adopted on 19 November 1981

PERFORMANCE STANDARDS FOR DEVICES TO INDICATE SPEED AND DISTANCE

THE ASSEMBLY,

RECALLING Article 16(i) of the Convention on the Inter-Governmental Maritime Consultative Organization,

BEARING IN MIND the proposed amendment to Regulation 12, Chapter V of the International Convention for the Safety of Life at Sea, 1974, concerning the carriage of devices to indicate speed and distance,

HAVING CONSIDERED the recommendation made by the Maritime Safety Committee at its forty-second session,

1. ADOPTS the Recommendation on Performance Standards for Devices to Indicate Speed and Distance set out in the Annex to the present resolution;

2. RECOMMENDS Member Governments to ensure that devices to indicate speed and distance installed on or after the date of entry into force of the amendment conform to performance standards not inferior to those specified in the Annex to the present resolution.

ANNEX

RECOMMENDATION ON PERFORMANCE STANDARDS FOR DEVICES TO INDICATE SPEED AND DISTANCE

1 Introduction

1.1 Devices to indicate speed and distance required by Regulation 12, Chapter V, of the 1974 SOLAS Convention, as amended, are intended for general navigational use to provide information on the distance run and the forward speed of the ship, through the water or over the ground. The equipment should function at forward speeds up to the maximum speed of the ship and in water of depth greater than 3 metres beneath the keel.

1.2 In addition to the recommended general requirements for electronic navigational aids the equipment should conform to the following minimum performance standards.

2 Methods of presentation

2.1 Speed information may be presented in either analogue or digital form. Where a digital display is used, its incremental steps should not exceed 0.1 knots. Analogue displays should be graduated at least every 0.5 knots and be marked with figures at least every 5 knots. If the display can present the speed of the ship in both forward and reverse directions, the direction of movement should be indicated unambiguously.

2.2 Distance run information should be presented in digital form. The display should cover the range from 0 to not less than 9999.9 nautical miles and the incremental steps should not exceed 0.1 nautical miles. Where practicable, means should be provided for resetting a readout to zero.

2.3 The display should be easily readable by day and by night.

2.4 Means should be provided for feeding distance run information to other equipment fitted on board. The information should be in the form of one contact closure or the equivalent for every 0.005 nautical miles run.

2.5 If equipment is capable of being operated in either the "speed through the water" or "speed over the ground" modes, mode selection and mode indication should be provided.

3 Accuracy of measurement

3.1 Errors in the indicated speed, when the ship is operating free from shallow water effect, and from the effects of wind, current and tide should not exceed 5 per cent of the speed of the ship, or 0.5 knots, whichever is the greater.

3.2 Errors in the indicated distance run, when the ship is operating free from shallow water effect, and from the effects of wind, current and tide should not exceed 5 per cent of the distance run by the ship in one hour or 0.5 nautical miles in each hour, whichever is the greater.

3.3 If the accuracy of devices to indicate speed and distance run can be affected by certain conditions (e.g. sea state and its effects, water temperature, salinity, sound velocity in water, the depth of water under the keel, heel and trim of ship), details of possible effects should be included in the equipment handbook.

4 Roll and pitch

The performance of the equipment should be such that it will meet the requirements of this Recommendation when the ship is rolling up to plus or minus 10 degrees and pitching up to plus or minus 5 degrees.

5 Construction and installation

5.1 The system should be so designed that neither the method of attachment of parts of the equipment to the ship nor damage occurring to any part of the equipment which penetrates the hull could result in the ingress of water to the ship.

5.2 Where any part of the system is designed to extend from and retract into the hull of the ship, the design should ensure that it can be extended, operated normally and retracted at all speeds up to the maximum speed of the ship. Its extended and retracted positions should be clearly indicated at the display position.