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(1997) (Rev.1 Dec 2007) (Corr.1 Feb 2022)

Cargo manifold gutter bars - freeing arrangements and intact stability

Interpretation of the 1966 International Convention on Load Lines, regulation 26 and the 1988 Protocol relating to the 1966 International Convention on Load Lines, regulations 24(1)(g) and 26, as amended by resolution MSC.143(77)

ICLL 1966, Regulation 26 Special Conditions of Assignment for Type "A" Ships

Regulation 26 of ICLL 1966 reads as follows:

Regulation 26 Special Conditions of Assignment for Type "A" Ships

Machinery Casings

(1) Machinery casings on Type "A" ships as defined in Regulation 27 shall be protected by an enclosed poop or bridge of at least standard height, or by a deckhouse of equal height and equivalent strength, provided that machinery casings may be exposed if there are no openings giving direct access from the freeboard deck to the machinery space. A door complying with the requirements of Regulation 12 may, however, be permitted in the machinery casing, provided that it leads to a space or passageway which is as strongly constructed as the casing and is separated from the stairway to the engine room by a second weathertight door of steel or other equivalent material.

Gangway and Access

- (2) An efficiently constructed fore and aft permanent gangway of sufficient strength shall be fitted on Type "A" ships at the level of the superstructure deck between the poop and the midship bridge or deckhouse where fitted, or equivalent means of access shall be provided to carry out the purpose of the gangway, such as passages below deck. Elsewhere, and on Type "A" ships without a midship bridge, arrangements to the satisfaction of the Administration shall be provided to safeguard the crew in reaching all parts used in the necessary work of the ship.
- (3) Safe and satisfactory access from the gangway level shall be available between separate crew accommodations and also between crew accommodations and the machinery space.

Hatchways

(4)	Expose	ed ha	tchway	s on th	e freeb	oard a	nd forec	astle (decks d	or on th	ne tops	of e	xpansior
trunk	s on Ty	pe "A	" ships	shall b	e provi	ided wi	h efficie	nt wa	tertight	covers	s of ste	el or	other
equiv	alent m	ateria	al.										

Note:

1. Rev.1 of this Unified Interpretation is to be uniformly implemented by Members and Associates from 1 July 2008, unless otherwise instructed by a Flag State.

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Freeing Arrangements

(cont)

- (5) Type "A" ships with bulwarks shall have open rails fitted for at least half the length of the exposed parts of the weather deck or other effective freeing arrangements. The upper edge of the sheer strake shall be kept as low as practicable.
- (6) Where superstructures are connected by trunks, open rails shall be fitted for the whole length of the exposed parts of the freeboard deck.

ICLL 1988, as amended by res. MSC.143(77), Regulation 24 Freeing Ports

Regulation 24 of ICLL 1988 reads as follows

Regulation 24 Freeing Ports

(1)(g) Gutter bars greater than 300 mm in height fitted around the weather decks of tankers in way of cargo manifolds and cargo piping shall be treated as bulwarks. Freeing ports shall be arranged in accordance with this regulation. Closures attached to the freeing ports for use during loading and discharge operations are to be arranged in such a way that jamming cannot occur while at sea.

ICLL 1988, Regulation 26 Special conditions of assignment for type 'A' ships

Regulation 26 of ICLL 1988 reads as follows

Regulation 26 Special conditions of assignment for type 'A' ships

Machinery casings

- (1) Machinery casings on type 'A' ships, as defined in regulation 27, shall be protected by one of the following arrangements:
 - (a) an enclosed poop or bridge of at least standard height; or
 - (b) a deckhouse of equal height and equivalent strength.
- (2) Machinery casings may, however, be exposed if there are no openings giving direct access from the freeboard deck to the machinery space. A door complying with the requirements of regulation 12 is acceptable in the machinery casing, provided that it leads to a space or passageway which is as strongly constructed as the casing and is separated from the stairway to the engine-room by a second weathertight door of steel or other equivalent material.

Gangway and access

- (3) A fore-and-aft permanent gangway, constructed in accordance with the provisions of regulation 25-1(2)(e), shall be fitted on type 'A' ships at the level of the superstructure deck between the poop and the midship bridge or deckhouse where fitted. The arrangement contained in regulation 25-1(2)(a) is considered an equivalent means of access to carry out the purpose of the gangway.
- (4) Safe access from the gangway level shall be available between separate crew accommodations and also between crew accommodations and the machinery space.

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Hatchways

(cont)

- (5) Exposed hatchways on the freeboard and forecastle decks or on the tops of expansion trunks on type 'A' ships shall be provided with efficient watertight covers of steel or other equivalent material.

 Freeing arrangements
- (6) Type 'A' ships with bulwarks shall have open rails fitted for at least half the length of the weather deck or other equivalent freeing arrangements. A freeing port area, in the lower part of the bulwarks, of 33% of the total area of the bulwarks, is an acceptable equivalent freeing arrangement. The upper edge of the sheer strake shall be kept as low as practicable.
- (7) Where superstructures are connected by trunks, open rails shall be fitted for the whole length of the exposed parts of the freeboard deck.

Interpretation

- <u>1.</u> Where gutter bars are installed on the weather decks of tankers in way of cargo manifolds and are extended aft as far as the after house front for the purpose of containing cargo spills on deck during loading and discharge operations, the free surface effects caused by containment of a cargo spill during liquid transfer operations or of boarding seas while underway require consideration with respect to the vessel's available margin of positive initial stability (GMo).
- <u>2.</u> Where the gutter bars installed are greater than 300 mm in height, they are to be treated as bulwarks according to the Load Line Convention with freeing ports arranged in accordance with Regulation 24 and effective closures provided for use during loading and discharge operations. Attached closures are to be arranged in such a way that jamming cannot occur while at sea, ensuring that the freeing ports will remain fully effective.

On ships without deck camber, or where the height of the installed gutter bars exceeds the camber, and for tankers having cargo tanks exceeding 60% of the vessel's maximum beam at midships regardless of gutter bar height, gutter bars should not be accepted without an assessment of the initial stability (GMo) for compliance with the relevant intact stability requirement taking into account the free surface effect caused by liquids contained by the gutter bars.

- 3. An assessment of the initial stability (GMo) for compliance with the relevant intact stability requirements taking into account the free surface effect caused by liquids contained by the gutter bars shall be undertaken on:
 - tankers having cargo tanks exceeding 60% of the vessel's maximum beam at midships regardless of gutter bar height,
 - ships without deck camber,
 - ships where the height of the installed gutter bars exceeds the camber.

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