

Unified Interpretation on Means of Escape from Machinery Spaces

Object of Amendment

Guidance for the Survey and Construction of Steel Ships Part R
Guidance for the Survey and Construction of Passenger Ships

Reason for Amendment

SOLAS Regulation II-2/13.4 specifies requirements related to the means of escape from machinery spaces, and IMO circular MSC.1/Circ.1511 is the unified interpretation (UI) for such requirements. The contents of this UI have already been incorporated into ClassNK Rules.

The UI stipulates that spaces where flammable liquids are stowed are not considered to be a “safe position” capable of serving as the exit of an escape route from a machinery space. Some vessels, however, have been designed so that the exits of escape routes lead to steering gear spaces, and it is unclear whether such steering gear spaces are considered to be “a safe position” in cases where they contain storage tanks for hydraulic oils for the steering gear equipment. IACS brought this to attention of the IMO, and also submitted a draft amendment for the UI to the IMO that clarified steering gear spaces in which hydraulic oils for the steering gear equipment are stored are considered to be a “safe position”.

The IACS draft amendments were agreed upon by 10th session of IMO Sub-Committee on Ship Design and Construction (SDC 10) held in January 2024 and received final approval as MSC.1/Circ.1511/Rev.1 at 108th session of IMO Maritime Safety Committee (MSC108) held in May 2024.

Accordingly, relevant requirements are amended at this time in anticipation of their final approval as MSC.1/Circ.1511/Rev.1.

Outline of the Amendment

Adds steering gear spaces in which hydraulic oils for the steering gear equipment are stored as a safe position with respect to exits for escape routes from machinery spaces.

Effective Date and application

The effective date of this amendment is 27 June 2024.

ID: DX23-18

An asterisk (*) after the title of a requirement indicates that there is also relevant information in the corresponding Guidance.

Amended-Original Requirements Comparison Table (Unified Interpretation on Means of Escape from Machinery Spaces)

Amended	Original	Remarks
<p>Part R FIRE PROTECTION, DETECTION AND EXTINCTION</p> <p>R13 MEANS OF ESCAPE</p> <p>R13.4 Means of Escape from Machinery Spaces</p> <p>R13.4.1 Escape from Machinery Spaces of Category A 8 A “safe position” specified in 13.4.1(1), Part R of the Rules is any space, <u>such as steering gear spaces where hydraulic oils for the steering gear equipment are stowed, and vehicle and ro-ro spaces, from which access is provided and maintained clear of obstacles to the open deck. This excludes cargo spaces, lockers, storerooms, cargo pump-rooms and spaces where flammable liquids are stowed.</u></p> <p>EFFECTIVE DATE AND APPLICATION</p> <p>1. The effective date of the amendments is 27 June 2024.</p>	<p>Part R FIRE PROTECTION, DETECTION AND EXTINCTION</p> <p>R13 MEANS OF ESCAPE</p> <p>R13.4 Means of Escape from Machinery Spaces</p> <p>R13.4.1 Escape from Machinery Spaces of Category A 8 A “safe position” specified in 13.4.1(1), Part R of the Rules is any space, <u>excluding cargo spaces, lockers and storerooms irrespective of their area, cargo pump-rooms and spaces where flammable liquids are stowed, but including vehicle and ro-ro spaces, from which access is provided and maintained clear of obstacles to the open deck.</u></p>	

Amended-Original Requirements Comparison Table (Unified Interpretation on Means of Escape from Machinery Spaces)

