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Agenda item 15

MSC 84/15/2  
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## ROLE OF THE HUMAN ELEMENT

### Safety recommendations for decked fishing vessels of less than 12 metres in length and undecked fishing vessels

#### Note by the Secretariat

#### SUMMARY

<i>Executive summary:</i>	This document refers to the preamble, chapters 1 and 11 of, and annex I to, the draft Safety recommendations for decked fishing vessels of less than 12 metres in length and undecked fishing vessels, which the Joint MSC/MEPC Working Group on Human Element has been requested to review
<i>Strategic direction:</i>	5.2
<i>High-level action:</i>	5.2.1
<i>Planned output:</i>	5.2.1.2
<i>Action to be taken:</i>	Paragraph 3
<i>Related documents:</i>	SLF 51/5; and MSC 83/28, paragraph 16.15

1 The Committee may recall that MSC 83 had noted, under agenda item 11 (Stability, load lines and fishing vessel safety), that SLF 50 had referred relevant chapters of the draft Safety recommendations for decked fishing vessels of less than 12 metres in length and undecked fishing vessels to the respective sub-committees and to the Joint MSC/MEPC Working Group on Human Element for consideration. MSC 83 requested the Secretariat to prepare a relevant document for MSC 84 under this agenda item, so that the Joint MSC/MEPC Working Group on Human Element, when established, could consider the relevant chapters of the draft Safety recommendations and comment as appropriate.

2 In pursuance of the above request, the Secretariat has prepared this document, containing, in the annex, the text of the preamble, chapters 1 and 11 of, and annex I to, the draft Safety recommendations (SLF 51/5), which the Joint MSC/MEPC Working Group has been requested to review.

#### Action requested of the Committee

3 The Committee is invited to note the above information and take action as appropriate.

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## **ANNEX**

### **PREAMBLE, CHAPTERS 1 AND 11 AND ANNEX I OF THE DRAFT SAFETY RECOMMENDATIONS FOR DECKED FISHING VESSELS OF LESS THAN 12 METRES IN LENGTH AND UNDECKED FISHING VESSELS**

#### **PREAMBLE**

These safety recommendations are the result of the continuing co-operation between the Food and Agriculture Organization of the United Nations (FAO), the International Labour Organization (ILO) and the International Maritime Organization (IMO), in relation to the safety of fishing vessels that began with the development of parts A and B of the Code of Safety for Fishing Vessels and Fishermen between 1968 and 1974 (hereinafter referred to as the Code) for decked fishing vessels of 24 metres in length and over. This was followed by the development of the Voluntary Guidelines for the Design, Construction and Equipment of Small Fishing Vessels (hereinafter referred to as the (Voluntary Guidelines) approved by the Maritime Safety Committee (MSC) at its forty-first session in October 1979 and by the FAO in November 1979 for circulation to governments and the ILO Governing Body being informed at its 211<sup>th</sup> session in November 1979 of the intention to publish this document.

On adopting the Torremolinos Protocol of 1993 relating to the Torremolinos International Convention for the Safety of Fishing Vessels, 1977, the Conference recommended that there would be a need to revise the Code. Consequently, IMO undertook a review and invited the participation of FAO and ILO, it also decided, at the same time, to review the Voluntary Guidelines; that are directed at decked fishing vessels of 12 m in length and over but less than 24 m in length.

Following the completion of the review, of the Code and the Voluntary Guidelines, the revised texts were approved by MSC at its seventy-ninth session (1 to 10 December 2004). Thereafter, at the Committee on Fisheries at its twenty-sixth session in March 2005, where FAO welcomed the revisions and recommended the early publication by IMO of these documents and later, the Governing Body of the ILO approved the revised texts at its 293<sup>rd</sup> session in June 2005.

During the process of revising the Code and the Voluntary Guidelines, the fact became evident that there were no guidelines or recommendations for small fishing vessels of less than 12 m in length that were similar to part B of the Code or the Voluntary Guidelines. As a consequence, MSC at its seventy-ninth session agreed to include in the work programme of the Sub-Committee on Stability and Load Lines and on Fishing Vessel Safety (SLF) a new high priority item on "Safety of small fishing vessels". The aim being to develop safety recommendations for decked vessels of less than 12 m in length and undecked vessels of any length, bearing in mind that the majority of fishing fatalities occur aboard such vessels.

The SLF Sub-Committee undertook the development of the safety recommendations in collaboration with FAO and ILO in order to provide guidelines to Competent Authorities for the design, construction, equipment, training of the crew of small fishing vessels as well as operational safety and established a correspondence group that commenced work in 2005 to develop recommendations. In this regard, the importance of addressing the small fishing vessel sector, that includes more than 80% of all fishing vessels, was emphasized by the more than 30 entities agreeing to participate in the work of the correspondence group.

