Bulletin

CCS Australian Office, No. 056, 2016 Issue 006

Australian Ship Safety Information

--- Pilot Ladder

The safety of a person embarking or disembarking from a ship by pilot ladder was dependent on the material state of and suitable use of pilot ladder. Accordingly, embarkation, disembarkation and other over-side uses of a pilot ladder by a pilot or other persons was treated as a safety critical shipboard operation.

AMSA ever released a Marine Notice (No.19/2015), including its explanatory Information Sheet to remind all relevant parties to suitably use and maintain the pilot ladder, as indicated in Attachment 1 and Attachment 2 of this Bulletin.

1. Pilot Ladder Standards

SOLAS V/23 dealt with the standards for pilot ladder on ships on or after 1 July 2012.The pilot ladder will meet EITHER of the following TWO standards, for which are not identical:

a) <IMO Resolution A.1045(27) ---Pilot transfer arrangement>, as indicated in Attachment 3 of this Bulletin, OR

b) <ISO 799:2004 ---Ships and marine technology --- pilot ladders>

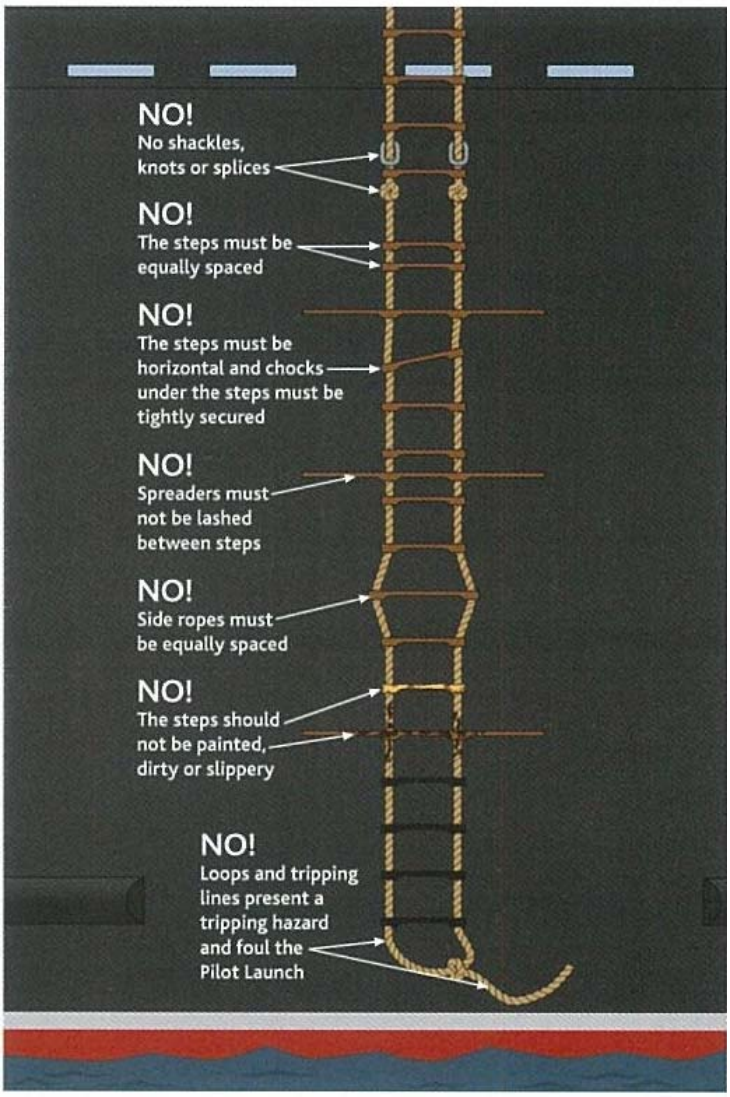
As required by SOLAS, pilot ladder shall be certified by the manufacturer. Any repair work carried out on pilot ladders must be in accordance with the provisions of the standard to which it is certified.

2. How to Use Pilot Ladder

IMO Circular MSC.1/Circ.1428 illustrates the pilot ladder rigging arrangements required by SOLAS V/23, as indicated in Attachment 4 of this Bulletin. For reader's easier understanding, we dug out corresponding Section from SOLAS and IMO A. 1045(27) respectively included in the Bracket following the descriptive Requirements as indicated in MSC.1/Circ.1428 illustrations.

