South African Maritime Safety Authority

Ref: **SM6/5/2/1**

Date: **30 October 2018**

Marine Notice No. 30 of 2018

Display of Vessel Manoeuvring Characteristics for Boats other than Ski Boats, Surf Boats and Dinghies

TO ALL SHIP OWNERS, SHIP OPERATORS, MASTERS, SHIPS YARDS, NAVAL ARCHITECTS AND PRINCIPAL OFFICERS

Summary

This Marine Notice addresses the requirements for the Master and Officers to be familiar with vessel manoeuvring characteristics for the purposes of Navigation and Emergencies.

In order for the Master, Officers and Crew to effectively apply the MS (Collision and Distress Signals) Regulations of 2005, all Officers of the Watch should be aware of the vessel manoeuvring characteristics in order to take effective and early action to avoid a collision.

Reference is made to the following Rules:

Rule 2(b): Responsibilities

(b) In construing and complying with these Rules due regard shall be had to all dangers of navigation and collision and to any special circumstances, including the limitations of the vessels involved, which may make a departure from these Rules necessary to avoid immediate danger.

Rule 6(a)(iii): Safe Speed

Every vessel shall at all times proceed at a safe speed so that she can take proper and effective action to avoid collision and be stopped within a distance appropriate to the prevailing circumstances and conditions

In determining a safe speed the following factors shall be among those taken into account:

(a) By all vessels:

(iii) the manoeuvrability of the vessel with special reference to stopping distance and turning ability in the prevailing conditions;

Rule 7(c) Risk of collision

(c) Assumptions shall not be made on the basis of scanty information, especially scanty radar information.

SAMSA, having duly considered the requirements of these Rules, have taken the approach that in order to ensure that early and effective action could be taken by a vessel when a risk of collision or any other emergency affecting the safe navigation of the vessel exists, the Master, Officers and Crew need to have access to the manoeuvring characteristics of the vessel when making decisions on the appropriate action to take.

It is for this reason that every owner or master shall ensure that the manoeuvring characteristics of the vessel shall be prominently and permanently displayed in the wheelhouse in the format of a poster. Where possible, the wheelhouse poster should be displayed in the engine room.

The "wheelhouse poster" shall clearly show:

i) Speeds of the vessel through the water; at least 3 different engine speeds or pitch values, equivalent to slow, half and full speeds ahead and astern.

ii) The time elapsed and distance of forward travel of the ship from the time that full astern power is applied to the ship whilst moving ahead at full speed until the ship has stopped.

The wheelhouse poster may be in any format, provided that all the basic elements are shown. For ease of reference, a basic wheelhouse poster is provided in Annex 1.

The wheelhouse poster format may also be based on *"IMO Resolution A.601(15) Recommendation on the Provision and the Display of Manoeuvring Information on Board Ships"*.

Manoeuvrability of a vessel may be significantly influenced by hydrodynamic interaction with the sea bottom, banks and other vessels passing nearby. In addition, winds, waves, currents and tides also affect manoeuvrability.

In order to get credible results, sea trials are to be carried out in the following conditions:

- *Deep and unrestricted waters:* Water depth at the trial site is to be more than four times of vessel draft at midship. The site should be free from other traffic and far enough from banks that any manoeuvre would not make any bank closer than two ship lengths.
- *Winds and waves:* The trials are not to be conducted if sea state is greater than 4. Wind is not to exceed Beaufort 5. It is not recommended to conduct the trials if the sea state is greater than 2 and wind greater than Beaufort 3.
- *Tides and currents:* It is recommended to avoid places with strong current and/or tidal influence when choosing a trial site. If current cannot be avoided, it should be uniform and the tests should be performed both for initial following and initial ahead current

Existing Ships: All existing vessels shall have a wheelhouse poster by no later than the next safety survey.

New Builds: Prior to delivery of the ship to the owner, the ship yard shall ensure that a wheelhouse poster is completed, showing the relevant information.

Modified Ships: If any vessel is modified to such an extent that the modifications may influence the vessel's manoeuvring characteristics, the surveyor may require that new sea trials are completed and the manoeuvring characteristics and wheelhouse poster updated. (*Examples: Engine/Rudder replacement which affect the manoeuvring characteristics of the vessel*)

The standards were selected so that they are simple, practical and do not require a significant increase in trials time or complexity over that in current trials practice. The standards are based on the premise that the manoeuvrability of ships can be adequately judged from the results of typical ship trials manoeuvres.

Issued by and obtainable from:
The South African Maritime Safety Authority
146 Lunnon Road
Hillcrest Pretoria

P O Box 13186
Hatfield 0028
South Africa

Tel.: +27 12 366 2600
Fax: +27 12 366 2601
E-mail: marinenotices@samsa.org.za
Web Site : www.samsa.org.za

30 October 2018

SM6/5/2/1

ANNEX 1: TYPICAL EXAMPLE

WHEELHOUSE POSTER

SHIP MAIN PARTICULARS

Vessel Name ..... Call Sign ..... Official No .....

Length(m) ..... Breadth(m) ..... Year Build .....

STEERING PARTICULARS	
Type of Rudder(s)	
Time hard-over to hard-over with one power unit	s
Time hard-over to hard-over with two power units	s
Minimum speed to maintain course, propeller stopped	kts

ANCHOR CHAIN	
Side	No. Shackles
Port	
Starboard	

PROPULSION PARTICULARS								
Type of Engine					kW		HP	
Type of Propeller								
Engine Order		Rpm/Pitch Setting	Speed (knots)		**Engine Order**		Rpm/Pitch Setting	Speed (knots)
Ahead	Full Sea speed				Astern			
	Full					Full		
	Half					Half		
	Slow					Slow		

Critical revolutions	rpm
Minimum revolutions	rpm
Time Limit astern	min
Time Limit at minimum revolutions	min
Emergency full ahead to astern	s
Stop to full	s

DRAUGHT	
Ballast Condition	
Forward	
Astern	

DRAUGHT	
Fully loaded Condition	
Forward	
Astern	