In addition to the IMO competence in relation to safety of life, vessels and equipment at sea, the correspondence group drew heavily on the wide experience of FAO in the design, construction and operation of small fishing vessels, particularly in developing countries where the majority of small fishing vessels operate. It also drew on the competence of ILO regarding conditions of work and service aboard small fishing vessels. The co-operation between FAO and IMO in relation to measures to combat Illegal, Unregulated and Unreported (IUU) fishing was recognized with particular regard to the adverse impact on the safety of small fishing vessels in many parts of the world.

The FAO/ILO/IMO Code of Safety for Fishermen and Fishing Vessels, 2005, part A, Safety and Health Practice, provides, in Section I, General, and in Section II, Undecked vessels and decked vessels of less than 12 metres in length, and in certain of its Appendices, guidance that concerns the safety and health of fishermen on small vessels. These Safety recommendations should be read in conjunction with the Code, part A. During the preparation of the Safety recommendations, it was however noted that additional operational guidance was needed concerning these vessels. This has been taken into account in the text. It is further recommended that in framing national safety requirements it would be essential to give consideration to local weather and sea conditions and any special operational requirements.

[The remaining paragraphs to be prepared at time of submission to SLF.]

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## **CHAPTER 1      GENERAL PROVISIONS**

### **1.1      Purpose and scope**

1.1.1 The purpose of these safety recommendations is to provide information on the design, construction, equipment, training and protection of the crew of small fishing vessels with a view to promoting the safety of the vessel and safety and health of the crew. They are not intended as a substitute for national laws and regulations but may serve as a guide to those concerned with framing such national laws and regulations. Each Competent Authority responsible for the safety of vessels should ensure that the provisions of these safety recommendations are adapted to its specific requirements, having due regard to the size and type of vessels, their intended service and area of operation. Before doing so, Competent Authorities should consult with the vessel owners and fishermen, and their representative organizations, and other relevant stakeholders such as vessel designers, builders, and equipment manufacturers. When adapting the safety recommendations, the Competent Authority should endeavour to ensure a level of safety at least equivalent to the provision or provisions concerned.

1.1.2 Unless otherwise stated, the provisions of these recommendations are intended to apply to new decked vessels of less than 12 m in length (L) and new undecked vessels of any length intended to operate at sea. Nevertheless, even where not otherwise stated, the Competent Authority should as far as reasonable and practical give consideration to the application of these provisions to existing vessels.<sup>1</sup>

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<sup>1</sup> A vessel of less than 12 m in length (L) could be in excess of 15 m in length overall (LOA). See Annex I.

1.1.3 In these recommendations the use of the word sea includes oceans, rivers, lakes and dams, or any body of water.

1.1.4 The provisions of these recommendations do not apply to vessels used for sport or recreation.

## 1.2 Definitions

For the purpose of these recommendations, unless expressly provided otherwise, the following definitions apply:

1.2.1 *Amidships*<sup>2</sup> means the mid-length of LOA.

1.2.2 *Approved* means approved by the Competent Authority.

1.2.3 *Baseline* is the horizontal line intersecting at amidships the keel line.

1.2.4 *Bow height* is defined as the vertical distance at the forward perpendicular between the waterline corresponding to the maximum permissible draught and the designed trim and the top of the exposed deck at side.

1.2.5 *Breadth (B)*<sup>3</sup> is the maximum breadth of the vessel, measured at maximum beam to the moulded line of the frame in a vessel with a metal shell and to the outer surface of the hull in a vessel with a shell of any other material.

1.2.6 *Collision bulkhead* is a watertight bulkhead up to the working deck in the fore part of the vessel as approved by the Competent Authority.

1.2.7 *Competent Authority* is the Government of the State whose flag the vessel is entitled to fly. The Competent Authority may delegate certain of its duties to entities authorized by it and that it deems suitably qualified to undertake those duties.

1.2.8 *Crew* means the skipper and all persons employed or engaged in any capacity on board a vessel on the business of that vessel.

1.2.9 *Cubic Numeral (CuNo)* is the result of multiplying LOA x B x D.

1.2.10 *Decked vessel* is a vessel having a fixed watertight deck covering the entire hull above the deepest operating waterline. Where open wells or cockpits are fitted in this deck the vessel is considered a decked vessel if flooding of the well or cockpit will not endanger the vessel.

1.2.11 *Deck erection* is any decked structure on the working deck.

1.2.12 *Deepest operating waterline* is the waterline related to the maximum permissible operating draft.

1.2.13 The *depth (D)*<sup>3</sup> is the moulded depth amidships.

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<sup>2</sup> The dimensions are illustrated in Annex I.

#### 1.2.14 *Design categories*<sup>3</sup>

The categories here indicate sea and wind conditions for which a vessel is assessed by this standard to be suitable, provided the vessel is correctly operated and at a speed appropriate to the prevailing sea state.