--Comments for Picture 1, as per sequenced wording from top to bottom in Picture--

a)



Picture 1: Pilot Ladder requirements
(Source from IMO MSC.1/Circ.1428)

a) Side Ropes: No shackle, knots or splices.(Refer to IMO A.1045(27), section 2.2.1)

b) Steps: Steps must be equally spaced. (Refer to IMO A.1045(27), section 2.1.2.6)

c) Steps: Steps must be horizontal and chocks above and under the steps must be tightly secured. (Refer to IMO A.1045(27), section 2.1.2.7 & 2.2.3)

d) Spreader Steps: Spreader must not be lashed between steps. (Refer to IMO A.1045(27), section 2.1.4)

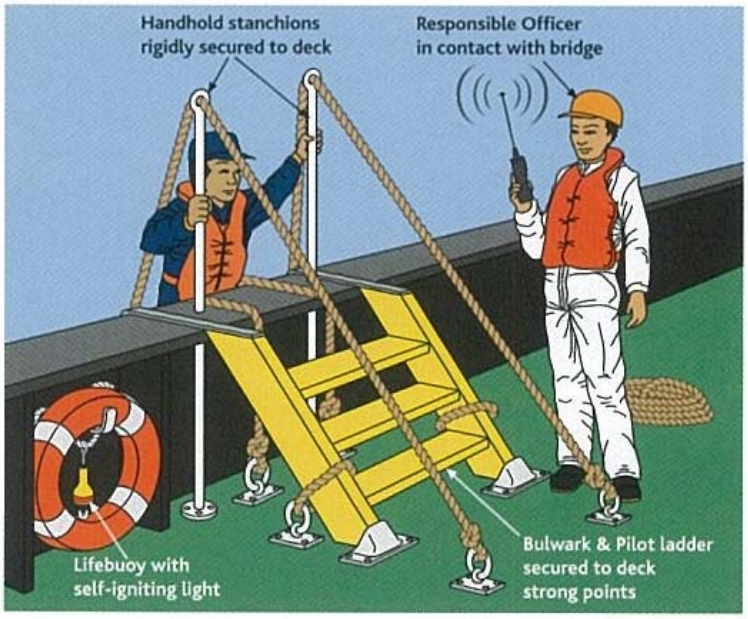
e) Side Ropes: Must be equally spaced in whole length. (Refer to IMO A.1045(27), section

2.1.2.6)

f) Steps: Steps should not be painted, dirty or slippery. (Refer to IMO A.1045(27), section 2.1.2.4)

g) Loops at lower end of pilot ladder not permitted: Loops and tripping line presents a tripping hazard and foul the Pilot Launch.

--Comments for Picture 2, as per sequenced wording from top to bottom & from left to right in the Picture--



Picture 2: Securing and Communication
(Source from IMO MSC.1/Circ.1428)

