

**CIRCULAR LETTER** 

No. 312-11-954c

dated  $\sqrt{5}.11.2016$ 

Re:

requirements to vessels intended for offshore support services

Item of supervision:

ships under construction and in service

Implementation

from the date of signing

Valid: till

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Cancels / Amends / Supplements Circular Letter

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Appendices:

Text of amendments to the Rules for the Classification and Construction of Sea-Going Ships, 2016, ND No. 2-020101-087-E and Rules for the Classification

and Construction of Sea-Going Ships, 2017, ND No. 2-020101-095-E

Director General

∕Konstantin G. Palnikov

Amends

Rules for the Classification and Construction of Sea-Going Ships, 2016, ND No. 2-020101-087-E and Rules for the Classification and Construction of Sea-Going Ships, 2017, ND No. 2-020101-095-E

We hereby inform that a new section shall be introduced to Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships" of the Rules regarding requirements to offshore service vessels, and amendments to Part II "Hull" of the Rules shall be introduced regarding requirements to hull structures of such vessels.

It is necessary to do the following:

- 1. Familiarize the RS surveyors and interested organizations in the area of the RS Branch Offices' activity with the content of the Circular Letter.
- 2. Apply the above requirements in the RS practical activity.

Person in charge:

D.A. Grubov

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(812) 312 24 28

"Thesis" System

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# RULES FOR THE CLASSIFICATION AND CONSTRUCTION OF SEA-GOING SHIPS, 2016, ND No. 2-020101-087-E AND RULES FOR THE CLASSIFICATION AND CONSTRUCTION OF SEA-GOING SHIPS, 2017, ND No. 2-020101-095-E

## PART II. HULL

### 3.8 SUPPLY VESSELS

The text of the Chapter 3.8 shall be amended to read:

## **"3.8 OFFSHORE SERVICE VESSELS**

- **3.8.1** The requirements of this Chapter apply to supply and standby vessels. Structural elements not covered by this Chapter shall comply with the requirements of Sections 1 and 2.
- 3.8.2 Construction.
- **3.8.2.1** Provision shall be made for longitudinal fenders at the weather deck and the deck below level
- **3.8.2.2** The fenders shall extend not less than 0,02*L* forward of the section where the weather deck has its full breadth.
- **3.8.2.3** The weather deck shall be efficiently stiffened in way of deck equipment or cargo which load exceeds the design deck load value.
- 3.8.2.4 Shell plating in way of stern rollers and fenders areas shall be efficiently stiffened.
- **3.8.2.5** In the forward region 0,2*L* from the forward perpendicular (FP) the ends of framing members of hull, forecastle and the first tier of deckhouse shall be connected by brackets.
- 3.8.3 Design loads.
- **3.8.3.1** Design loads on hull structures shall be taken in compliance with Sections 1 and 2.
- **3.8.3.2** For determining the scantlings of deck stiffeners according to 3.8.2.3 as well as scantlings of the supporting pillars, the load shall be calculated with due regard to the inertia force components in horizontal and vertical direction due to the vessel's rolling and pitching.
- **3.8.4** Scantlings of structural members.
- **3.8.4.1** The thickness of the side shell plating shall be 1 mm greater than required by 2.2.4. In any case the thickness of the side shell plating shall not be taken less than 9,0 mm.
- 3.8.4.2 In fenders area the thickness of the side shell plating shall not be taken as less than

$$smin = (6 + 0.05 L) \cdot \frac{a}{a_0}$$

where a = main framing spacing;

 $a_0$  = normal spacing according to 1.1.3;

a/ao shall not be taken less than 1,0.

**3.8.4.3** If fenders are suspended in the length, the thickness of unprotected side areas shall be 50 per cent greater than required by 3.8.4.2. The reinforced region shall be extended 600 mm transversely below deck or tween-deck, as far as applicable.

- **3.8.4.4** Scallop and one-sided welds shall not be used in connections between side frames and shell plating.
- **3.8.4.5** Section modulus of hold, tween-deck or forecastle frames shall not be less than specified in 3.7.4.4 with p determined by Formula (3.7.3.3-1),  $\alpha_1$  = 1,16,  $\alpha_2$  = 1,0. However, for supply vessels no needs to take the section modulus of side longitudinals, hold or tween-deck frames more than 1,25 times as required in 2.5.4.
- **3.8.4.6** The thickness of weather deck plating shall be determined from 2.6.4, but it shall not be less than 8,0 mm. If the weather deck is intended to carry deck cargoes, the thickness shall be increased by 1,0 mm as required by 2.6.4. If the weather deck is intended to carry anchors and anchor chain cables, the thickness shall be increased by 2,5 mm as required by 2.6.4.
- **3.6.4.7** The thickness of the weather deck stringer in the region of rescue zone shall be not less than

$$smin = (7 + 0.02 L) \cdot \frac{a}{a_0}$$

where a/a<sub>0</sub> shall not be less than 1,0.

