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**UNIFIED INTERPRETATION OF PROVISIONS OF IMO SAFETY, SECURITY, AND
ENVIRONMENT-RELATED CONVENTIONS**

**Draft revision of MSC.1/Circ.1511 on the Unified interpretations of
SOLAS regulations II-2/9 and II-2/13**

Submitted by IACS

SUMMARY

Executive summary: This document proposes a revision of MSC.1/Circ.1511 on the *Unified interpretations of SOLAS regulations II-2/9 and II-2/13* to clarify the term "safe position" used in connection with means of escape from machinery spaces.

*Strategic direction, if 7
applicable:*

Output: 7.1

Action to be taken: Paragraph 11

Related documents: MSC/Circ.1120, MSC.1/Circ.1511 and MSC.1/Circ.1321

Introduction

1 SOLAS regulations II-2/13.4.1 and II-2/13.4.2 specify the requirements for means of escape from machinery spaces on passenger and cargo ships, respectively. Those regulations require one of the two means of escape from machinery spaces to be located inside a protected enclosure that leads to a "safe position" outside the machinery spaces, as follows:

"4.1 Means of escape on passenger ships

Means of escape from each machinery space in passenger ships shall comply with the following provisions.

4.1.1 Escape from spaces below the bulkhead deck

Where the space is below the bulkhead deck the two means of escape shall consist of either:

- .1 ... One of these ladders shall be located within a protected enclosure that satisfies regulation 9.2.2.3, category (2), or regulation 9.2.2.4, category (4), as appropriate, from the lower part of the space it serves to a safe position outside the space. ..."

...

4.1.4 Escape from machinery control rooms

Two means of escape shall be provided from a machinery control room located within a machinery space, at least one of which will provide continuous fire shelter to a safe position outside the machinery space."; and

"4.2 Means of escape of cargo ships

Means of escape from each machinery space in cargo ships shall comply with the following provisions.

4.2.1 Escape from machinery spaces of category A

- .1 ... One of these ladders shall be located within a protected enclosure that satisfies regulation 9.2.3.3, category (4), from the lower part of the space it serves to a safe position outside the space. ...".

2 The term "safe position" is used only in connection with this protected enclosure (i.e. the escape trunk) and is not defined in SOLAS. IACS understands that the intention of the term is to clarify an appropriate space to exit the protected enclosure (escape trunk).

3 MSC.1/Circ.1511 interprets the term "safe position" and specifies that access must be provided from the "safe position" to the embarkation decks (passenger ships) or open deck (cargo ships), as follows:

"Regulation 13.4.1

1 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 ro-ro spaces, from which access is provided and maintained clear of obstacles to the embarkation decks (regulations II-2/13.4.1.1.1 and 13.4.1.4)...."; and

"Regulation 13.4.2

1 A "safe position" can be any space, 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 (regulation II-2/13.4.2.1.1)...."

Discussion

4 IACS notes that for some ships, in particular ro-ro ships, the means of escape within the protected enclosure is arranged to the steering gear room, for example as illustrated in figure 1 below.

5 The steering gear space is often used for stowage of hydraulic oil to the power-operated steering gear. While the hydraulic oil for the steering gear typically has a flashpoint of more than 150°C, MSC.1/Circ.1321 on *Guidelines for measures to prevent fires in engine-rooms and cargo pump-rooms* considers hydraulic oils as flammable liquids. "Flammable liquids" is not defined in SOLAS chapter II-2.

6 As per paragraph 3 above, MSC.1/Circ.1511 states that lockers, storerooms, cargo spaces and spaces where flammable liquids are stowed cannot be considered a "safe position". Accordingly, the means of escape through a protected enclosure, to a steering gear space where hydraulic oil is stowed, is regularly subject to consideration.

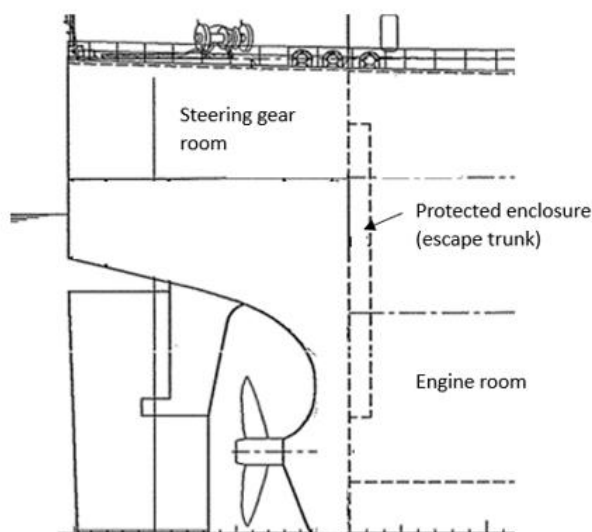


Figure 1: Protected enclosure from the lower part of the engine room to the steering gear space

7 MSC.1/Circ.1511 explicitly permits special category spaces and ro-ro spaces to be considered as safe positions, and IACS would in general expect the steering gear space to contain less flammable liquid than a vehicle space (special category spaces and ro-ro spaces). This expectation is supported by SOLAS regulation II-2/9.2.2.3.2.2(10), classifying steering gear spaces on passenger ships as "auxiliary machinery spaces having little or no fire risk". For cargo ships, footnote (i) of tables 9.5 and 9.6 of MSC/Circ.1120 indicates that also steering gear room on cargo ships including tankers can be interpreted as "machinery space having little or no fire risk".

8 Spaces where flammable vapours may be present are generally not suitable as a "safe position". However, the hydraulic oil for the steering gear is not heated and IACS considers the risk of flammable vapours to be low.

9 It is recognized that the "steering gear space" is not a defined space in SOLAS chapter II-2 in the same way as "special category spaces" and "ro-ro spaces". However, as neither "lockers", "storerooms" and "spaces where flammable liquids are stowed" are defined terms, it is understood that the interpretation in MSC.1/Circ.1511 intends to describe the content and use of a space, rather than only referring to spaces covered by defined terms.

Proposal

10 Based on the discussions in paragraphs 3 to 9 above, IACS prepared the draft revision of interpretations in MSC.1/Circ.1511 to clarify that steering gear spaces may be regarded as "safe position" for the purpose of exiting the protected enclosure from machinery spaces, also if hydraulic oils for the steering gear equipment are stowed in the space, for consideration of the Sub-Committee.

Action requested of the Sub-Committee

11 The Sub-Committee is invited to consider the above, the proposal in paragraph 10 and draft revision of MSC.1/Circ.1511 as set out in the annex and take action, as appropriate.

ANNEX

DRAFT AMENDMENTS TO UNIFIED INTERPRETATIONS OF SOLAS REGULATIONS II-2/9 AND II-2/13 (MSC.1/CIRC.1511)

The following changes are proposed:*

"REGULATION II-2/13 – MEANS OF ESCAPE

...

Regulations 13.4.1

1 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 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 (regulations II-2/13.4.1.1.1 and 13.4.1.4).

...

Regulations 13.4.2

1 A "safe position" can be any space, excluding cargo spaces, lockers and storerooms irrespective of their area, cargo pump-rooms and spaces where flammable liquids are stowed, but including 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 (regulation II-2/13.4.2.1.1)."

* Tracked changes are indicated using "strikeout" for deleted text and "grey shading" to highlight new insertions and all modifications, including deleted text.