##### .1 **Design category A**

Category of vessels considered suitable to operate in seas with significant wave heights above 4 m and wind speeds in excess of Beaufort Force 8, but excluding abnormal conditions, e.g., hurricanes.

##### .2 **Design category B**

Category of vessels considered suitable to operate in seas with significant wave heights up to 4 m and winds of Beaufort Force 8 or less.

##### .3 **Design category C1**

Category of vessels considered suitable to operate in seas with significant wave heights up to 2 m and a typical steady wind force of Beaufort Force 6 or less.

##### .4 **Design category C2**

Category of vessels considered suitable to operate in seas with significant wave heights up to 1 m and a typical steady wind force of Beaufort Force 5 or less.

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<sup>3</sup> *Distance categories*<sup>3</sup>

This table is an *aide-mémoire* for the members of the correspondence group.

The categories here indicate the distances from safe haven for which a vessel is assessed by the safety recommendation to be suitable, provided the vessel is correctly operated. The competent authority may vary the distance from a safe haven to suit local conditions, practice and experience.

Distance	More than 200 nm	Not more than 200 nm	Not more than 100 nm	Not more than 20 nm	Not more than 5 nm
				Design	Distance
Chapter 1	General provisions				
Chapter 2	Construction, watertight integrity and equipment			X	
Chapter 3	Stability and associated seaworthiness			X	
Chapter 4	Machinery and electrical installations			X	X
Chapter 5	Fire protection, detection and extinction				X
Chapter 6	Protection of the crew				X
Chapter 7	Life-saving appliances			X	X
Chapter 8	Emergency procedures and safety training				X
Chapter 9	Communications			X	X
Chapter 10	Navigational equipment				X
Chapter 11	Crew accommodation				X
Chapter 12	Manning and training				X

**.5 Design category D**

Category of vessels considered suitable to operate in seas with significant wave heights up to and including 0.30 m with occasional waves of 0.5 m height, for example from passing vessels, and a typical steady wind force of Beaufort Force 4 or less.

1.2.15 *Enclosed superstructure* is a superstructure with:

- .1 enclosing bulkheads of efficient construction;
- .2 access openings, if any, in those bulkheads fitted with permanently attached weathertight doors of a strength equivalent to the unpierced structure which can be operated from each side; and
- .3 other openings in sides or ends of the superstructure fitted with efficient weathertight means of closing. A raised quarter-deck is regarded as a superstructure. A bridge or poop should not be regarded as enclosed unless access is provided for the crew to reach machinery and other working spaces inside those superstructures by alternative means which are available at all times when bulkhead openings are closed.

1.2.16 *Existing vessel* is a vessel which is not a new vessel.

1.2.17 *Fishing vessel* (hereto referred to as vessel) means any vessel used commercially for catching fish, whales, seals, walrus or other living resources of the sea.

1.2.18 *Forward and after perpendiculars* should be taken at the forward and after ends of the length (L). The forward perpendicular should be coincident with the foreside of the stem on the waterline on which the length is measured.

1.2.19 *Freeboard (f)* is the actual minimum freeboard and, on a decked vessel, is the distance from the underside of the working deck at the side to a water-line, measured perpendicularly to the water-line, plus the minimum thickness of decking. When the working deck is stepped, the lowest line of the deck and the continuation of that line parallel to the upper part of the deck should be taken as the working deck. On an undecked vessel, the freeboard (*f*) is the distance from the gunwale or a down flooding opening, whichever is lower, measured perpendicularly to the waterline. A down flooding opening is an opening in the hull or superstructures which cannot rapidly be closed watertight.

1.2.20 *Height of a superstructure or other erection* is the least vertical distance measured at side from the top of the deck beams of a superstructure or an erection to the top of the working deck beams.

1.2.21 *Keel line*<sup>3</sup> is the line parallel to the slope of keel passing amidships through:

- .1 the top of the keel or line of intersection of the inside of shell plating with the keel where a bar keel extends above that line of a vessel with a metal shell; or
- .2 the rabbet lower line of the keel of a vessel with a shell of wood or a composite material; or

- .3 the intersection of a fair extension of the outside of the shell contour at the bottom with the centreline of a vessel with a shell of material other than wood and metal.

1.2.22 *Least depth*<sup>3</sup> is the depth measured from the keel line to the top of the working deck beam at side. Where the working deck is stepped and the raised part of the deck extends over the point at which the least depth is to be determined, the least depth should be measured to a line of reference extending from the lower part of the deck along a line parallel with the raised part.

1.2.23 *Length (L)*<sup>3</sup> should be taken as 96% of the total length on a waterline at 85% of the least depth, or as the length from the foreside of the stem to the axis of the rudder stock on that waterline, if that length is greater. In vessels designed with rake of keel the waterline on which this length is measured should be parallel to the designed waterline.

