

Pilot Transfer Arrangement Safety Requirements

Each area of noncompliance cited in a ladder report includes reference notes.

The notes refer to the documents listed below and included in the following pages.

Example:

Retrieval line at or below 4th step or leading aft 5,8,10

← reference notes

Current reference documents

NOTE 4	SOLAS V Reg 23 INTERNATIONAL CONVENTION FOR THE SAFETY OF LIFE AT SEA, 1974, CHAPTER V SAFETY OF NAVIGATION, Regulation 23 Pilot transfer arrangements (4 pages) December 5, 2000	pg 2
NOTE 5	IMO Resolution A.1045(27) Agenda item 9, PILOT TRANSFER ARRANGEMENTS (7 pages) November 30, 2011	pg 6
NOTE 6	ISO 799-1:2019(E) Ships and marine technology — Pilot ladders — (Proprietary. Available at ISO.org. Describes ladder materials/construction/testing.) (22 pages) Reviewed and confirmed in 2024.	pg 13
NOTE 7	MSC.1/Circ. 1331/Rev.1 Revised guidelines for construction, installation, maintenance and inspection/survey of means of embarkation and disembarkation (8 pages) revised August 28, 2025	pg 14
NOTE 8	MSC.1/Circ.1428 PILOT TRANSFER ARRANGEMENTS, Required boarding arrangements for pilots (2 pages) May 28, 2012	pg 22
NOTE 9	IMO Resolution A.1108(29) Agenda item 10, AMENDMENTS TO THE RECOMMENDATION ON PILOT TRANSFER ARRANGEMENTS (RESOLUTION A.1045(27)) (2 pages) December 2, 2015	pg 24
NOTE 10	USCG MSIB 21-20 CH 2 Recommendation for Pilot Transfer Arrangements (2 pages) November 5, 2020	pg 26

Earlier documents for reference only

NOTE 1	IMCO Res A.426(XI) ARRANGEMENTS FOR EMBARKING AND DISEMBARKING PILOTS IN VERY LARGE SHIPS <i>adopted 1979-11-15 for vessels constructed 1979-1999 (Suspended – For Reference Only)</i>
NOTE 2	IMO Res_A.889(21) PILOT TRANSFER ARRANGEMENTS <i>adopted 1999-11-25 for vessels constructed 1999-2012 (Suspended – For Reference Only)</i>
NOTE 3	Resolution MSC99(73) Chapter V Reg 23 ADOPTION OF AMENDMENTS TO THE INTERNATIONAL CONVENTION FOR THE SAFETY OF LIFE AT SEA, 1974, AS AMENDED <i>adopted 2000-12-05 for vessels constructed after July 2002 (Suspended – For Reference Only)</i>

INTERNATIONAL CONVENTION FOR THE SAFETY OF LIFE AT SEA, 1974

CHAPTER V SAFETY OF NAVIGATION

Regulation 23 Pilot transfer arrangements

1 Application

- 1.1 Ships engaged on voyages in the course of which pilots may be employed shall be provided with pilot transfer arrangements.
- 1.2 Equipment and arrangements for pilot transfer which are installed* on or after 1 July 2012 shall comply with the requirements of this regulation, and due regard shall be paid to the standards adopted by the Organization * .
* Refer to A.1045 (27) .
- 1.3 Except as provided otherwise, equipment and arrangements for pilot transfer which are provided on ships before 1 July 2012 shall at least comply with the requirements of regulation 17* or 23, as applicable, of the International Convention for the Safety of Life at Sea, 1974, in force prior to that date, and due regard shall be paid to the standards adopted by the Organization prior to that date.
* Refer to the Assembly resolution on Pilot transfer arrangements, to be adopted by the Organization.
- 1.4 Equipment and arrangements which are replaced after [the date of entry into force of this regulation] shall, in so far as is reasonable and practicable, comply with the requirements of this regulation.
- 1.5 With respect to ships constructed before 1 January 1994, regulation 23.5 shall apply not later than the first survey * after [entry-into-force date].
* Refer to MSC.1/Circ.1290, annex on the Unified Interpretation of the term "first survey" referred to in SOLAS regulations.
- 1.6 Regulation 23.6 applies to all ships.

2 General

- 2.1 All arrangements used for pilot transfer shall efficiently fulfil their purpose of enabling pilots to embark and disembark safely. The appliances shall be kept clean, properly maintained and stowed and shall be regularly inspected to ensure that they are safe to use. They shall be used solely for the embarkation and disembarkation of personnel.

- 2.2 The rigging of the pilot transfer arrangements and the embarkation of a pilot shall be supervised by a responsible officer having means of communication with the navigation bridge and who shall also arrange for the escort of the pilot by a safe route to and from the navigation bridge. Personnel engaged in rigging and operating any mechanical equipment shall be instructed in the safe procedures to be adopted and the equipment shall be tested prior to use.
- 2.3 A pilot ladder shall be certified by the manufacturer as complying with this regulation or with an international standard acceptable to the Organization.
* Ladders shall be inspected in accordance with chapter I, regulations 6, 7 and 8.
* Refer to the recommendations by the International Organization for Standardization, in particular publication ISO 799:2004, Ships and marine technology — Pilot ladders.
- 2.4 All pilot ladders used for pilot transfer shall be clearly identified with tags or other permanent marking so as to enable identification of each appliance for the purposes of survey, inspection and record keeping. A record shall be kept on the ship as to the date the identified ladder is placed into service and any repairs effected.
- 2.5 Reference in this regulation to an accommodation ladder includes a sloping ladder used as part of the pilot transfer arrangements.

3 Transfer arrangements

- 3.1 Arrangements shall be provided to enable the pilot to embark and disembark safely on either side of the ship.
- 3.2 In all ships where the distance from sea level to the point of access to, or egress from, the ship exceeds 9 m, and when it is intended to embark and disembark pilots by means of the accommodation ladder * , or other equally safe and convenient means in conjunction with a pilot ladder, the ship shall carry such equipment on each side, unless the equipment is capable of being transferred for use on either side.
* Refer to SOLAS regulation II-1/3-9, Means of embarkation on and disembarkation from ships, adopted by resolution MSC.256(84), together with the associated Guidelines.
- 3.3 Safe and convenient access to, and egress from, the ship shall be provided by either:

- .1 a pilot ladder requiring a climb of not less than 1.5 m and not more than 9 m above the surface of the water so positioned and secured that:
 - .1.1 it is clear of any possible discharges from the ship;
 - .1.2 it is within the parallel body length of the ship and, as far as is practicable, within the mid-ship half length of the ship;
 - .1.3 each step rests firmly against the ship's side; where constructional features, such as rubbing bands, would prevent the implementation of this provision, special arrangements shall, to the satisfaction of the Administration, be made to ensure that persons are able to embark and disembark safely; and
 - .1.4 the single length of pilot ladder is capable of reaching the water from the point of access to, or egress from, the ship and due allowance is made for all conditions of loading and trim of the ship, and for an adverse list of 15° ; the securing strong point, shackles and securing ropes shall be at least as strong as the side ropes; or
- .2 an accommodation ladder in conjunction with the pilot ladder (i.e. a combination arrangement), or other equally safe and convenient means, whenever the distance from the surface of the water to the point of access to the ship is more than 9 m. The accommodation ladder shall be sited leading aft. When in use, means shall be provided to secure the lower platform of the accommodation ladder to the ship's side, so as to ensure that the lower end of the accommodation ladder and the lower platform are held firmly against the ship's side within the parallel body length of the ship and, as far as is practicable, within the mid-ship half length and clear of all discharges.

