財團法人驗船中心
CR CLASSIFICATION SOCIETY

CR 通 報
CR NOTICE

NO. : CR-2025-002(S)

Date : Feb. 24, 2025

TO : 所有船東、驗船師、航港局船舶組及各航務中心

FROM : 台北總部

SUBJECT : 2025 年澳洲 PSC 檢查，有關艙蓋與領港梯等缺失項目之重要注意事項

一 近期一艘散裝船於澳洲格拉德斯通(Gladstone)港遭 PSC 開立五項缺失，其中有二項缺失分別因船端未妥善保養維護導致主甲板上的艙蓋狀況嚴重惡化和領港梯缺損。PSC 檢查報告如附件一，艙蓋照片如附件二。

二 澳洲海事局曾發布通告 Marine Notice 10-2022(如附件三)，到訪澳洲各港口船上計畫性保養是持續關注的議題，不是有期限的重點檢查活動。提醒散裝船船東須依據 SOLAS Reg. XII/7.2 且建議參考 MSC.169(79)「散裝船艙蓋船東檢查和維護標準」(如附件四)，確實維護艙蓋設施。

三 對於領港上、下船舶的布置標準和領港梯檢查的要求，請船東及其所屬船隊於前往澳洲前依其海事通告 Marine Notice 2023/04(如附件五)，確實檢查並維護領港登離船布置，特別是領港梯需符合 ISO 799 有關 30 個月強度測試(Strength test)之要求。

四 另外，本次澳洲 PSC 檢查報告中顯示，PSCO 檢查過程中對於船員在船進行各項作業而未穿戴適當的個人防護裝備(Personal Protective Equipment, PPE)時，亦會將其列入檢查缺失，請船東確實要求船員遵守公司各項作業安全相關規定。

黃建樺

總驗船師 黃建樺
Chief Surveyor Chien-Hua Huang

附件一

Australian Government
Australian Maritime Safety Authority

REPORT OF INSPECTION IN ACCORDANCE WITH IMO AND ILO PORT STATE CONTROL PROCEDURES

GPO Box 2181 CANBERRA ACT 2601 AUSTRALIA • Contact: Manager Ship Inspection Group • Phone: +61 2 6279 5048 • Fax: +61 2 6279 5058 • Email: psc@amsa.gov.au

1 name of reporting authority **Australia**

2 name of ship

6 IMO number

10 date of inspection

11 place of inspection **Gladstone, QLD, Australia**

20 seq	code	nature of deficiency[1)]	convention	21 action taken	22 responsible RO
1	01306	Shipboard working arrangements. No non-watchkeeping hours listed for deck officers.		17	
2	03104	Main deck. Hatch covers. Seriously deteriorated.		99-Refer to RO prior to departure. To be rectified to the satisfaction of RO and AMSA.	
3	05118	GMDSS Station. MF/HF radio. Key personnel demonstrated lack of familiarity with DSC test call procedure.		17| 10	
4	10101	Main deck. Pilot ladders. Defective.		17	
5	18412	Machinery spaces. Personal Protective Equipment (PPE). Multiple crew members, on multiple occasions failed to wear correct PPE in machinery spaces.		16	

OUTSTANDING DEFICIENCIES TO BE RECTIFIED

Date	20 seq	code	nature of deficiency[1)]	convention	21 action taken	22 responsible RO
12.02.2025	1	01306	Shipboard working arrangements. No non-watchkeeping hours listed for deck officers.		17	
12.02.2025	2	03104	Main deck. Hatch covers. Seriously deteriorated.		99-Refer to RO prior to departure. To be rectified to the satisfaction of RO and AMSA.	
12.02.2025	4	10101	Main deck. Pilot ladders. Defective.		17	
12.02.2025	5	18412	Machinery spaces. Personal Protective Equipment (PPE). Multiple crew members, on multiple occasions failed to wear correct PPE in		16	

1) This inspection was not a full survey and deficiencies listed may not be exhaustive. In the event of a detention, it is recommended that full survey is carried out and all deficiencies are rectified before an application for re-inspection is made.

附件二

船上艙蓋現況照片

Australian Government
Australian Maritime Safety Authority

MARINE NOTICE

Marine notice 10-2022

Planned maintenance on ships

Purpose

This marine notice draws the attention of vessel operators to the importance of planned maintenance in ensuring safe operation of ships, and highlights AMSA's current focus on planned maintenance during Port State Control inspections.