1.2.24 *Length overall (LOA)*<sup>3</sup> is the length of the vessel in a straight line parallel to the design waterline, from the foremost part of the stem at the height of the deck or gunwale to the after most part of the stern.

1.2.25 *New vessel* is a vessel the keel of which is laid, or which is at a similar stage of construction, on or after the date of adoption of the present safety recommendations.

1.2.26 *Organization* means the International Maritime Organization.

1.2.27 *Owner* means any person or entity having assumed the responsibility for the operation of the vessel.

1.2.28 *Protocol* means the Torremolinos International Convention for the Safety of Vessels, 1977, as modified by the Torremolinos Protocol of 1993 relating thereto.

1.2.29 *Skipper* means the person having command of a vessel.

1.2.30 *Steel or other equivalent material* means steel or any material which, by itself or due to insulation provided, has structural and integrity properties equivalent to steel at the end of the applicable fire exposure to the standard fires test (e.g., aluminium alloy with appropriate insulation).

1.2.31 *Superstructure deck* is that complete or partial deck forming the top of a deck erection situated at a height of not less than 1.8 m above the working deck. Where this height is less than 1.8 m, the top of such deck erections should be treated in the same way as the working deck.

1.2.32 *Undecked* vessel is a vessel which is not a decked vessel.

1.2.33 *Watertight* means capable of preventing the passage of water through the structure in any direction under a head of water for which the surrounding structure is designed.

1.2.34 *Weathertight* means that in any sea conditions water will not penetrate into the vessel.

1.2.35 *Working deck* is generally the lowest complete deck above the deepest operating waterline from which fishing is undertaken. In vessels fitted with two or more complete decks, the Competent Authority may accept a lower deck as a working deck provided that that deck is situated above the deepest operating waterline.



### **1.3 Measurements**

In these recommendations measurements are given in the metric system using the following abbreviations:

m	–	metre
cm	–	centimetre
mm	–	millimetre
t	–	tonne (1,000 kg)
kg	–	kilogram
°C	–	degree Celsius
N	–	Newton
kW	–	Kilowatt

### **1.4 Maintenance and surveys**

1.4.1 The hull, machinery, equipment and radio installations as well as crew accommodation of every vessel should be constructed and installed so as to be capable of being regularly maintained to ensure that they are at all times, in all respects, satisfactory for the vessel's intended service.

1.4.2 Where practicable, before the construction of a vessel, plans of, and information concerning the vessel should be submitted to the Competent Authority, for approval.

1.4.3 The Competent Authority should arrange for appropriate surveys of a vessel during construction and, at regular intervals after completion, to ensure satisfactory condition of the vessel's hull, machinery and equipment, as well as crew accommodation. An appropriate report of the survey should be entered in the record of the vessel.

1.4.4 After any survey has been completed no change should be made in the structural arrangements, machinery, and equipment, as well as crew accommodation, etc., covered by the survey, without the approval of the Competent Authority.

1.4.5 Documentation relating to the safety of the vessel should cease to be valid upon transfer of the vessel to the flag of another State. New safety documentation should only be issued when the Competent Authority is fully satisfied that the vessel is in compliance with the requirements of the relevant provisions.

1.4.6 Hull, machinery and equipment should be maintained to a standard acceptable to the Competent Authority and in accordance with manufacturer's recommendations or those of a recognized organization.

### **1.5 Equivalent**

Where the present provisions require that a particular fitting, material, appliance or apparatus, or type thereof, should be fitted or carried in a vessel, or that any particular provision should be made, the Competent Authority may allow any other fitting, material, appliance or apparatus, or type thereof, to be fitted or carried, or any other provision to be made in that vessel, if it is satisfied by trial thereof or otherwise that such fitting, material, appliance or apparatus, or type thereof, or provision, is at least as effective as that required by the present recommendations.

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## **CHAPTER 11 – CREW ACCOMMODATION**

### **11.1 General**

11.1.1 Unless expressly provided otherwise, this chapter should apply to decked vessels of design categories A and B that are at sea for more than 36 h.

11.1.2 Accommodation of appropriate size and quality should be provided on vessels of all design categories, bearing in mind the length of the voyage, the weather conditions and size of vessel.

11.1.3 Location, structure and arrangement of crew accommodation spaces and means of access thereto should be such as to ensure adequate security, protection against weather, sea, heat, cold, condensation, undue noise, vibration, fumes, odours and effluvia from other spaces. Sleeping rooms should be placed aft of the collision bulkhead, if fitted.

11.1.4 In the choice of materials used for construction of accommodation spaces, account should be taken of properties potentially harmful to the health of personnel or likely to harbour vermin and mould.

