

NIS/NOR Circular

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Damage Stability Requirements for Special Purpose Ships

1. Purpose

The purpose of this circular is to clarify which damage stability requirements to apply to new Norwegian flagged Special Purpose Ships, dependent on subdivision length L_s and the number of special personnel carried on board.

2. Application

This circular applies to Norwegian flagged Special Purpose Ships which building contracts are signed on or after 20 Mai 2007 and supersedes the following document:

• NIS/NOR Circular no. 4/2005 – Offshore Supply Vessels.

This circular is valid until the date IMO Res. A.534(13) is implemented into Norwegian legislation, or until it is superseded, or otherwise withdrawn.

3. Definitions

For the purpose of this circular the following definitions are applicable:

- (a) *IMO Res.* A.534(13): IMO Res. A.534(13) Code of Safety for Special Purpose Ships, adopted on 17 November 1983 and amended by MSC/Circ.739.
- (b) *Special Purpose Ship*: As defined in IMO Res. A.534(13), paragraph 1.3.4, and shall include, but is not limited to, Seismic Research Vessels, Cable Layers, ROV Vessels and Construction Vessels.
- (c) Subdivision length L_s : The greatest projected moulded length of that part of the ship at or below deck or decks limiting the vertical extent of flooding with the ship at the deepest subdivision load line, c.f. SOLAS Ch. II-1/25-2 para. 2.1.
- (d) IMO Res. A.469(XII): IMO Res. A.469(XII) Guidelines for the Design and Construction of Offshore Supply Vessels, or when implemented into Norwegian Legislation; IMO Res. MSC.235(82) – Guidelines for the Design and Construction of Offshore Supply Vessels, 2006.

4. References

(a) Regulation of 15 September 1992 No. 695 concerning the Construction of Passenger Ships, Cargo Ships and Barges. §§ 43 and 44 of this regulation are directly comparable to IMO Res. A.469(XII) – Guidelines for the Design and Construction of Offshore Supply Vessels. It should however be noted that for vessels who's design deviates substantially from the

design of a standard Offshore Supply Vessel, the NMD shall be consulted with respect to the vertical damage extent, c.f. § 43(5)b).

- (b) SOLAS 1974 as amended per 16 April 2007.
- (c) NIS Circular 1/2002 Life Saving Appliances on Special Purpose Ships.

5. Background

Our national definition of Offshore Supply Vessel in regulation of 15 September 1992 No. 695, § 2(1)15 is wider that the definition used in IMO Res. A.469(XII)¹. The definition in § 2(1)15 includes those ships that operate "in the close vicinity of oil platforms and other offshore structures in the open sea", and is not limited with respect to the length of said vessels.

As a consequence, damage stability according to §§ 43 and 44/ IMO Res. A.469(XII) has been accepted for vessels other than traditional Offshore Supply Vessels and with subdivision lengths of 80 metres and above, i.e. vessels that do no meet the definition of Offshore Supply Vessel in IMO Res. A.469(XII), paragraph 1.2.1, also after entry into force of SOLAS Chapter II-1 Part B-1.

Such application may, in some instances, no longer be correct.

6. Life Saving Appliances on Special Purpose Ships

- (a) In paragraphs 7 and 8 below, and where the resulting requirement is use of IMO Res. A.534(13), the carrying capacity of fully enclosed lifeboats on each side may be reduced to 50%, c.f. NIS Circular 1/2002.
- (b) Vessels carrying more than 50 special personnel, and with a carrying capacity of enclosed lifeboats of less than 100% on each side, shall according to NIS Circular 1/2002 meet the requirements of IMO Res. A.534(13), independent of area of operation and subdivision length L_s.

7. Damage stability for Special Purpose Ships, L_s < 80 metres

- (a) Special Purpose Ships with a subdivision length L_s of less than 80 metres that are intended to operate within the safety zone of offshore installations, c.f. regulation of 15 September 1992 No. 695, § 2(1)15, shall as a basis, comply with IMO Res. A.469(XII)¹.
- (b) At owner's/builder's request, IMO Res. A.534(13) may be applied in lieu of item (a). In such cases items 8(b)(i) and (ii) shall apply.

8. Damage stability for Special Purpose Ships, $L_s \ge 80$ metres

- (a) Special Purpose Ships with a subdivision length L_s of 80 metres and above shall meet the probabilistic requirements of SOLAS, Ch. II-1, Part B-1, and as an additional national requirement, in the case of operation within the safety zone of offshore installations, IMO Res. A.469(XII)¹.
- (b) As an alternative, item .5 of the footnote to SOLAS regulation II-1/25-1, paragraph 1 may be applied, i.e. IMO Res. A.534(13). In such instances and when the vessel is intended to operate in close vicinity of offshore installations, the following should be observed:
 - (i) For vessels carrying more than 50 special personnel, IMO Res. A.534(13) may be considered as at least equivalent to IMO Res. A.469(XII)¹, i.e. no additional national requirements need be applied.
 - (ii) Notwithstanding paragraph 2.2.1 of IMO Res. A.534(13) for vessels carrying not more than 50 special personnel, the machinery space shall be subject to a damage

¹ C.f. the definition in paragraph 3(d).

stability standard of at least IMO Res. $A.469(XII)^2$, with respect to both damage extent and survivability.

9. Special Purpose Ships carrying more than 200 special personnel

Independent of subdivision length L_s , and not limited to stability requirements, these vessels shall comply with all SOLAS requirements applicable to passenger ships to the extent decided by the NMD in each particular case.

 $^{^{2}}$ C.f. the definition in paragraph 3(d).