When a combination arrangement is used for pilot access, means shall be provided to secure the pilot ladder and manropes to the ship's side at a point of nominally 1.5 m above the bottom platform of the accommodation ladder. In the case of a combination arrangement using an accommodation ladder with a trapdoor in the bottom platform (i.e. embarkation platform), the pilot ladder and man ropes shall be rigged through the trapdoor extending above the platform to the height of the handrail.

4 Access to the ship's deck

Means shall be provided to ensure safe, convenient and unobstructed passage for any person embarking on, or disembarking from, the ship between the head of the pilot ladder, or of any accommodation ladder or other appliance, and the ship's deck. Where such passage is by means of:

- .1 a gateway in the rails or bulwark, adequate handholds shall be provided; and
- .2 a bulwark ladder, two handhold stanchions rigidly secured to the ship's structure at or near their bases and at higher points shall be fitted. The bulwark ladder shall be securely attached to the ship to prevent overturning.

5 Shipside doors

Shipside doors used for pilot transfer shall not open outwards.

6 Mechanical pilot hoists

Mechanical pilot hoists shall not be used.

7 Associated equipment

7.1 The following associated equipment shall be kept at hand ready for immediate use when persons are being transferred:

- .1 two man-ropes of not less than 28 mm and not more than 32 mm in diameter properly secured to the ship if required by the pilot; man-ropes shall be fixed at the rope end to the ring plate fixed on deck and shall be ready for use when the pilot disembarks, or upon request from a pilot approaching to board (the manropes shall reach the height of the stanchions or bulwarks at the point of access to the deck before terminating at the ring plate on deck) ;
- .2 a lifebuoy equipped with a self-igniting light; and
- .3 a heaving line.

7.2 When required by paragraph 4, stanchions and bulwark ladders shall be provided.

8 Lighting

Adequate lighting shall be provided to illuminate the transfer arrangements overside and the position on deck where a person embarks or disembarks.

ASSEMBLY
27th session
Agenda item 9

A 27/Res.1045
20 December 2011
Original: ENGLISH

Resolution A.1045(27)

**Adopted on 30 November 2011
(Agenda item 9)**

PILOT TRANSFER ARRANGEMENTS

THE ASSEMBLY,

RECALLING Article 15(j) of the Convention on the International Maritime Organization regarding the functions of the Assembly in relation to regulations and guidelines concerning maritime safety,

NOTING the provisions of regulation V/23 of the International Convention for the Safety of Life at Sea (SOLAS), 1974, as amended,

HAVING CONSIDERED the recommendation made by the Maritime Safety Committee at its eighty-seventh session,

1. ADOPTS the "Recommendation on Pilot Transfer Arrangements", as set out in the Annex to the present resolution;
2. INVITES Governments to draw the attention of all concerned to this recommendation;
3. FURTHER INVITES Governments to ensure that mechanical pilot hoists are not used;
4. REQUESTS Governments to ensure that pilot ladders and their arrangements, use and maintenance conform to standards not inferior to those set out in the annex to the present resolution;
5. REVOKES resolution A.889(21).

Annex

RECOMMENDATION ON PILOT TRANSFER ARRANGEMENTS**1 GENERAL**

Ship designers are encouraged to consider all aspects of pilot transfer arrangements at an early stage in design. Equipment designers and manufacturers are similarly encouraged, particularly with respect to the provisions of paragraphs 2.1.2, 3.1 and 3.3.

2 PILOT LADDERS

A pilot ladder should be certified by the manufacturer as complying with this section or with the requirements of an international standard acceptable to the Organization.¹

2.1 Position and construction

2.1.1 The securing strong points, shackles and securing ropes should be at least as strong as the side ropes specified in section 2.2 below.

2.1.2 The steps of the pilot ladders should comply with the following requirements:

- .1 if made of hardwood, they should be made in one piece, free of knots;
- .2 if made of material other than hardwood, they should be of equivalent strength, stiffness and durability to the satisfaction of the Administration;
- .3 the four lowest steps may be of rubber of sufficient strength and stiffness or other material to the satisfaction of the Administration;
- .4 they should have an efficient non-slip surface;
- .5 they should be not less than 400 mm between the side ropes, 115 mm wide and 25 mm in depth, excluding any non-slip device or grooving;
- .6 they should be equally spaced not less than 310 mm or more than 350 mm apart; and
- .7 they should be secured in such a manner that each will remain horizontal.

2.1.3 No pilot ladder should have more than two replacement steps which are secured in position by a method different from that used in the original construction of the ladder, and any steps so secured should be replaced as soon as reasonably practicable by steps secured in position by the method used in the original construction of the pilot ladder. When any replacement step is secured to the side ropes of the pilot ladder by means of grooves in the sides of the step, such grooves should be in the longer sides of the step.

¹

Refer to the recommendations by the International Organization for Standardization, in particular publication ISO 799:2004, *Ships and marine technology – Pilot ladders*.

2.1.4 Pilot ladders with more than five steps should have spreader steps not less than 1.8 m long provided at such intervals as will prevent the pilot ladder from twisting. The lowest spreader step should be the fifth step from the bottom of the ladder and the interval between any spreader step and the next should not exceed nine steps.

2.1.5 When a retrieval line is considered necessary to ensure the safe rigging of a pilot ladder, the line should be fastened at or above the last spreader step and should lead forward. The retrieval line should not hinder the pilot nor obstruct the safe approach of the pilot boat.

2.1.6 A permanent marking should be provided at regular intervals (e.g. 1 m) throughout the length of the ladder consistent with ladder design, use and maintenance in order to facilitate the rigging of the ladder to the required height.