11.1.5 All practical measures should be taken to protect crew accommodation and furnishings against the admission of insects and other pests.

### **11.2 Lighting, heating and ventilation**

11.2.1 All crew accommodation spaces should be adequately lit, as far as possible, by natural light. Such spaces should also be equipped with adequate artificial light.

11.2.2 Methods of lighting should not endanger the health or safety of the crew or the safety of the vessel.

11.2.3 Adequate heating facilities in crew accommodation spaces should be provided as required by climatic conditions.

11.2.4 Facilities for heating should be designed so as not to endanger health or safety of the crew or safety of the vessel.

11.2.5 Heating by means of open fires should be prohibited.

11.2.6 Accommodation spaces should be adequately ventilated. Vessels operating in tropical climates should, where practicable, be fitted with mechanical ventilation. The ventilation of galleys and sanitary spaces should be to the open air and, unless fitted with a mechanical ventilation system, be independent from that for other crew accommodation.

### **11.3 Sleeping spaces**

11.3.1 Sleeping spaces should be so planned and equipped as to ensure reasonable comfort for the occupants and to facilitate tidiness.

11.3.2 The minimum number of berths should not be less than half the number of crew onboard. The minimum berth size should be determined by the Competent Authority.

11.3.3 Suitable bedding should be provided for the crew. Mattresses should not be of a type that is liable to develop toxic fumes in cases of fire nor of a type that could attract pests or insects. Mattresses should be provided with a cover of fire retardant material.

11.3.4 Whenever reasonable and practicable, having regard to the size, type or intended service of the vessel, the furnishings of sleeping spaces should include both a fitted cupboard preferably with an integral lock and a drawer for each occupant.

#### **11.4 Eating spaces and cooking facilities**

11.4.1 Wherever reasonable and practicable, eating spaces and cooking facilities should be provided separate from sleeping spaces.

11.4.2 Cooking facilities should be of adequate dimensions for the purpose and have sufficient storage space and satisfactory drainage. Where possible, refrigerators or other low-temperature storage should be provided, to the satisfaction of the Competent Authority.

11.4.3 The cooking facility should be provided with cooking utensils, the necessary number of cupboards, shelves, sinks and dish racks of rustproof material and with satisfactory drainage.

11.4.4 The cooking facility should be fitted with suitable facilities for the preparation of hot drinks for the crew at all times.

11.4.5 Cooking appliances should be fitted with fail-safe devices in the event of failure of the power source or fuel. Supplies of fuel in the form of gas or oil should not be stored in the cooking facility.

#### **11.5 Sanitary facilities**

11.5.1 Sufficient sanitary facilities, including toilets and washing facilities should be provided to the satisfaction of the Competent Authority.

11.5.2 Soil and waste discharge pipes should not pass through:

- .1 fresh water tanks;
- .2 drinking water tanks; and
- .3 provision stores (where practicable);

nor should they (where practicable) pass overhead in:

- .4 eating spaces; and
- .5 sleeping spaces.

Such pipes should be fitted with anti-syphon closures.

11.5.3 In general, toilets should be situated convenient to, but separate from, sleeping spaces and eating spaces.

## **11.6 Water facilities**

11.6.1 Filling, storage and distribution arrangements for drinking water should be designed to preclude any possibility of water contamination. Tanks should be designed to allow internal cleaning.

11.6.2 In every vessel, a dedicated supply of at least 2.5 litres of drinking water per person per day should be provided for drinking and cooking purposes.

11.6.3 Where the washing facilities use salt water additional fresh water should be carried to allow the crew to rinse themselves.

## **11.7 Vessels of design categories A and B, spending less than 36 hours at sea and C1, C2 and D**

11.7.1 Vessels should have adequate facilities relating to:

- .1 lighting, heating and ventilation;
- .2 sleeping spaces;
- .3 eating spaces and cooking facilities;
- .4 sanitary facilities;
- .5 water facilities; and
- .6 protection from the elements (refer to 6.11.10).

