KINGDOM OF BAHRAIN
Ministry of Transportation and Telecommunications

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وزارة المواصلات والاتصالات

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Directive No. SOLAS/05

DISPLAY OF MANOEUVRING INFORMATION ON BOARD SHIPS

Issued under the enabling power of the Ministerial Resolution 20/2016
Issue Date: 27 December 2016

1. Introduction:

(1) With reference to;

- Ports and Maritime Affairs (PMA) Resolution no. 8/2016, Regarding the Implementation of the Requirements of the International Convention for the Safety of Life at Sea, 1974 and its amendments
- SOLAS 1974, Regulation V/23 "Pilot transfer arrangements"
- IMO Resolution A.601(15), "Recommendation on Provision and Display of Maneuvering Information on Board Ships".
- MSC.137(76), the Standards for Ship Maneuverability and
- MSC/Circ.1053, "Explanatory Notes to the Standards for Ship Maneuverability".

(2) The purpose of this directive is to ensure that appropriate information is available to the master and pilot alike and be kept on board in conformity to SOLAS requirements and the ISM Code.

(3) The provision and the display of maneuvering data on board ships should be as set out in the annex to Resolution A.601 (15).

2. Application

(1) This directive applies to all Bahraini registered vessels of 150 Gross Tonnage and above;

(2) The PMA recommends that maneuvering information in the form of a pilot card, wheelhouse poster and maneuvering booklet should be provided as follows;

(a) the pilot card on all ships to which the requirements of the 1974 SOLAS Convention, as amended, apply.

(b) the pilot card, wheelhouse poster and maneuvering booklet on all new ships and fishing vessels of 100 meters in length and over, and all new chemical tankers and gas carriers regardless of size.

(c) the pilot card, wheelhouse poster and maneuvering booklet on all new ships that may pose a hazard due to unusual dimensions or characteristics.

(d) the maneuvering information should be amended after any modification or conversion of the ship which may alter its maneuvering characteristics or extreme dimensions.

(e) pilot card, wheelhouse poster and maneuvering booklet, on all ships shall be periodically inspected, maintained and surveyed in accordance with this directive.

3. Maneuvering Information

(1) Pilot card, wheelhouse poster and maneuvering booklet as required by the resolution A.601(15) "Provision and Display of Maneuvering Information on Board Ships".

(2) Pilot card (Appendix 1)

(a) The pilot card is intended to provide information to the pilot on boarding the ship. This information should describe the current condition of the ship, with regard to its loading, propulsion and maneuvering equipment.

(b) to be filled in by the master, is intended to provide information to the pilot on boarding the ship. This information should describe the current condition of the ship, with regard to its loading, propulsion and maneuvering equipment, and other relevant equipment.

Note: The information provided in the pilot card should be available without the need to conduct special maneuvering trials.

(3) Wheelhouse poster (Appendix 2)

(a) The wheelhouse poster should be permanently displayed in the wheelhouse. It should contain general particulars and detailed

information describing the maneuvering characteristics of the ship, and be of such a size to ensure ease of use.

(b) The wheelhouse poster should be permanently displayed in the wheelhouse. It should contain general particulars and detailed information describing the maneuvering characteristics of the ship, and be of such a size to ensure ease of use.

Note: The maneuvering characteristics may be determined by conducting special maneuvering trials or by computer simulation techniques or by estimation. The master should bear in mind that the maneuvering performance of the ship may differ from that shown on the poster due to environmental, hull and loading conditions.

(4) Maneuvering booklet (Appendix 3)

(a) The maneuvering booklet should be available on board and should contain comprehensive details of the ship maneuvering characteristics and other relevant data.

(b) The maneuvering booklet should include the information shown on the wheelhouse poster together with other available maneuvering information.

Note: Most of the maneuvering information in the booklet can be estimated but some should be obtained from trials.

4. Additional Information

Any other relevant additional information should be added to the contents of the booklet, particularly information concerned with the operation of the bridge maneuvering control.

5. Revision History

Revision No. 1 of the present Directive is the first revision.

Hassan Ali Al Majed
Undersecretary for Ports and Maritime Affairs
27th December 2016

Res. A.601(15)

APPENDIX 1

PILOT CARD

Ship's name _____ Date _____

Call sign _____ Deadweight _____ tonnes Year built _____

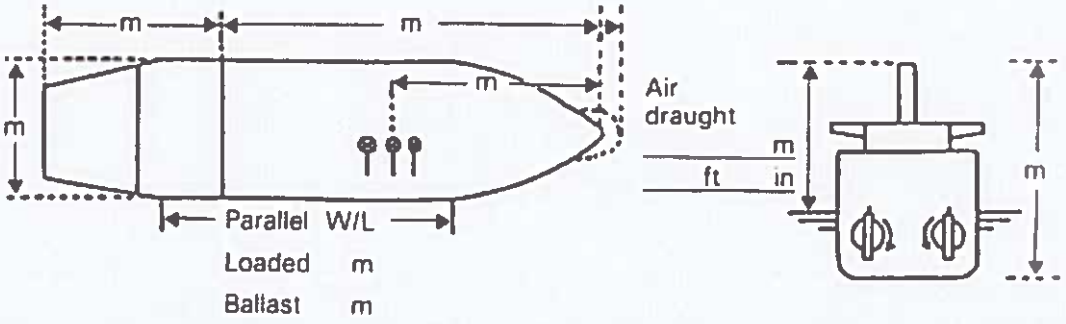
Draught aft _____m/____ft ____in, Forward _____m/____ft ____in, Displacement _____tonnes