2.2 Ropes

2.2.1 The side ropes of the pilot ladder should consist of two uncovered ropes not less than 18 mm in diameter on each side and should be continuous, with no joints and have a breaking strength of at least 24 Kilo Newtons per side rope. The two side ropes should each consist of one continuous length of rope, the midpoint half-length being located on a thimble large enough to accommodate at least two passes of side rope.²

2.2.2 Side ropes should be made of manila or other material of equivalent strength, durability, elongation characteristics and grip which has been protected against actinic degradation and is satisfactory to the Administration.

2.2.3 Each pair of side ropes should be secured together both above and below each step with a mechanical clamping device properly designed for this purpose, or seizing method with step fixtures (chocks or widgets), which holds each step level when the ladder is hanging freely. The preferred method is seizing.²

3 ACCOMMODATION LADDERS USED IN CONJUNCTION WITH PILOT LADDERS

3.1 Arrangements which may be more suitable for special types of ships may be accepted, provided that they are equally safe.

3.2 The length of the accommodation ladder should be sufficient to ensure that its angle of slope does not exceed 45°. In ships with large draft ranges, several pilot ladder hanging positions may be provided, resulting in lesser angles of slope. The accommodation ladder should be at least 600 mm in width.

3.3 The lower platform of the accommodation ladder should be in a horizontal position and secured to the ship's side when in use. The lower platform should be a minimum of 5 m above sea level.

3.4 Intermediate platforms, if fitted, should be self-levelling. Treads and steps of the accommodation ladder should be so designed that an adequate and safe foothold is given at the operative angles.

² Refer to the recommendations by the International Organization for Standardization, in particular publication ISO 799:2004, *Ships and marine technology — Pilot ladders*, part 4.3a and part 3, paragraph 3.2.1.

3.5 The ladder and platform should be equipped on both sides with stanchions and rigid handrails, but if handropes are used they should be tight and properly secured. The vertical space between the handrail or handrope and the stringers of the ladder should be securely fenced.

3.6 The pilot ladder should be rigged immediately adjacent to the lower platform of the accommodation ladder and the upper end should extend at least 2 m above the lower platform. The horizontal distance between the pilot ladder and the lower platform should be between 0.1 and 0.2 m.

3.7 If a trapdoor is fitted in the lower platform to allow access from and to the pilot ladder, the aperture should not be less than 750 mm x 750 mm. The trapdoor should open upwards and be secured either flat on the embarkation platform or against the rails at the aft end or outboard side of the platform and should not form part of the handholds. In this case the after part of the lower platform should also be fenced as specified in paragraph 3.5 above, and the pilot ladder should extend above the lower platform to the height of the handrail and remain in alignment with and against the ship's side.

3.8 Accommodation ladders, together with any suspension arrangements or attachments fitted and intended for use in accordance with this recommendation, should be to the satisfaction of the Administration³.

4 MECHANICAL PILOT HOISTS

The use of mechanical pilot hoists is prohibited by SOLAS regulation V/23.

5 ACCESS TO DECK

Means should be provided to ensure safe, convenient and unobstructed passage for any person embarking on, or disembarking from, the ship between the head of the pilot ladder, or of any accommodation ladder, and the ship's deck; such access should be gained directly by a platform securely guarded by handrails. Where such passage is by means of:

- .1 a gateway in the rails or bulwark, adequate handholds should be provided at the point of embarking on or disembarking from the ship on each side which should be not less than 0.7 m or more than 0.8 m apart. Each handhold should be rigidly secured to the ship's structure at or near its base and also at a higher point, not less than 32 mm in diameter and extend not less than 1.2 m above the top of the bulwarks. Stanchions or handrails should not be attached to the bulwark ladder;
- .2 a bulwark ladder should be securely attached to the ship to prevent overturning. Two handhold stanchions should be fitted at the point of embarking on or disembarking from the ship on each side which should be not less than 0.7 m or more than 0.8 m apart. Each stanchion should be rigidly secured to the ship's structure at or near its base and also at a higher point, should be not less than 32 mm in diameter and should extend not less than 1.2 m above the top of the bulwarks. Stanchions or handrails should not be attached to the bulwark ladder.

³ Refer to SOLAS regulation II-1/3-9 concerning accommodation ladders.

6 SAFE APPROACH OF THE PILOT BOAT

Where rubbing bands or other constructional features might prevent the safe approach of a pilot boat, these should be cut back to provide at least 6 metres of unobstructed ship's side. Specialized offshore ships less than 90 m or other similar ships less than 90 m for which a 6 m gap in the rubbing bands would not be practicable, as determined by the Administration, do not have to comply with this requirement. In this case, other appropriate measures should be taken to ensure that persons are able to embark and disembark safely.

7 INSTALLATION OF PILOT LADDER WINCH REELS

7.1 Point of access

7.1.1 When a pilot ladder winch reel is provided it should be situated at a position which will ensure persons embarking on, or disembarking from, the ship between the pilot ladder and the point of access to the ship, have safe, convenient and unobstructed access to or egress from the ship.

7.1.2 The point of access to or egress from the ship may be by a ship's side opening, an accommodation ladder when a combination arrangement is provided, or a single section of pilot ladder.

7.1.3 The access position and adjacent area should be clear of obstructions, including the pilot ladder winch reel, for distances as follows:

- .1 a distance of 915 mm in width measured longitudinally;
- .2 a distance of 915 mm in depth, measured from the ship's side plating inwards; and
- .3 a distance of 2,200 mm in height, measured vertically from the access deck.

7.2 Physical positioning of pilot ladder winch reels

7.2.1 Pilot ladder winch reels are generally fitted on the ship's upper (main) deck or at a ship's side opening which may include side doors, gangway locations or bunkering points. Winch reels fitted on the upper deck may result in very long pilot ladders.

7.2.2 Pilot ladder winch reels which are fitted on a ship's upper deck for the purpose of providing a pilot ladder which services a ship side opening below the upper deck or, alternatively, an accommodation ladder when a combination arrangement is provided should:

- .1 be situated at a location on the upper deck from which the pilot ladder is able to be suspended vertically, in a straight line, to a point adjacent to the ship side opening access point or the lower platform of the accommodation ladder;
- .2 be situated at a location which provides a safe, convenient and unobstructed passage for any person embarking on, or disembarking from, the ship between the pilot ladder and the place of access on the ship;

- .3 be situated so that safe and convenient access is provided between the pilot ladder and the ship's side opening by means of a platform which should extend outboard from the ship's side for a minimum distance of 750 mm, with a longitudinal length of a minimum of 750 mm. The platform should be securely guarded by handrails;
- .4 safely secure the pilot ladder and manropes to the ship's side at a point on the ship's side at a distance of 1,500 mm above the platform access point to the ship side opening or the lower platform of the accommodation ladder; and
- .5 if a combination arrangement is provided, have the accommodation ladder secured to the ship's side at or close to the lower platform so as to ensure that the accommodation ladder rests firmly against the ship's side.

