

It is recognized that all the necessary information may not be available at the time of the original trials and some of the data may have to be obtained after the ship is in service. However, the basic information should be completed as soon as practicable. Furthermore, it is recommended that the booklet should be in such a form that additional data for each manoeuvre could be added and that shipmasters be encouraged to add to this basic information as they gain experience in the handling of the vessel in conditions not covered by the original data.

Copies of the appropriate diagrams should be posted on the bridge.

All data provided should be for calm weather, no current and deep-water conditions with clean hull. These facts should be clearly noted on the data displayed with a warning that the vessel's response may significantly change under different conditions, including shallow water.

## 2. *Supplementary information*

The attention of masters is drawn to the following points which should be considered in relation to the safe handling of the ship:

- (i) Squat. The decrease in clearance under the keel when a vessel is under way in shallow water is known as squat, and varies with speed. A vessel which will in certain circumstances squat several feet can effectively reduce this by a substantial reduction in speed.
- (ii) The extent of "blind zone" forward created by the forward part of the vessel may be inhibiting and its extent should be determined in both loaded and ballast conditions.
- (iii) Consideration should be given to the effective increase in draught due to the ship motion in a seaway.
- (iv) It should be noted that where practicable the quickest method of reducing headway is to turn under the influence of full rudder, with or without the use of engine astern power.

12 October 1971  
Agenda item 8

RESOLUTION A.210(VII)

Incorporated in MSC.1(XLV)

### RECOMMENDATION ON STEERING GEAR FOR LARGE SHIPS

The Assembly,

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

*Recognizing* the importance of adequate and direct control of the manoeuvrability of large ships at any time during the voyage in order to reduce the risk of collision or stranding,

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

*Adopts* the Recommendation on Steering Gear for Large Ships, the text of which appears at Annex to this Resolution,

*Invites* all governments concerned to take steps to give effect to the Recommendation as soon as possible.

ANNEX

RECOMMENDATION ON STEERING GEAR FOR  
LARGE SHIPS

Having regard to the possibility that a large ship proceeding at full speed with other ships in the vicinity can suddenly be deprived of the ability to operate the steering gear, it is recommended that arrangements should be made in all new ships over 70,000 tons gross tonnage to ensure to the satisfaction of the Administration that the navigating officer will at all times have adequate and direct control over the rudder movements even though in emergencies the full rate of movement may not necessarily be assured. This objective should be achieved by:

- (a) the duplication of the steering gear operating mechanism;
- (b) the provision of an alternative supply of power from the emergency generator; and
- (c) alternative control arrangements from the bridge to the steering gear.

Such alternative arrangements should come into operation, either automatically, or in respect of (c) only by a changeover device on the navigating bridge, in the event of the failure of the arrangements in use at the time. The Administration might further examine existing ships over 70,000 tons gross tonnage to implement these arrangements in so far as they are reasonable and practicable.

12 October 1971  
Agenda item 8

RESOLUTION A.211(VII)

Incorporated in [MSC.1\(XLV\)](#)

RECOMMENDATION ON SAFETY MEASURES FOR PERIODICALLY  
UNATTENDED MACHINERY SPACES OF CARGO SHIPS ADDITIONAL  
TO THOSE NORMALLY CONSIDERED NECESSARY FOR AN  
ATTENDED MACHINERY SPACE

The Assembly,

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

*Recognizing* that the increasing application of automation in ships calls for the provision of special safety measures particularly for the protection of engine rooms against fire and unintended flooding,

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