- **3.8.4.8** The scantlings of weather deck framing members shall be determined as required by 2.6.4 with a design load corresponding to the specified value but not less than 35 kPa.
- **3.8.4.9** While obtaining reinforcements for stern rollers and mooring winches, 4.3.5 of Part III "Equipment, Arrangements and Outfit" shall be guided by.
- **3.8.4.10** The section modulus of vertical frames of fronts, sides and after ends of deckhouses located on the forecastle deck shall be not less than required by 2.12.4.5.2. The assumed head p, in kPa, shall not be taken less than given in Table 3.8.4.10.

Table 3.8.4.10

Deckhouse tier	Assumed head <i>p</i> , in kPa			
	Front bulkhead	Side bulkhead	Aft end bulkhead	s <sub>min</sub> , mm
First	90	60	25	10,8 <i>a</i>
Second and above	75	50	25	10 <i>a</i>
Note. <i>a</i> – spaci	ing between bu	  khead vertical fram	nes.	

- **3.8.4.11** The plate thickness of the side and end bulkheads of deckhouses shall be not less than indicated in 3.8.4.10.
- **3.8.4.12** Thickness of bulwark plating shall be at least 7 mm, and the width of the stanchion lower edge measured along the weld shall be not less than 360 mm. The distance between stanchions shall not exceed two spacings or 1,3 m, whichever is the lesser.".

# Part XVII. DISTINGUISHING MARKS AND DESCRIPTIVE NOTATIONS IN THE CLASS NOTATION SPECIFYING STRUCTURAL AND OPERATIONAL PARTICULARS OF SHIPS

Shall be supplemented by new Section 13 reading as follows:

## "13 REQUIREMENTS FOR OFFSHORE SERVICE VESSELS

### 13.1 MODU/FOP SUPPLY VESSELS

### 13.1.1 General.

For vessels intended to supply MODU/FOP and complying with the requirements of the present Chapter, a descriptive notation **Supply vessel (OS)** may be added to the character of classification.

## 13.1.2 Hull.

The hull structure shall comply with 3.8 of Part II "Hull".

- **13.1.3** Equipment, arrangements and outfit.
- **13.1.3.1** Access means to the spaces located under the open cargo deck shall comply with 7.1.6 of Part III "Equipment, Arrangements and Outfit".
- **13.1.3.2** Access means to machinery and boiler spaces shall comply with 7.6.6 of Part III "Equipment, Arrangements and Outfit".
- **13.1.3.3** Location of ventilators shall comply with 7.8.4 of Part III "Equipment, Arrangements and Outfit".

# **13.1.4** Stability.

The vessel's stability shall comply with 3.11 of Part IV "Stability".

## 13.1.5 Subdivision.

As regards the subdivision, the vessel shall comply with 3.4.9 of Part V "Subdivision".

## 13.1.6 Systems and piping.

Uptakes of boilers, exhaust pipes of main and auxiliary engines and incinerators shall comply with 11.1.3 of Part VIII "Systems and Piping".

### 13.2 STANDBY VESSELS

## 13.2.1 General.

For vessels intended to carry out rescue and standby services in offshore areas of hydrocarbon production and complying with the requirements of this Chapter, a descriptive notation **Standby vessel** may be added to the character of classification.

## 13.2.2 Hull.

The hull structure shall comply with the applicable requirements of 3.8, Part II "Hull".

- 13.2.3 Equipment, arrangements and outfit.
- **13.2.3.1** Access means to the spaces located under the open cargo deck shall comply with 7.1.6 of Part III ""Equipment, Arrangements and Outfit".