7.2.3 Pilot ladder winch reels fitted inside a ship's side opening should:

- .1 be situated at a position which provides a safe, convenient and unobstructed passage for any person embarking on, or disembarking from, the ship between the pilot ladder and the place of access on the ship;
- .2 be situated at a position which provides an unobstructed clear area with a minimum length of 915 mm and minimum width of 915 mm and minimum vertical height of 2,200 mm; and
- .3 if situated at a position which necessitates a section of the pilot ladder to be partially secured in a horizontal position on the deck so as to provide a clear access as described above, then allowance should be made so that this section of the pilot ladder may be covered with a rigid platform for a minimum distance of 915 mm measured horizontally from the ship's side inwards.

7.3 Handrails and handgrips

Handrails and handgrips should be provided in accordance with section 5 to assist the pilot to safely transfer between the pilot ladder and the ship, except as noted in paragraph 7.2.2.3 for arrangements with platforms extending outboard. The horizontal distance between the handrails and/or the handgrips should be not less than 0.7 m or more than 0.8 m apart.

7.4 Securing of the pilot ladder

Where the pilot ladder is stowed on a pilot ladder winch reel which is located either within the ship's side opening or on the upper deck:

- .1 the pilot ladder winch reel should not be relied upon to support the pilot ladder when the pilot ladder is in use;
- .2 the pilot ladder should be secured to a strong point, independent of the pilot ladder winch reel; and
- .3 the pilot ladder should be secured at deck level inside the ship side opening or, when located on the ship's upper deck, at a distance of not less than 915 mm measured horizontally from the ship's side inwards.

7.5 Mechanical securing of pilot ladder winch reel

7.5.1 All pilot ladder winch reels should have means of preventing the winch reel from being accidentally operated as a result of mechanical failure or human error.

7.5.2 Pilot ladder winch reels may be manually operated or, alternatively, powered by either electrical, hydraulic or pneumatic means.

7.5.3 Manually operated pilot ladder winch reels should be provided with a brake or other suitable arrangements to control the lowering of the pilot ladder and to lock the winch reel in position once the pilot ladder is lowered into position.

7.5.4 Electrical, hydraulic or pneumatically driven pilot ladder winch reels should be fitted with safety devices which are capable of cutting off the power supply to the winch reel and thus locking the winch reel in position.

7.5.5 Powered winch reels should have clearly marked control levers or handles which may be locked in a neutral position.

7.5.6 A mechanical device or locking pin should also be utilized to lock powered winch reels.

INTERNATIONAL STANDARD

**ISO
799-1**

First edition
2019-02

Ships and marine technology — Pilot ladders —

Part 1: Design and specification

*Navires et technologie maritime — Échelles de pilote —
Partie 1: Conception et spécification*

ISO STANDARDS ARE PROPRIETARY INFORMATION

This document is not included here but is available at the
ISO website: <https://www.iso.org/standard/68808.html>



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MSC.1/Circ.1331/Rev.1
28 August 2025

REVISED GUIDELINES FOR CONSTRUCTION, INSTALLATION, MAINTENANCE AND INSPECTION/SURVEY OF MEANS OF EMBARKATION AND DISEMBARKATION

- 1 The Maritime Safety Committee, at its eighty-sixth session (27 May to 5 June 2009), approved the *Guidelines for construction, installation, maintenance and inspection/survey of means of embarkation and disembarkation* (MSC.1/Circ.1331), prepared by the Sub-Committee on Ship Design and Equipment at its fifty-second session, with a view to providing specific guidance on the construction, installation, maintenance and inspection/survey of means of embarkation and disembarkation such as accommodation ladders and gangways required under SOLAS regulation II-1/3-9.
- 2 The Maritime Safety Committee, at its 110th session (18 to 27 June 2025) approved amendments to MSC.1/Circ.1331, prepared by the Sub-Committee on Ship Design and Construction, at its eleventh session, as set out in the annex.
- 3 Member Governments are invited to bring the attached Revised Guidelines to the attention of shipowners, shipbuilders, designers, manufacturers, port State control authorities and other parties concerned in conjunction with SOLAS regulation II-1/3-9 (Means of embarkation on and disembarkation from ships).
- 4 The present circular supersedes MSC.1/Circ.1331.

ANNEX

REVISED GUIDELINES FOR CONSTRUCTION, INSTALLATION, MAINTENANCE AND INSPECTION/SURVEY OF MEANS OF EMBARKATION AND DISEMBARKATION

1 APPLICATION AND DEFINITIONS

1.1 This document is intended to provide Guidelines for the construction, installation, maintenance and inspection/survey of means of embarkation and disembarkation required under SOLAS regulation II-1/3-9, adopted by resolution MSC.256(84). Where means of embarkation and disembarkation other than those specifically covered by these Guidelines are fitted, an equivalent level of safety should be provided.

1.2 Unless expressly provided otherwise, the expression "installed on or after 1 July 2026" in these Guidelines means:

- (a) for ships for which the building contract is placed on or after 1 July 2026, or in the absence of the contract, the keels of which are laid or which are at a similar stage of construction on or after 1 July 2026, any installation date on the ship; or
- (b) for ships other than those ships prescribed in (a) above, a contractual delivery date for the equipment or, in the absence of a contractual delivery date, the actual delivery date of the equipment to the ship on or after 1 July 2026.

1.3 For the purpose of these Guidelines, a "safety net" is a net which is rigged between the ship's side and the means of (dis)embarkation to prevent a person from falling into the water or onto the quayside from a means of (dis)embarkation.

2 CONSTRUCTION

2.1 Accommodation ladders and gangways for means of embarkation and disembarkation which are installed before 1 July 2026 on board ships constructed on or after 1 January 2010 should meet applicable international standards such as ISO 5488:1979, *Shipbuilding – Accommodation ladders*, ISO 7061:1993, *Shipbuilding – Aluminium shore gangways for seagoing vessels* and/or national standards and/or other requirements recognized by the Administration.

2.2 Accommodation ladders and gangways for means of embarkation and disembarkation which are installed on ships constructed on or after 1 January 2010, which are installed on or after 1 July 2026, should meet applicable international standards such as ISO 5488:2015, *Ships and marine technology – Accommodation ladders*, ISO 7061:2015 or ISO 7061:2024, *Ships and marine technology – Aluminium shore gangways for seagoing vessels* and/or national standards and/or other requirements recognized by the Administration.