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## ANNEX I

### ILLUSTRATION OF TERMS USED IN THE DEFINITIONS

Figure 1

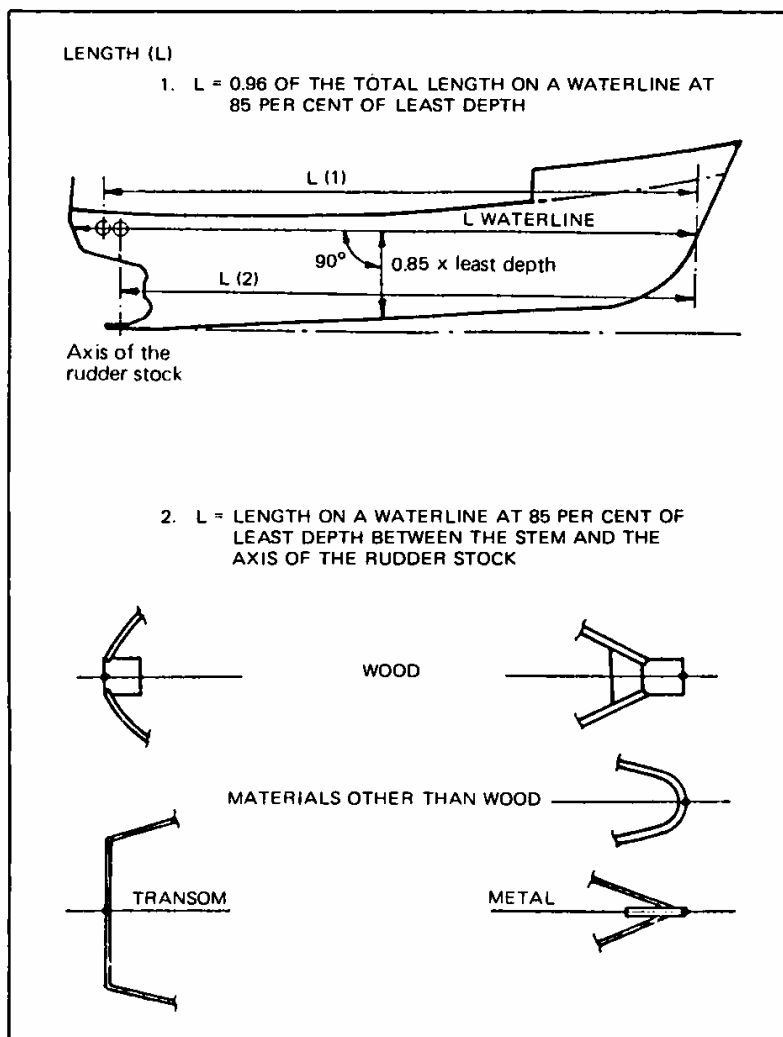


Figure 2

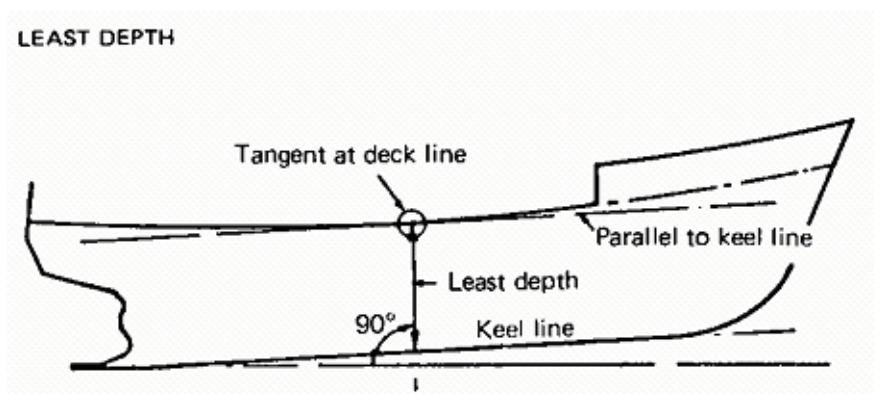
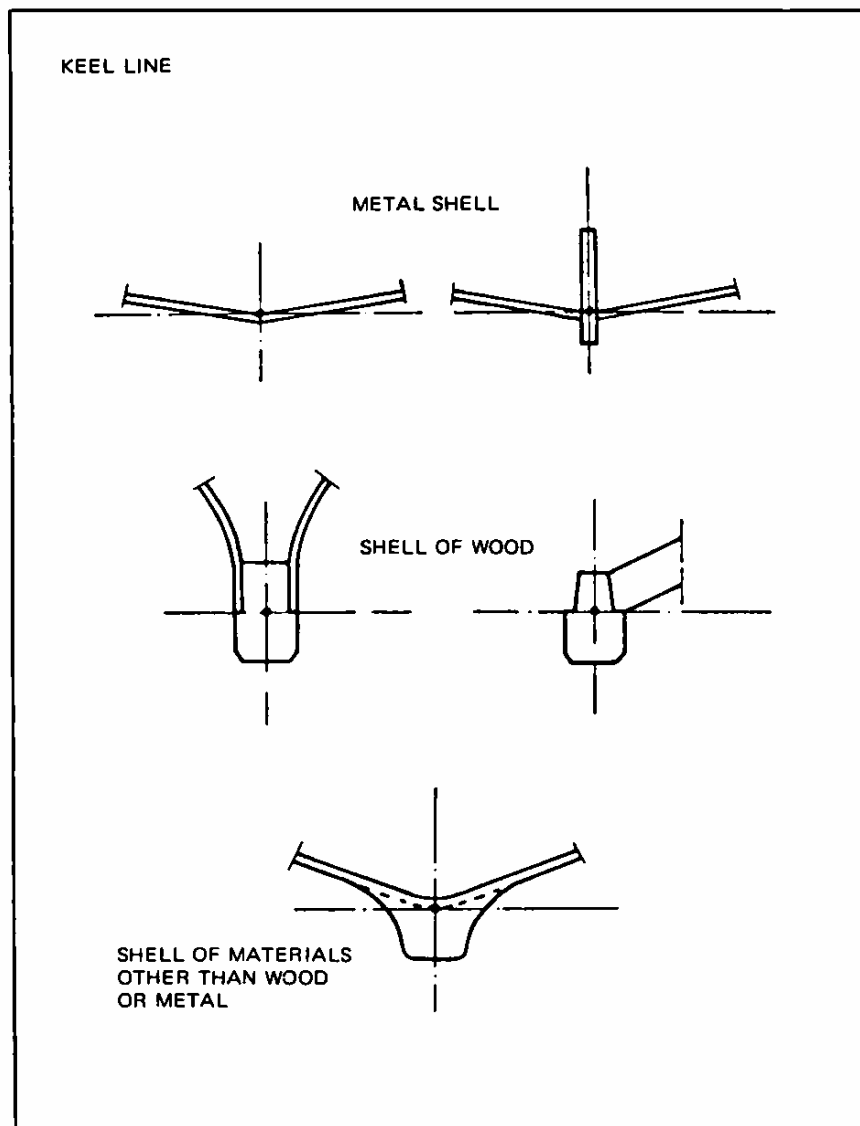


