

RESOLUTION A.209(VII)

RECOMMENDATION ON INFORMATION TO BE INCLUDED
IN THE MANOEUVRING BOOKLETS

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.160(ES.IV) by which it adopted the Recommendation on Data Concerning Manoeuvring Capabilities and Stopping Distances of Ships,

Desiring to ensure uniformity in the information to be included in the manoeuvring booklets available on board, particularly in large ships and ships carrying dangerous chemicals in bulk,

Having examined the Recommendation by the Maritime Safety Committee at its twenty-first session,

Adopts the Recommendation on Information to be Included in the Manoeuvring Booklets, the text of which appears at Annex to this Resolution,

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

ANNEX

RECOMMENDATION ON INFORMATION TO BE INCLUDED
IN THE MANOEUVRING BOOKLETS

In pursuance of Assembly Resolution A.160(ES.IV) Administrations are recommended to require that manoeuvring booklets containing the information given herewith are on board and available to the masters of large ships. Administrations should consider to what extent it may also be applicable to masters of small ships, especially ships carrying dangerous chemicals.

The booklet should consist of two parts as follows:

- Part 1 - Manoeuvring data and/or diagrams
- Part 2 - Supplementary information

1. *Manoeuvring data and/or diagrams*

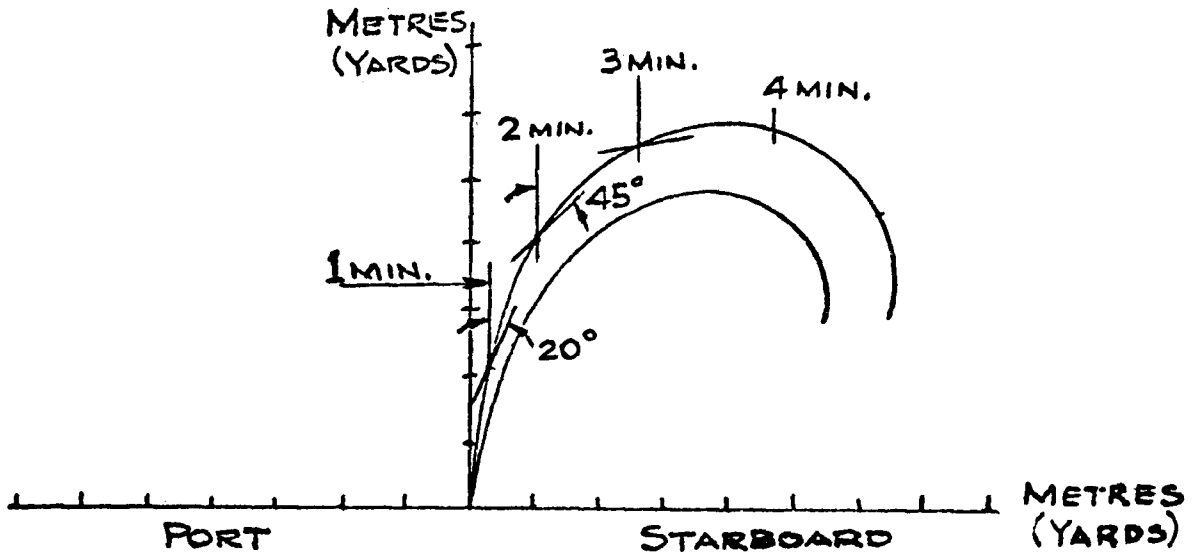
The following information should be contained in Part 1 of the booklet:

- (i) The lowest constant engine revolutions per minute at which the ship can safely steer under:
 - (a) normal ballast conditions; and
 - (b) normal loaded condition.
- (ii) (a) Change of heading diagram and turning circles to port and starboard giving advance and transfer, time and distance, using maximum rudder angle from an initial full speed and slow speed with constant engine control setting.

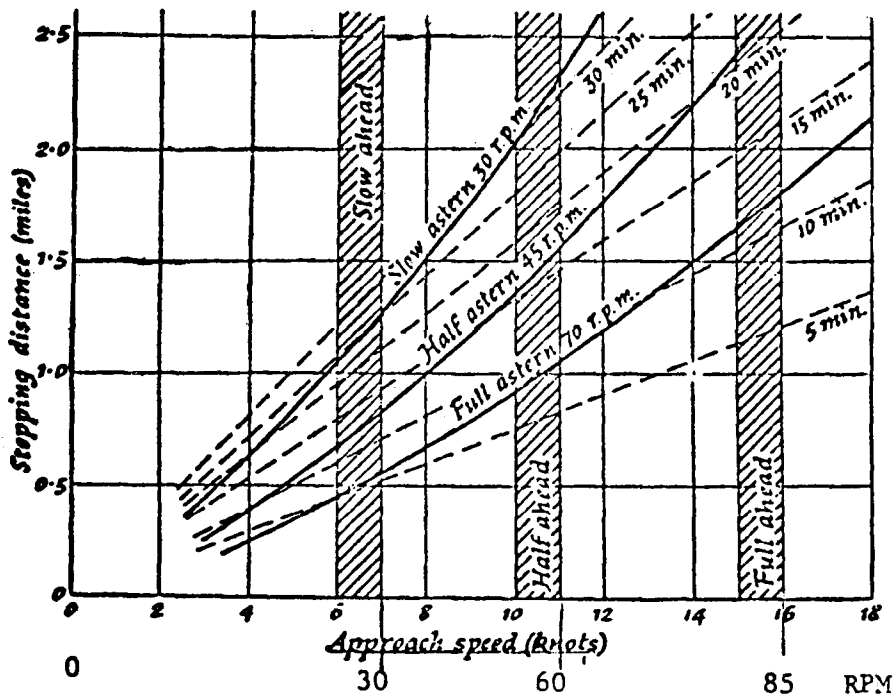
- (b) Turning circle information from initial full speed with maximum rudder and engines stopped.
- (iii) Approximate time and distance a vessel will travel with a minimum application of rudder if it retains approximately its initial heading in both loaded and ballast conditions from:
 - (a) initial full speed after stopping the engines; and
 - (b) initial full speed by the application of astern power at various levels (should the ship turn, the track reach until the ship is almost still in the water - one knot - should be given).

It is recommended that, where necessary, as much of this information as possible should be presented in diagrammatic form, such as the diagram for "Turning Circle" and "Stopping Curves" shown below.

TURNING CIRCLE DIAGRAM



STOPPING CURVES DIAGRAM



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,