2.3 Accommodation ladders and gangways installed on ships constructed before 1 January 2010, which are installed on or after 1 July 2026, should meet applicable international standards insofar as is reasonable and practicable, such as ISO 5488:1979, *Shipbuilding – Accommodation ladders*, or ISO 5488:2015, *Ships and marine technology – Accommodation ladders*, ISO 7061:1993, ISO 7061:2015 or ISO 7061:2024, *Ships and marine technology – Aluminium shore gangways for seagoing vessels* and/or national standards and/or other requirements recognized by the Administration.

2.4 The construction and test of accommodation ladder winches which are installed before 1 July 2026 on board ships constructed on or after 1 January 2010 should be in accordance with applicable international standards, such as ISO 7364:1983 *Shipbuilding and marine structures – Deck machinery – Accommodation ladder winches*.

2.5 The construction and test of accommodation ladder winches which are installed on or after 1 July 2026 on board ships constructed on or after 1 January 2010 should be in accordance with applicable international standards such as ISO 7364:2016 *Ships and marine technology – Deck machinery – Accommodation ladder winches*.

2.6 The construction and test of accommodation ladder winches installed on ships constructed before 1 January 2010, which are installed on or after 1 July 2026, should be in accordance with applicable international standards insofar as is reasonable and practicable, such as ISO 7364:1983, *Shipbuilding and marine structures – Deck machinery – Accommodation ladder winches*, or ISO 7364:2016 *Ships and marine technology – Deck machinery – Accommodation ladder winches*.

2.7 The structure of the accommodation ladders and gangways and their fittings and attachments should be such as to allow regular inspection, maintenance of all parts and, if necessary, lubrication of their pivot pin. Special care should be taken to ensure that the welding connection works are properly performed.

3 INSTALLATION

3.1 Location

As far as practicable, the means of embarkation and disembarkation should be sited clear of the working area and should not be placed where cargo or other suspended loads may pass overhead.

3.2 Lighting

Adequate lighting should be provided to illuminate the means of embarkation and disembarkation, the position on deck where persons embark or disembark and the controls of the arrangement.

3.3 Lifebuoy

A lifebuoy equipped with a self-igniting light and a buoyant lifeline should be available for immediate use in the vicinity of the embarkation and disembarkation arrangement when in use.

3.4 Arrangement

3.4.1 Each accommodation ladder should be of such a length to ensure that, at a maximum design operating angle of inclination, the lowest platform will be not more than 600 mm above the waterline in the lightest seagoing condition, as defined in SOLAS regulation III/3.13.

3.4.2 The arrangement at the head of the accommodation ladder should provide direct access between the ladder and the ship's deck by a platform securely guarded by handrails and adequate handholds. The ladder should be securely attached to the ship to prevent overturning.

3.4.3 For ships on which the height of the embarkation/disembarkation deck exceeds 20 m above the waterline specified in paragraph 3.4.1 and on other ships for which the Administration considers compliance with the provisions of paragraph 3.4.1 impractical, an alternative means of providing safe access to the ship or supplementary means of safe access to the bottom platform of the accommodation ladder may be accepted.

3.5 Marking

Each accommodation ladder or gangway should be clearly marked at each end with a plate showing the restrictions on the safe operation and loading, including the maximum and minimum permitted design angles of inclination, design load, maximum load on bottom end plate, etc. Where the maximum operational load is less than the design load, it should also be shown on the marking plate.

3.6 Test

3.6.1 After installation, the winch and the accommodation ladder should be operationally tested to confirm proper operation and condition of the winch and the ladder after the test.

3.6.2 The winch should be tested as a part of the complete accommodation ladder unit through a minimum of two times hoisting and lowering of the accommodation ladder in accordance with the onboard test requirement specified in international standards applicable to the winch.

3.6.3 Every new accommodation ladder should be subjected to a static load test of the specified maximum working load upon installation.

3.7 Positioning

3.7.1 Gangways should not be used at an angle of inclination greater than 30° from the horizontal and accommodation ladders should not be used at an angle greater than 55° from the horizontal, unless designed and constructed for use at angles greater than these and marked as such, as required by paragraph 3.5.

3.7.2 Gangways should never be secured to a ship's guardrails unless they have been designed for that purpose. If positioned through an open section of bulwark or railings, any remaining gaps should be adequately fenced.

3.7.3 Adequate lighting for means of embarkation and disembarkation and the immediate approaches should be ensured from the ship and/or the shore in hours of darkness.

3.8 Rigging (safety net)

3.8.1 A safety net should be mounted in way of the accommodation ladders and gangways where it is possible that a person may fall from the means of embarkation and disembarkation or between the ship and quayside.

3.8.2 The safety net in 3.8.1 is not required if the provisions of 3.8.3 and 3.8.4 below are met.

3.8.3 The hazard of a person falling through the sides of the means of (dis)embarkation is adequately mitigated if the top railing is of rigid construction and a side net* has been rigged between this railing and the base of the accommodation ladder, including its upper and lower platforms, or the gangway (see figure 1).

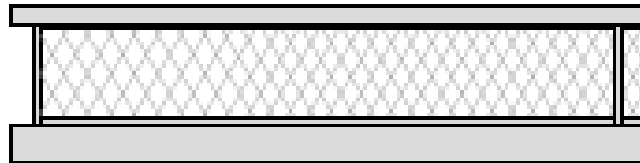


Figure 1: Side net between rigid top railing and base of ladder

3.8.4 The hazard of falling over the rigid top railing is adequately mitigated if this railing is installed in accordance with relevant international standards, at a height of not less than 1,000 mm.

3.9 Verification

Upon installation, the compliance of the entire arrangement with these Guidelines should be verified.

3.10 Protection of crew

When rigging the accommodation ladder, gangway and the safety net, the crew should have sufficient personal safety protection. The crew should wear life jackets and safety harnesses while rigging.

4 MAINTENANCE

4.1 Accommodation ladders and gangways, including associate winch and fittings, should be properly maintained and inspected at appropriate intervals as required by SOLAS regulation III/20.7.2, in accordance with manufacturers' instructions. Additional checks should be made each time the accommodation ladder and gangway is rigged, looking out for signs of distortion, cracks and corrosion. Close examination for possible corrosion should be carried out, especially when an aluminium accommodation ladder/gangway has fittings made of mild steel.

4.2 Bent stanchions should be replaced or repaired and guard ropes should be inspected for wear and renewed where necessary.

4.3 Moving parts should be free to turn and should be greased as appropriate.

4.4 The lifting equipment should be inspected, tested and maintained paying careful attention to the condition of the hoist wire. The wires used to support the means of embarkation and disembarkation should be renewed when necessary, as required by SOLAS regulation II-1/3-9.