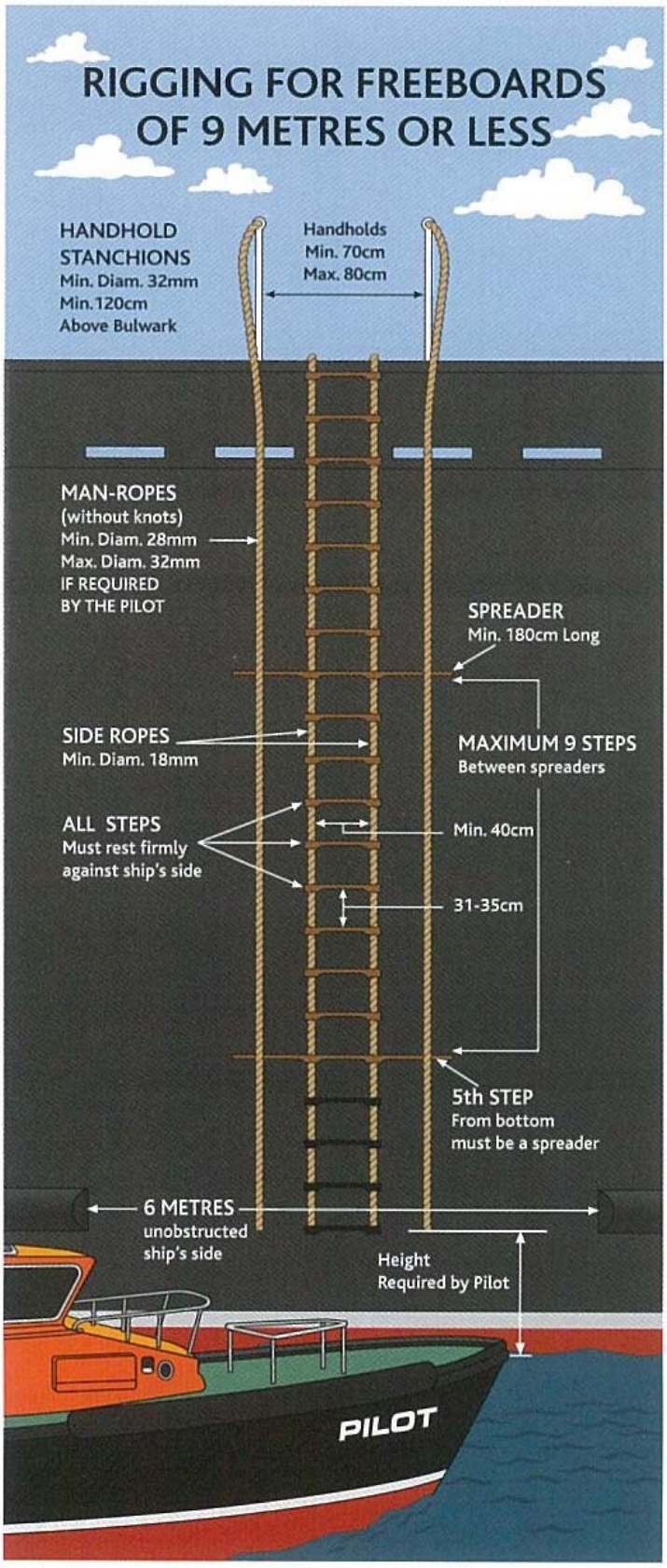
a) Handhold stanchions rigidly secured to deck. (Refer to IMO A.1045(27), section 5.1 & 5.2 and SOLAS CH V, Reg.23, section 4.1 & 4.2 & 7.1.1)

b) Responsible Officer in contact with bridge. (Refer to SOLAS CH V, Reg.23, section 2.2)

c) Lifebuoy with self-igniting light near pilot embarkation deck. (Refer to SOLAS CH V, Reg.23, section 7.1.2)

d) Bulwark and pilot ladder secured to deck strong points. (Refer to IMO A.1045(27), section 5 and SOLAS CH V, Reg.23, section 4.2)

--Comments for Picture 3, as per sequenced wording from top to bottom in Picture--



Picture 3: Pilot Ladder for freeboard less than 9m

(Source from IMO MSC.1/Circ.1428)

b) Handhold Stanchions: Min. diameter 32mm ; Above bulwark 1200mm ; Gap of handhold stanchions between 700mm – 800mm. (Refer to IMO A.1045(27), section 5.1 & 5.2)

c) Manropes: Manrope must be available if required by Pilot ; Without knots ; Diameter between 28mm - 32mm. (Refer to SOLAS CH V, Reg.23, section 7.1.1)

d) Side Ropes: min. diameter 18mm. (Refer to IMO A.1045(27), section 2.2.1)

e) Steps: All steps must rest firmly against the ship's side ; Steps should be not less than 400mm between side ropes ; Steps should be equally spaced between 310mm – 350mm. (Refer to IMO A.1045(27), section 2.1.2.5 & 2.1.2.6 and SOLAS CH V, Reg.23, section 3.3.1.3)

f) Spreader Steps: The spreader steps not less than 1800mm in length ; Maximum 9 steps between spreader steps ; The 5th steps from pilot ladder bottom must be a spreader step ; The four lowest steps may be of rubber material. (Refer to IMO A.1045(27), section 2.1.4 & 2.1.2.3)

g) Safety approach of pilot launch: 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 meters of unobstructed ship's side. (Refer to IMO A.1045(27), section 6)

h) Height of pilot ladder bottom end above pilot launch was depending on pilot instructions.

--Comments for Picture 4, as per sequenced wording from top to bottom in Picture--

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 in conjunction with the pilot ladder (i.e. a combination arrangement) will be used.