SHIP'S PARTICULARS

Length overall _____m, Anchor chain: Port _____shackles, Starboard _____shackles,

Breadth _____m Stern _____shackles

Bulbous bow Yes/No (1 shackle = _____m/_____fathoms)



Type of engine _____ Maximum power _____kW (_____HP)

Manoeuvring engine order	Rpm/pitch	Speed (knots)	
		Loaded	Ballast
Full ahead			
Half ahead			
Slow ahead			
Dead slow ahead			
Dead slow astern		Time limit astern _____min	
Slow astern		Full ahead to full astern _____s	
Half astern		Max. no. of consec starts _____	
Full astern		Minimum RPM _____ _____knots	
		Astern power _____% ahead	

Res. A.601(15)

APPENDIX 1 ***(continued)***

STEERING PARTICULARS	
Type of rudder _____	Maximum angle _____ °
Hard-over to hard-over _____ s	
Rudder angle for neutral effect _____ °	
Thruster: Bow _____ kW (_____ HP)	Stern _____ kW (_____ HP)

CHECKED IF ABOARD AND READY

Anchors ☐

Whistle ☐

Radar ☐ 3 cm ☐ 10 cm

ARPA ☐

Speed log ☐ Doppler: Yes/No
- Water speed ☐
- Ground speed ☐
- Dual-axis ☐

Engine telegraphs ☐

Steering gear ☐
- Number of power units operating ☐

Indicators:
- Rudder ☐
- Rpm/pitch ☐
- Rate of turn ☐

Compass system ☐

Constant gyro error = _____ °

VHF ☐

Elec. pos. fix. system ☐
Type _____

OTHER INFORMATION:

APPENDIX 2

WHEELHOUSE POSTER

Ship's name _____, Call sign _____, Gross tonnage _____, Net tonnage _____

Max. displacement _____tonnes, and Deadweight _____tonnes, and Block coefficient _____ at summer full load draught

Draught at which the manoeuvring data were obtained

Loaded	Ballast
Trial/Estimated	Trial/Estimated
___m forward	___m forward
___m aft	___m aft

STEERING PARTICULARS

Type of rudder(s) _____

Maximum rudder angle _____°

Time hard-over to hard-over
- with one power unit _____s
- with two power units _____s

Minimum speed to maintain course propeller stopped _____knots

Rudder angle for neutral effect _____°

ANCHOR CHAIN

	No of shackles	Max. rate of heaving (m/shackle)
Port		
Starboard		
Stern		

(1 shackle = ___m) ___(fathoms)

PROPULSION PARTICULARS

Type of engine _____, ___kW (___HP), Type of propeller _____

Engine order	Rpm/pitch setting	Speed (knots) Loaded	Speed (knots) Ballast
Full sea speed			
Full ahead			
Half ahead			
Slow ahead			
Dead slow ahead			
Dead slow astern	Critical revolutions ___rpm Minimum rpm ___ ___knots		
Slow astern	Time limit astern ___min Time limit at min revs ___min		
Half astern	Emergency full ahead to full astern ___s Stop to full astern ___s		
Full astern	Astern power ___% ahead Max. no of consecutive starts ___		

THRUSTER EFFECT at trial conditions

Thruster	kW (HP)	Time delay for full thrust	Turning rate at zero speed	Time delay to reverse full thrust	Not effective above speed
Bow		s	°/min	min s	knots
Stern		s	°/min	min s	knots
Combined		s	°/min	min s	knots

DRAUGHT INCREASE (LOADED)

Estimated Squat Effect			Heel Effect	
Under keel clearance	Ship's speed (knots)	Max. bow squat estimated (m)	Heel angle (degree)	Draft increase (m)
m			2	
			4	
			8	
m			12	
			16	