* Refer to ISO 9554:2019, Fibre ropes – General specifications or other standards acceptable to the Administration.

4.5 Arrangements should also be made to examine the underside of gangways and accommodation ladders at regular intervals.

4.6 All inspections, maintenance work and repairs of accommodation ladders and gangways should be recorded in order to provide an accurate history for each appliance. The information to be recorded appropriately on board should include the date of the most recent inspection, the name of the person or body who carried out that inspection, the due date for the next inspection and the dates of renewal of wires used to support the embarkation and disembarkation arrangement.

4.7 The safety net and/or side net should be properly stored in ventilated places avoiding sunlight and chemical contamination. The safety net and/or side net should be checked and maintained regularly and replaced if found necessary.

5 EXAMINATION AND OPERATIONAL TEST DURING SURVEYS REQUIRED BY SOLAS REGULATIONS I/7 AND 8

5.1 Accommodation ladders/gangways and davits

5.1.1 Accommodation ladder

5.1.1.1 The following items should be thoroughly examined during annual surveys required by SOLAS regulations I/7 and 8 and checked for satisfactory condition of the accommodation ladder:

- .1 steps;
- .2 platforms;
- .3 all support points such as pivots, rollers, etc.;
- .4 all suspension points such as lugs, brackets, etc.;
- .5 stanchions, safety pins, rigid handrails, hand ropes and turntables, side nets and their securing points;
- .6 davit structure, wire and sheaves, etc.; and
- .7 any other relevant provisions stated in these Guidelines.

5.1.1.2 At every five-yearly survey, upon completion of the examination required by paragraph 5.1.1.1, the accommodation ladder should be statically tested with the specified maximum working load of the ladder.

5.1.2 Gangway

5.1.2.1 The following items should be thoroughly examined during annual surveys required by SOLAS regulations I/7 and 8 and checked for satisfactory condition of the gangway:

- .1 treads;
- .2 side stringers, cross-members, decking, deck plates, etc.;
- .3 all support points such as wheel, roller, etc.;

- .4 stanchions, safety pins, rigid handrails, hand ropes; side nets and their securing points; and
- .5 any other relevant provisions stated in these Guidelines.

5.1.2.2 At every five-yearly survey, upon completion of the examination required by paragraph 5.1.2.1, the gangway should be statically tested with the specified maximum working load of the gangway.

5.2 Winch

5.2.1 During annual surveys required by SOLAS regulations I/7 and 8, the following items should be examined for satisfactory condition:

- .1 brake mechanism including condition of brake pads and band brake, if fitted;
- .2 remote control system; and
- .3 power supply system (motor).

5.2.2 At every five-yearly survey, upon completion of the examination required by paragraph 5.2.1, the winch should be operationally tested by raising and lowering the unloaded accommodation ladder.

5.3 Tests

5.3.1 The tests specified in sections 5.1 and 5.2 are for the purpose of confirming the proper operation of the accommodation ladder, gangway and/or winch, as appropriate.

5.3.2 The load used for the test should be:

- .1 the design load; or
- .2 the maximum operational load, if this is less than the design load and marked as per paragraph 3.5; or
- .3 the load nominated by the shipowner or operator only in those cases where the design load or maximum operational load is not known (e.g. for accommodation ladders or gangways which are provided on board ships constructed prior to 1 January 2010), in which case that nominated load should be used as the maximum operational load for all purposes within these Guidelines.

5.3.3 The tests should be carried out with the load applied as uniformly as possible along the length of the accommodation ladder or gangway. The ladder or gangway should be in horizontal position, and the accommodation ladder should be suspended by the wire(s) and supported by the winch.

5.3.4 Following satisfactory completion of the applicable test(s) without permanent deformation or damage to the tested item, the load used for that test should be marked as the maximum operational load in accordance with paragraph 3.5.

5.4 Fittings and davits

During annual surveys required by SOLAS regulations I/7 and 8, all fittings and davits on the ship's deck associated with accommodation ladders and gangways should be examined for satisfactory condition.

5.5 Means of access to deck

During annual surveys required by SOLAS regulations I/7 and 8, the fittings or structures for means of access to decks such as handholds in a gateway or bulwark ladder and stanchions should be examined for satisfactory condition.



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MSC.1/Circ.1428
28 May 2012

PILOT TRANSFER ARRANGEMENTS

Required boarding arrangements for pilots

1 The Maritime Safety Committee, at its eighty-eighth session (24 November to 3 December 2010), approved amendments to SOLAS regulation V/23 which, inter alia, include amendments to the Required Boarding Arrangements for Pilots (resolution MSC.308(88)). In addition, the twenty-seventh regular session of the Assembly, in December 2011, adopted resolution A.1045(27) on *Pilot transfer arrangements*.

2 These changes required amendments to the poster previously circulated under cover of MSC/Circ.568/Rev.1. The attached revised poster incorporates the most significant changes adopted by MSC 88.

3 The Maritime Safety Committee, at its ninetieth session (16 to 25 May 2012), concurred with the recommendation of the fifty-seventh session of the NAV Sub-Committee regarding Required boarding arrangements for pilots (6 to 10 June 2011) and approved a revision of the poster.

4 Member Governments are requested to bring the revised poster to the attention of their pilots, seafarers, shipowners, ship operators and others concerned with pilot boarding arrangements.