Figure 3



**Figure 4**

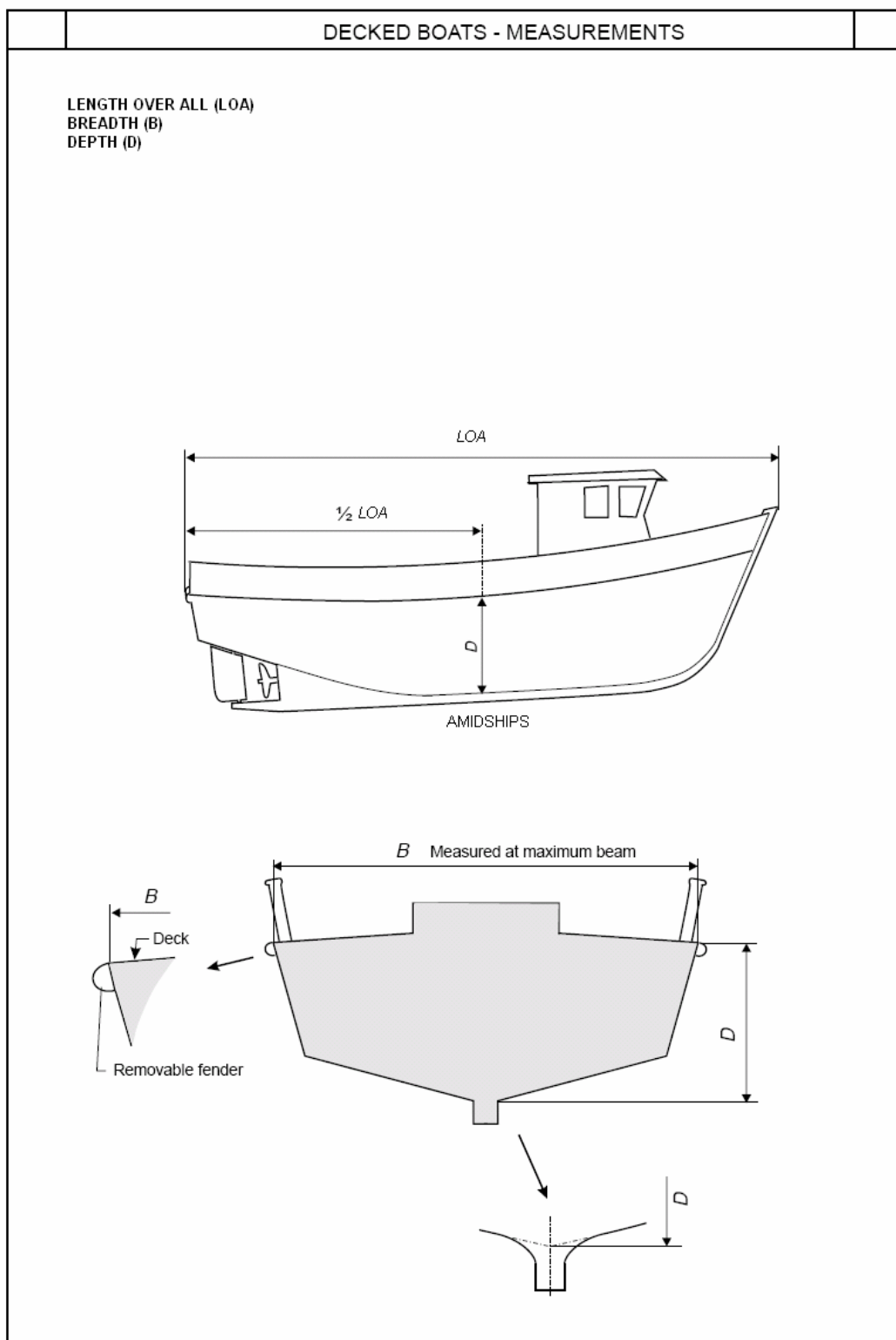
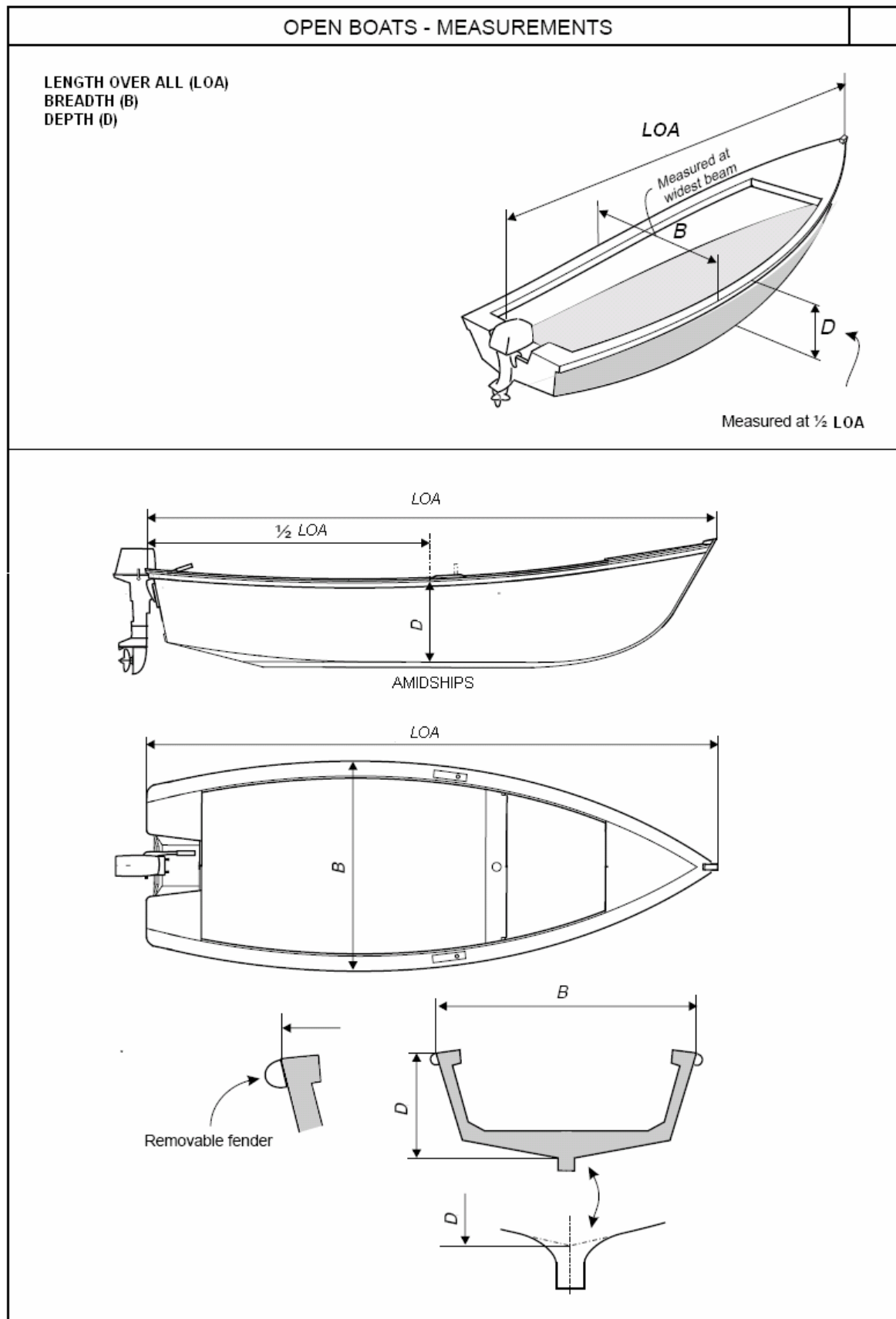


Figure 5





**Figure 6 – Cubic numeral**

$$LOA \times B \times D = \text{Cubic numeral (CuNo)}$$