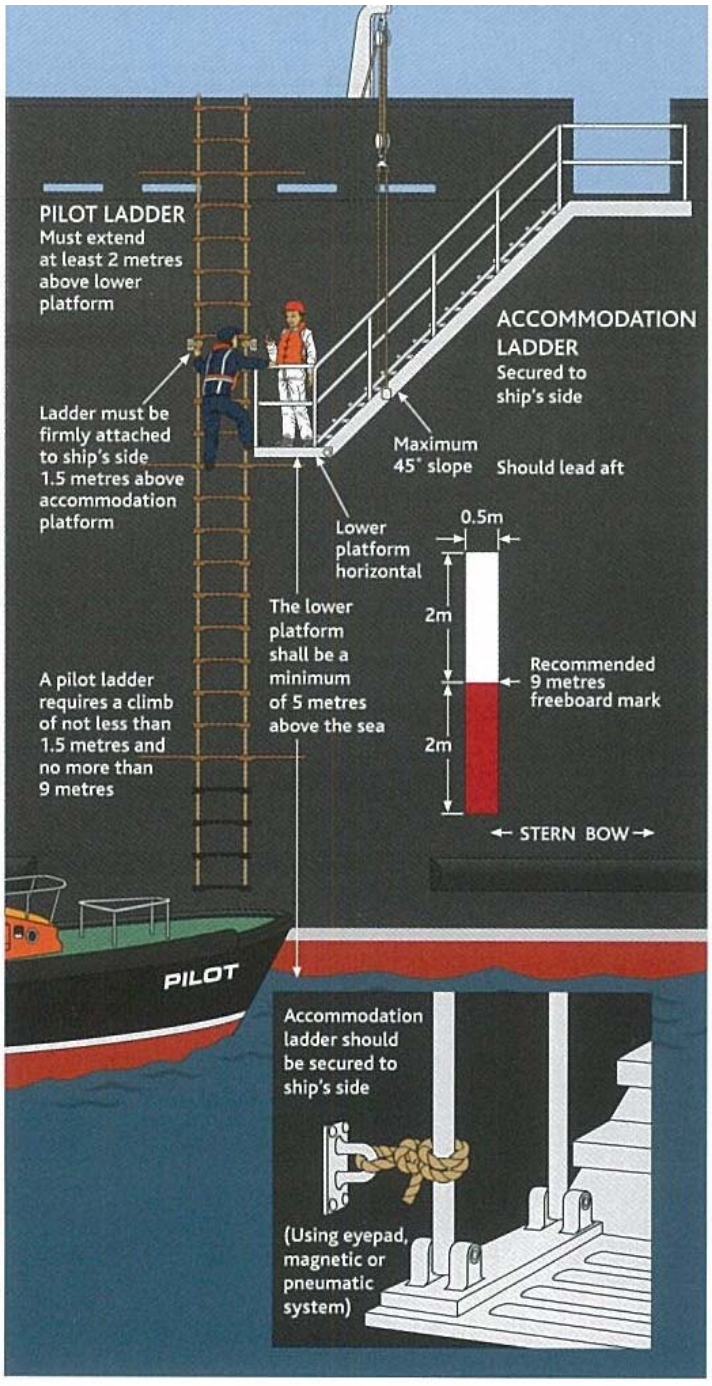
a) Pilot Ladder Rigging:

---Must extend at least 2m above the lower platform of vessel accommodation ladder. (Refer to IMO A.1045(27), section 3.6)

---Ladder must be firmly attached to ship’s side 1.5m above accommodation latter

platform. (Refer to SOLAS CH V, Reg.23, section 3.3.2.1)

---Pilot ladder requires a climb of not less than 1.5 meters and no more than 9 meters. (Refer to SOLAS CH V, Reg.23, section 3.3.2)



Picture 4: Pilot Ladder for freeboard more than 9m
(Source from IMO MSC.1/Circ.1428)

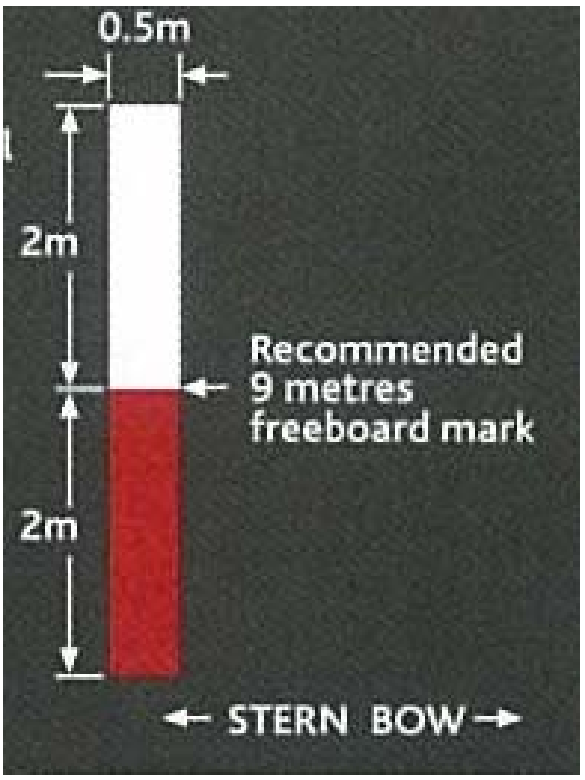
b) Ship Accommodation Ladder:

---Accommodation ladder shall be sited leading aft , and with maximum 45° angle of slope. (Refer to IMO A.1045(27), section 3.2 and SOLAS CH V, Reg.23, section 3.3.2)

---The lower platform of accommodation ladder should be in a horizontal positon and secured to the ship's side using eyepad, magnetic and pneumatic system (Refer to IMO A.1045(27), section 3.3)

---The lower platform should be a minimum of 5m above sea level. (Refer to IMO A.1045(27), section 3.3)

c) It was recommended 9 Meters Freeboard Mark was painted in both ship sides, as indicated in below Picture 5.



Picture5: 9m Freeboard Mark
(Source from IMO MSC.1/Circ.1428)

--Comments for Pilot Ladder Winch Reels **--**

Some specially designed vessel maybe provided with a pilot ladder winch reels. For more detailed requirements about winch reel, you are suggested to refer to IMO A. 1045(27)

section 7 and illustrations mentioned in MSC.1/Circ.1428. for more details.

3. Frequent Occurrence PSC Deficiencies for Pilot Ladder

As per information from AMSA Information Sheet, frequent PSC deficiencies related pilot ladder included:

a) Splices in side ropes (which are not permitted). Refer to Picture 6.



Picture 6： PSC deficiency
（Source from AMSA）

b) Extension service ropes, if provided in accordance with ISO.799 (2004), must **not** be spliced into the side ropes but should be properly attached to the thimbles or directly to the ship. Refer to Picture 6.

c) Construction of the ladder is such that it does not ensure that the steps are prevented from moving (often due to chocks or step fixtures not being fitted above and below steps). Refer to Picture 7 and Picture 8.

d) Temporary and/or unsafe access or securing arrangements for the top end of ladder, such as cluttered attachment of man ropes at the head of the ladder. Refer to Picture 9 and Picture 10.



Picture 7： PSC deficiency
（Source from AMSA）



Picture 8： PSC deficiency
（Source from AMSA）



Picture 9： PSC deficiency
（Source from AMSA）

e) When the pilot ladder is used in conjunction with an accommodation ladder:

— The lower end of accommodation ladder not firmly secured to vessel's side.

— The pilot ladder secured to the accommodation ladder platform by rope or unsafe

securing bars.

— The pilot ladder and manropes not secured to the ship's side to a point nominally at 1.5 m above the bottom platform of the accommodation ladder. (IMO A.1045(27) Section 3.6 stipulate the horizontal distance between the pilot ladder and the lower platform should be between 0.1 and 0.2 m) .

— The arrangement of pilot ladder and manropes are not rigged to pass through the trapdoor in the accommodation ladder platform as required by SOLAS reg. V/23.3.3.2.1.



Picture 10： PSC Deficiency
（source from AMSA）



Picture 11： PSC Deficiency
（source from AMSA）

f) Retrieval lines (where considered necessary) not rigged in accordance with IMO Resolution A.1045(27). (Refer to IMO A.1045(27) Section 2.1.5).

g) Man ropes, if required by pilots, not available or of incorrect diameter.

h) Steps broken, not level or unevenly spaced (Refer to Picture 11).

IT WAS REMINDERED THAT all vessels intending to call Australian Port, Captain should ensure suitable pilot ladder provided on board and all crew staff familiarize use of pilot ladder.

Attachment 1: AMSA Marine Notice (No. 19/2015)

Attachment 2: AMSA Information Sheet

Attachment 3: <IMO Resolution A.1045(27) ---Pilot transfer arrangement>

Attachment 4: <ISO 799:2004 ---Ships and marine technology --- pilot ladders>

CCS Australia Office

September 29, 2016

Announcement:

1. Intention is to assist and ensure owners to understand and well prepared, ensuring all updated requirements from AMSA can be met
2. For more information, please visit AMSA website at www.amsa.gov.au and CCS website at www.ccs.org.cn
3. The information contained does not and cannot supersede any AMSA or related governing parties requirements as well as CCS class rules and regulations.