ANNEX

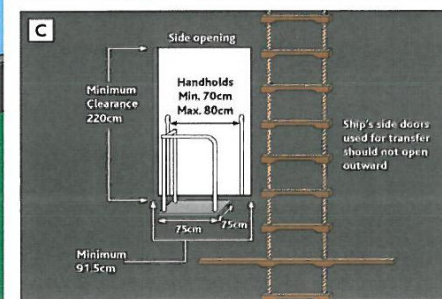
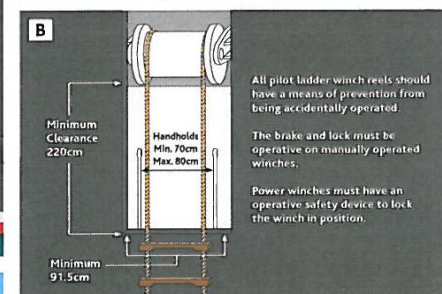
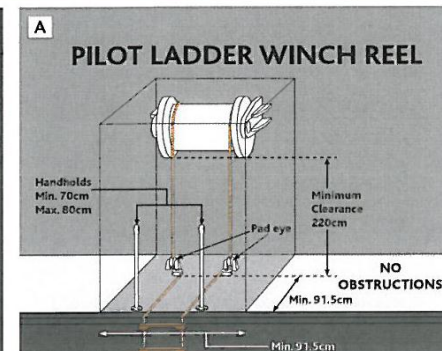
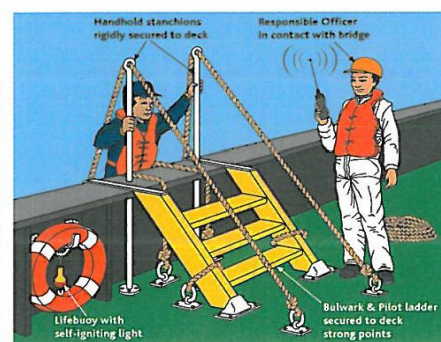
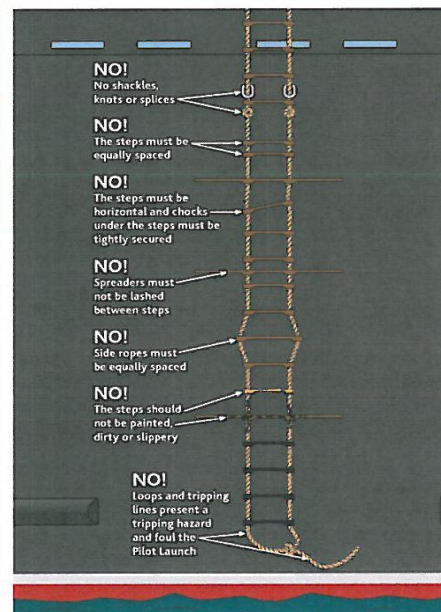
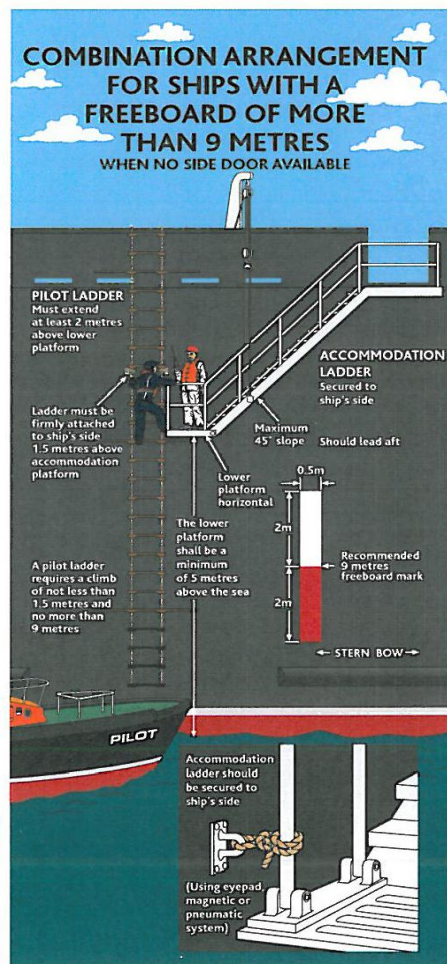
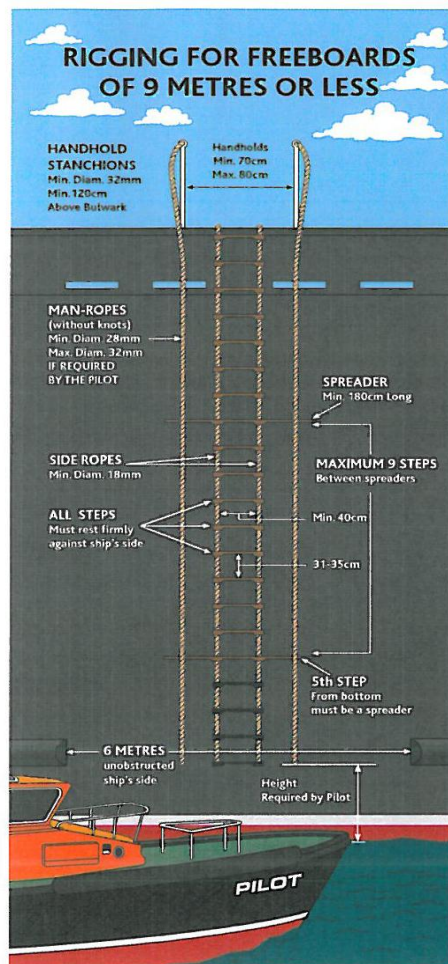
REQUIRED BOARDING ARRANGEMENTS FOR PILOT

In accordance with SOLAS Regulation V/23 & IMO Resolution A.1045(27)

INTERNATIONAL MARITIME PILOTS' ASSOCIATION



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This document and all IMO Pilot-related documents are available for download at: <http://www.impahq.org>



ASSEMBLY
29th session
Agenda item 10

A 29/Res.1108
14 December 2015
Original: ENGLISH

Resolution A.1108(29)

**Adopted on 2 December 2015
(Agenda item 10)**

**AMENDMENTS TO THE RECOMMENDATION ON
PILOT TRANSFER ARRANGEMENTS (RESOLUTION A.1045(27))**

THE ASSEMBLY,

RECALLING Article 15(j) of the Convention on the International Maritime Organization regarding the functions of the Assembly in relation to regulations and guidelines concerning maritime safety,

RECALLING ALSO the provisions of regulation V/23 of the International Convention for the Safety of Life at Sea (SOLAS), 1974, as amended,

RECALLING FURTHER resolution A.1045(27) by which it adopted the *Recommendation on pilot transfer arrangements*,

HAVING CONSIDERED the recommendation made by the Maritime Safety Committee at its ninety-fifth session,

1 ADOPTS the amendments to the *Recommendation on pilot transfer arrangements* (resolution A.1045(27)), set out in the annex to the present resolution;

2 INVITES Governments to draw the attention of all concerned to these amendments to the Recommendation;

3 REQUESTS Governments to ensure that pilot ladders and their arrangements, use and maintenance conform to standards not inferior to those set out in the annex to resolution A.1045(27), as amended by the present resolution.