Amended	Original	Remarks									
<p>GUIDANCE FOR THE SURVEY AND CONSTRUCTION OF PASSENGER SHIPS</p> <p>Annex 7-1 INTERPRETATION OF PROVISION OF CHAPTER II-2, <i>SOLAS</i> CONVENTION ON PASSENGER SHIPS</p> <p>1 INTERPRETATION OF PROVISION OF CHAPTER II-2, <i>SOLAS</i> CONVENTION</p> <p>1.1 Interpretation</p> <p>Interpretation of provision of Chapter II-2, <i>SOLAS</i> Convention (Amendments of Res. <i>MSC.99(73)</i>) on passenger ships are to be in accordance with Table 7-1-A1. Figures and tables referred to in provision and interpretation of provision are to comply with 1.2 respectively.</p>	<p>GUIDANCE FOR THE SURVEY AND CONSTRUCTION OF PASSENGER SHIPS</p> <p>Annex 7-1 INTERPRETATION OF PROVISION OF CHAPTER II-2, <i>SOLAS</i> CONVENTION ON PASSENGER SHIPS</p> <p>1 INTERPRETATION OF PROVISION OF CHAPTER II-2, <i>SOLAS</i> CONVENTION</p> <p>1.1 Interpretation</p> <p>Interpretation of provision of Chapter II-2, <i>SOLAS</i> Convention (Amendments of Res. <i>MSC.99(73)</i>) on passenger ships are to be in accordance with Table 7-1-A1. Figures and tables referred to in provision and interpretation of provision are to comply with 1.2 respectively.</p>										
<p>Table 7-1-A1 Interpretation of <i>SOLAS</i> II-2</p> <table> <tr> <th>Number</th><th><i>SOLAS</i></th><th>Interpretation</th></tr> <tr> <td colspan="3">(Omitted)</td></tr> <tr> <td>13.4.1.1</td><td>Where the space is below the bulkhead deck the two means of escape shall consist of either: .1 two sets of <i>steel ladders</i>*1 as widely separated as possible, leading to doors in the upper part of the space similarly separated and from which access is provided to the appropriate lifeboat and liferaft embarkation decks. One of these ladders shall be located within a protected enclosure that satisfies regulation 9.2.2.3,</td><td>*1: Ladders having strings of flexible steel wire ropes are not acceptable in such escape routes. *2: A "safe position" can be any space, excluding lockers and storerooms irrespective of their area, cargo spaces and spaces where flammable liquids are stowed, but including special category spaces and</td></tr> </table>			Number	<i>SOLAS</i>	Interpretation	(Omitted)			13.4.1.1	Where the space is below the bulkhead deck the two means of escape shall consist of either: .1 two sets of <i>steel ladders</i> *1 as widely separated as possible, leading to doors in the upper part of the space similarly separated and from which access is provided to the appropriate lifeboat and liferaft embarkation decks. One of these ladders shall be located within a protected enclosure that satisfies regulation 9.2.2.3,	*1: Ladders having strings of flexible steel wire ropes are not acceptable in such escape routes. *2: A "safe position" can be any space, excluding lockers and storerooms irrespective of their area, cargo spaces and spaces where flammable liquids are stowed, but including special category spaces and
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Amended-Original Requirements Comparison Table (Unified Interpretation on Means of Escape from Machinery Spaces)

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	<p>category (2) or regulation 9.2.2.4, category (4), as appropriate, from the lower part of the space it serves to a <i>safe position</i>^{*2} outside the space. Self-closing fire doors of the same fire integrity standards shall be fitted in the enclosure. The ladder shall be fixed in such a way that heat is not transferred into the enclosure through non-insulated fixing points. The <i>protected enclosure</i>^{*3, *4} shall have minimum internal dimensions of at least 800 mm x 800 mm, and shall have emergency lighting provisions; or</p> <p>.2 one steel ladder leading to a door in the upper part of the space from which access is provided to the embarkation deck and additionally, in the <i>lower part of the space</i>^{*5} and in a position well separated from the ladder referred to, a steel door capable of being operated from each side and which provides access to a safe escape route from the lower part of the space to the embarkation deck.</p>	<p>ro-ro spaces, from which access is provided and maintained clear of obstacles to the embarkation decks such as steering gear spaces where hydraulic oils for the steering gear equipment are stowed, and special category spaces and ro-ro spaces, from which access is provided and maintained clear of obstacles to the embarkation decks. This excludes lockers, storerooms, cargo spaces and spaces where flammable liquids are stowed.</p> <p>*3: Refer to R13.4.1-10, Part R of the Guidance for the Survey and Construction of Steel Ships.</p> <p>*4: Internal dimensions are to be interpreted as clear width, so that a passage having diameter of 800 mm is available throughout the vertical enclosure, as shown in the Fig. R13.4.1-2, clear of ship's structure, with insulation and equipment, if any. The ladder within the enclosure can be included in the internal dimensions of the enclosure. When protected enclosures include horizontal portions their clear width is not to be less than 600 mm.</p> <p>*5: Machinery spaces may include working platforms and passageways, or intermediate decks at more than one deck level. In such case, the lower part of the space is to be regarded as the lowest deck level, platform or passageway within the space. At deck levels, other than the lowest one, where only one means of escape other than the protected enclosure is provided, self-closing fire doors are to be fitted in the protected enclosure at that deck level. Smaller working platforms in-between deck levels, or only for access to equipment or components, need not be provided with two means of escape.</p>	
(Omitted)			

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Table 7-1-A1 Interpretation of SOLAS II-2(Continued)															
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