- **13.2.3.2** Access means to machinery and boiler spaces shall comply with 7.6.6 of Part III "Equipment, Arrangements and Outfit".
- **13.2.3.3** Location of ventilators shall comply with 7.8.4 of Part III "Equipment, Arrangements and Outfit".
- **13.2.3.4** The vessel shall be arranged on each side with a clearly marked rescue zone with a length of not less than 5 m. Rescue zones shall be located well clear of the propellers as well as any discharges extended at least 2 m below the load waterline.
- 13.2.3.5 In the rescue zones area the vessel's sides shall be free of appendages (fenders, etc.).
- **13.2.3.6** The access routes from rescue zones to survivors' accommodation as well as to helicopter winching area, where provided, shall have non-slip surface or wooden sheathings.
- **13.2.3.7** Deck in way of the rescue zone shall be free of any obstruction when this becomes practical (air pipes, valves, small hatches, etc.). If any, proper arrangement shall be provided as protection against personnel injury.
- **13.2.3.8** Bulwark or railings in way of the rescue zone shall be of a type easy to open or remove.
- **13.2.3.9** Each rescue zone shall be provided with a scrambling net made of corrosion resistant in the marine environment and non-slip material of at least 5 m wide and length enough to extend at least 1 m from the deploying area in the rescue zone till the minimal service waterline.
- **13.2.3.10** The vessel shall be provided with power assisted means capable of ensuring careful recovery of disabled persons from the sea.
- **13.2.3.11** The vessel shall be equipped with gears for towing of liferafts and rescue boats.
- **13.2.3.12** Bridge front and side windows shall be equipped with efficient storm shutters installed at any side of bulkhead. Strength of these shutters shall be equivalent to strength of the bulkhead. Storm shutters shall provide visibility from the bridge; they may be portable and stowed in an accessible position, so as to be readily mounted.
- 13.2.4 Life-saving appliances.
- **13.2.4.1** The vessel shall be equipped with at least one fast rescue boat of type complying with LSA Code, permanently ready for use. The emergency source of power of the launching arrangement of a fast rescue boat shall provide operation of the launching arrangement for at least 4 h.
- **13.2.4.2** Type approved lifejackets shall be provided for 25 per cent of the number of survivors for which the vessel is intended to carry.
- 13.2.5 Survivors' spaces.
- **13.2.5.1** The vessel shall have a treatment room for casualties, a recovery room with berths, and enclosed space to accommodate survivors. These spaces shall be provided with lighting and means to control temperature and humidity suitable for the area of operation.
- **13.2.5.2** The designed capacity of survivors shall be determined considering 0,75 m<sup>2</sup> per person. This includes free floor space and floor space with loose furniture, fixed seating and/or fixed beds. Other fixed furniture, toilets and bathrooms shall be excluded.
- **13.2.5.3** At least one installation comprising a toilet, a wash basin and shower shall be provided for each group of 50 survivors.

# 13.2.6 Stability.

The vessel's stability shall comply with 3.11 of Part IV "Stability".

## 13.2.7 Subdivision.

As regards the subdivision, the vessel shall comply with 3.4.3 of Part V "Subdivision".

- 13.2.8 Systems and piping.
- **13.2.8.1** Uptakes of boilers, exhaust pipes of main and auxiliary engines and incinerators shall comply with 11.1.3 of Part VIII "Systems and piping".
- **13.2.8.2** A decontamination area equipped with a shower system shall be arranged before entering to deckhouse accommodations from rescue zones.
- 13.2.9 Machinery installations.

The vessel shall be fitted with at least two propulsion systems capable of moving the vessel in the forward and aft direction.

- **13.2.10** Electrical equipment.
- **13.2.10.1** A searchlight shall be available on each side and adjustable from inside the navigation bridge. Each searchlight shall be able to provide an illumination level of 50 lux in clear air, within an area not less than 10 m diameter, to a distance of at least 250 m.
- **13.2.10.2** In addition to 6.7.1 of Part XI "Electrical equipment", illumination of the following spaces shall be at least:
- .1 overboard spaces, at a distance of within 5 m from the ship side in the rescue zone and reception areas for survivors 150 lux of total illumination level;
- .2 satisfactory lighting shall be available along the rescue zone and survivors reception area capable of providing minimum 50 lux at 20 m from the vessel.
- **13.2.10.3** In addition to 6.1.1 of Part XI "Electrical equipment" lighting with power from the main and emergency source shall be provided for the following spaces:
- .1 storage spaces for rescue boats and their launching arrangements, reception areas for survivors and rescue zones;
- .2 overboard spaces in the rescue zone, survivors' reception areas, in areas of rescue boats launching;
- .3 helicopter winching area and routes to this area from survivors' reception areas. Time of lighting source from emergency source shall be at least 30 min.".