Annex

**AMENDMENTS TO THE RECOMMENDATION ON
PILOT TRANSFER ARRANGEMENTS (RESOLUTION A.1045(27))****5 ACCESS TO DECK**

The existing paragraphs 5.1 and 5.2 are amended to read as follows:

- "1 a gateway in the rails or bulwark, adequate handholds should be provided at the point of embarking on or disembarking from the ship on each side which should be not less than 0.7 m or more than 0.8 m apart. Each handhold should be rigidly secured to the ship's structure at or near its base and also at a higher point, should be not less than 32 mm in diameter and should extend not less than 1.2 m above the deck to which it is fitted; and
 - .2 a bulwark ladder, two separate handhold stanchions should be fitted at the point of embarking on or disembarking from the ship on each side which should be not less than 0.7 m or more than 0.8 m apart. The bulwark ladder should be securely attached to the ship to prevent overturning. Each stanchion should be rigidly secured to the ship's structure at or near its base and also at a higher point, should be not less than 32 mm in diameter and should extend not less than 1.2 m above the top of the bulwarks. Stanchions or handrails should not be attached to the bulwark ladder."
-



Marine Safety Information Bulletin

Commandant
U.S. Coast Guard
Inspections and Compliance Directorate
2703 Martin Luther King Jr Ave SE, STOP 7501

MSIB Number: 21-20, Change 2
Date: November 05, 2020
E-Mail: FlagStateControl@uscg.mil
Washington, DC 20593-7501

Recommendation for Pilot Transfer Arrangements

Recent deaths of maritime pilots while embarking commercial vessels highlight the risks of operating in an unforgiving maritime environment. To ensure the safety of all personnel boarding a vessel at sea, the Coast Guard reminds vessel owners and operators of the requirements contained in the Safety of Life at Sea (SOLAS) Chapter V, Regulation 23 and **strongly recommends** that owners and operators follow the recommendations within IMO Resolution A.1045(27) – *Pilot Transfer Arrangements*.

For vessels with equipment and arrangements installed on or after July 1, 2012, combination arrangements involving a trapdoor configuration are required to comply with SOLAS Chapter V, Regulation 23.3.2.1. A graphic depiction of a SOLAS compliant combination arrangement involving a trapdoor is included as an enclosure (Source: American Pilots Association).

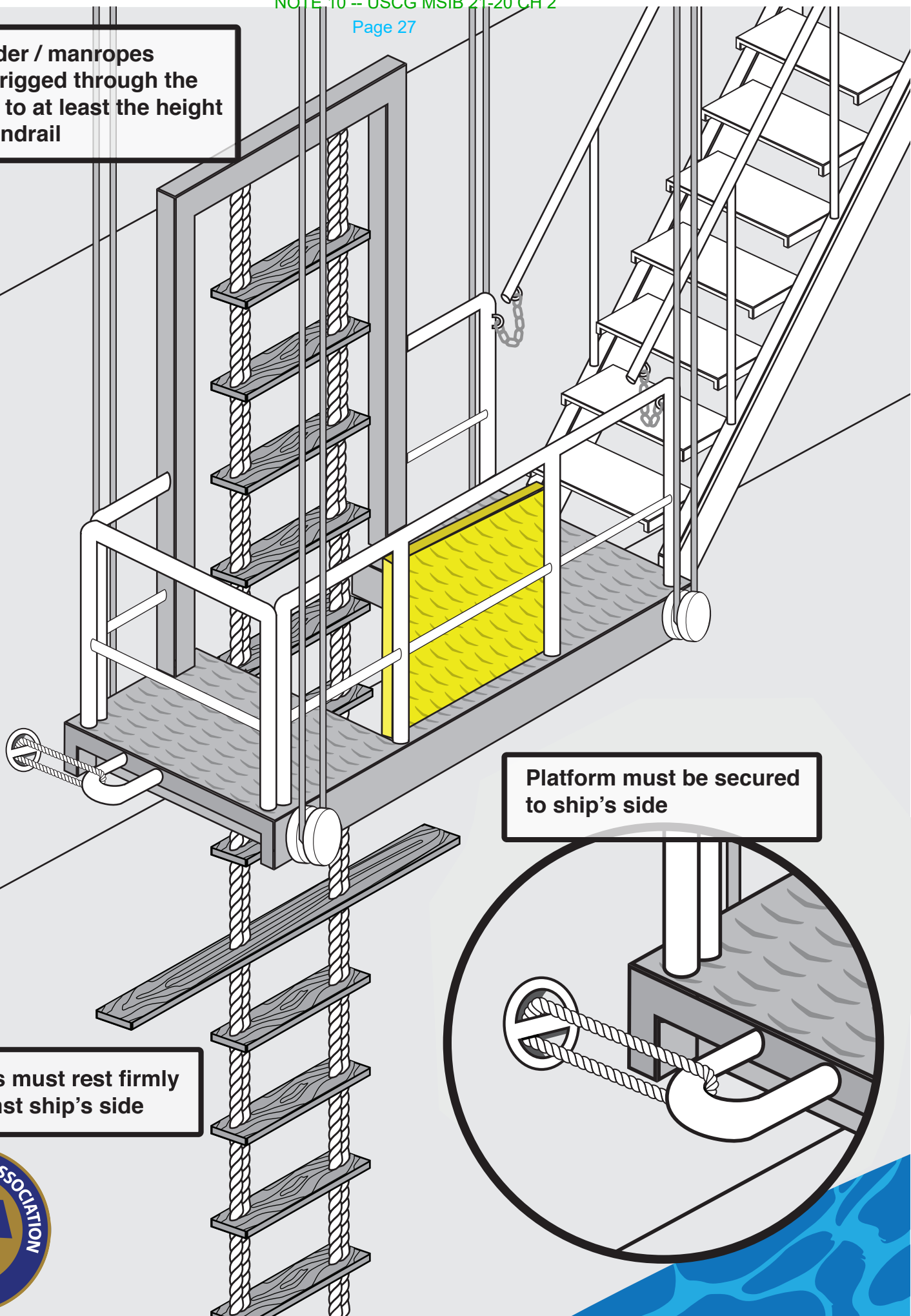
In accordance with SOLAS Chapter V, Regulation 23.1.4, equipment and arrangements installed on or after 1 July 2012, which are a replacement of equipment and arrangements provided on ships before 1 July 2012, shall, in so far as is reasonable and practicable, comply with the requirements of SOLAS Chapter V, Regulation 23.3.2.1. The Coast Guard **strongly recommends** that such replaced equipment and arrangements meet the recommendations within IMO Resolution A.1045(27).

For vessels registered in the U.S., Coast Guard marine inspectors and classification society surveyors verify pilot transfer arrangements during initial construction. Any changes in the approved configuration should be brought to the attention of the local Officer in Charge, Marine Inspection (OCMI) or the classification society surveyor, if applicable, in order to verify that the pilot transfer arrangement is in compliance with SOLAS Chapter V, Regulation 23.

Questions concerning this notice may be forwarded to Coast Guard Office of Commercial Vessel Compliance, Flag State Control Division (CG-CVC-4) at FlagStateControl@uscg.mil.

-uscg-

Pilot ladder / manropes must be rigged through the trapdoor to at least the height of the handrail



Platform must be secured to ship's side

Steps must rest firmly against ship's side