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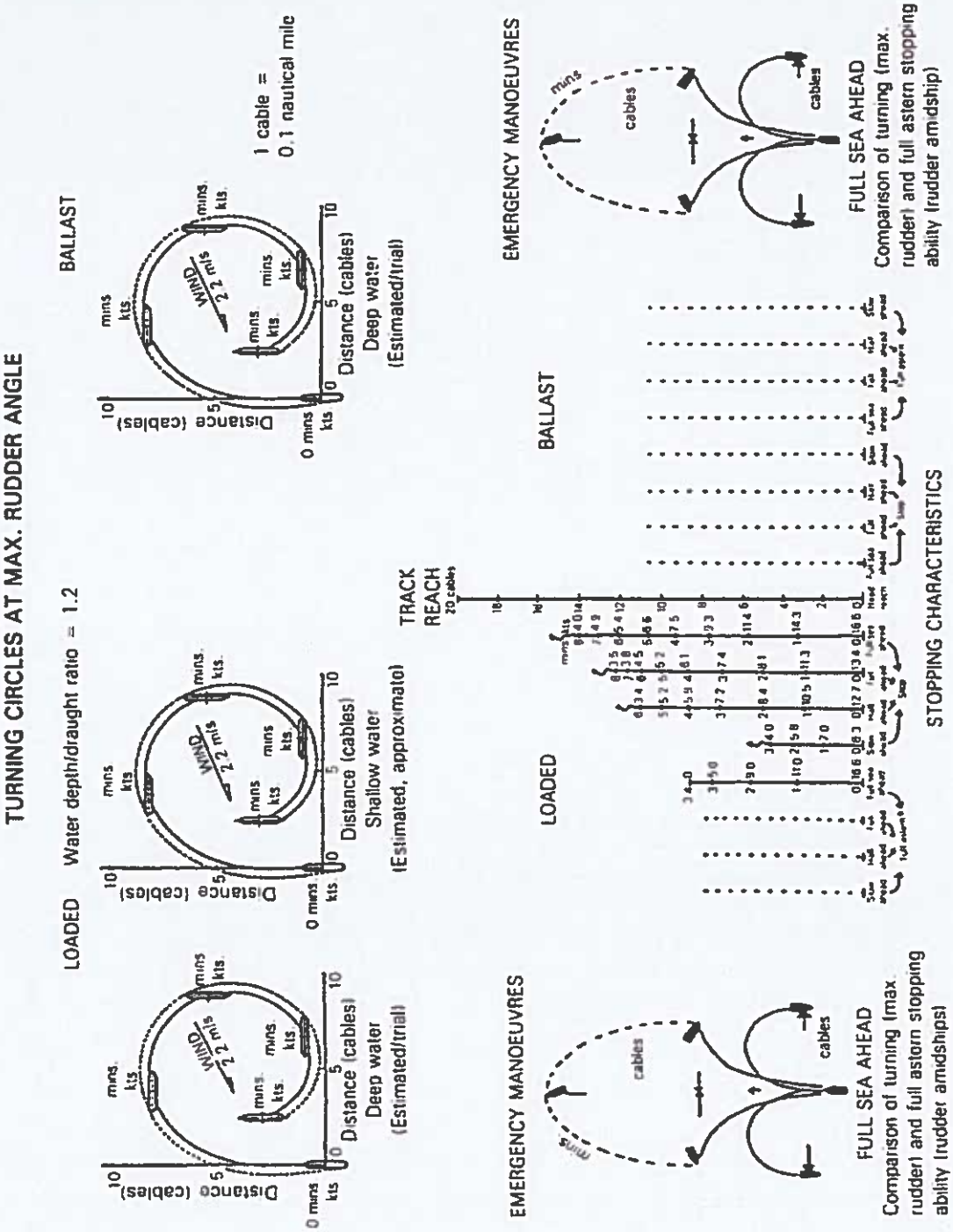
APPENDIX 2 *(continued)*



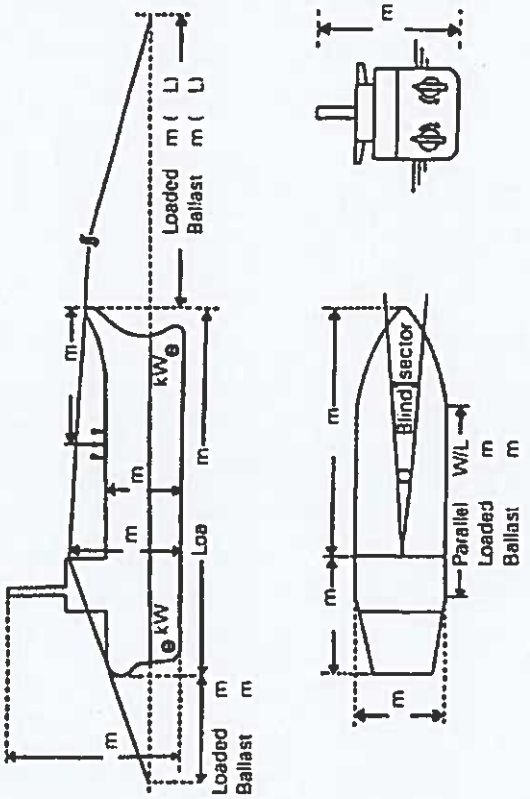
APPENDIX 2 *(continued)*

MAN OVERBOARD RESCUE MANOEUVRE	SEQUENCE OF ACTIONS TO BE TAKEN • TO CAST A LIFEBUOY • TO GIVE THE HELM ORDER • TO SOUND THE ALARM • TO KEEP THE LOOK-OUT	Insert a recommended turn

Prepared by _____

Date _____

PERFORMANCE MAY DIFFER FROM THIS RECORD DUE TO ENVIRONMENTAL, HULL AND LOADING CONDITIONS



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APPENDIX 3

RECOMMENDED INFORMATION TO BE INCLUDED IN THE MANOEUVRING BOOKLET

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