Recent incidents have demonstrated the potentially serious consequences of a lack of effective maintenance of main engines and power generation systems that can pose serious risks to the safe and pollution-free operation of vessels. In response to this, AMSA will immediately increase focus on planned maintenance during routine Port State Control inspections.

The International Safety Management Code (ISM Code)

Maintenance of the ship and equipment is a requirement of the ISM Code, including that:

- maintenance inspections are held at appropriate intervals
- any non-conformity is reported, with its possible cause, if known
- appropriate corrective action is taken, and
- records of these activities are maintained.

In relation to maintenance, the ISM Code specifies that the vessel's Safety Management System (SMS) should:

- identify equipment and technical systems that would cause hazardous situations if they were to suddenly fail, and
- provide for specific measures (i.e. regular testing of all equipment including stand-by equipment or systems that are not in continuous use) to ensure the continued reliability of such equipment or systems

Maintenance activities need to be properly resourced, and procedures must be documented.

Impact of the COVID-19 pandemic

AMSA recognises that a number of factors presented challenges to effective maintenance during the COVID-19 pandemic restrictions. These include supply chain difficulties in getting necessary parts and specialist expertise to affected vessels.

However, with travel restrictions and quarantine requirements now largely removed in Australia, AMSA expects operators to resume supply of necessary spares and provide support and expertise such as class surveyors, specialist technicians, company representatives etc. AMSA recognises that there are still supply chain issues which can delay the provision of spare parts. However, these issues are now well known and AMSA expects that operators anticipate these challenges and make advance provision in planning maintenance to minimise impact. In exceptional circumstances where spare parts cannot be provided, AMSA expects that the vessel operators will have consulted with the equipment manufacturers, classification society and flag state in preparing appropriate measures to ensure the continued safe operation of equipment and vessel. This could include for example the reduction in maximum

continuous rating of an engine, or the provision of towage services in coastal waters. Given the nature of recent incidents and the potentially serious consequences when effective maintenance has not been completed, AMSA will immediately increase focus on planned maintenance during routine Port State Control inspections to protect the safety of the crew, the vessel and the environment.

Inspections

During Port State Control inspections, AMSA will place a greater focus on planned maintenance of propulsion and auxiliary equipment and associated systems and will take necessary compliance actions to address any identified areas of concern. This may include the physical attendance of classification society surveyors to verify the condition of critical equipment and its suitability to continue to function under all voyage conditions to maintain safe operations. Operators should note that this is not a Focused Inspection Campaign (FIC) or Concentrated Inspection Campaign (CIC) of limited duration. It is a sustained focus on an identified area of concern that is part of AMSA's data driven and risk-based approach to our PSC inspection regime.

Further Reading

Recommendation 74 A Guide to managing maintenance in accordance with the requirements of the ISM Code- Rev.2 Aug 2018 (International Association of Classification Societies). Accessed https://iacs.org.uk/download/1861

附件四

RESOLUTION MSC.169(79)
(adopted on 9 December 2004)

STANDARDS FOR OWNERS' INSPECTION AND MAINTENANCE OF BULK CARRIER HATCH COVERS

THE MARITIME SAFETY COMMITTEE,

RECALLING Article 28(b) of the Convention on the International Maritime Organization concerning the functions of the Committee,

RECALLING ALSO SOLAS chapter XII on Additional safety measures for bulk carriers, which the 1997 SOLAS Conference adopted with the aim of enhancing the safety of ships carrying solid bulk cargoes,

RECALLING FURTHER that, having recognized the need to further improve the safety of bulk carriers in all aspects of their design, construction, equipment and operation, it examined the results of various formal safety assessment (FSA) studies on bulk carrier safety,

RECOGNIZING that, on the basis of the outcome of the aforementioned FSA studies, replacing hatch covers in existing bulk carriers would not be cost-effective and that, instead, more attention should be paid to hatch cover securing mechanisms and the issue of horizontal loads, especially with regard to maintenance and frequency of inspection,

RECALLING that, at its seventy-seventh session, in approving MSC/Circ.1071 – Guidelines for bulk carrier hatch cover surveys and owners' inspections and maintenance, it invited Member Governments to ensure that companies, as defined in the ISM Code, that operate bulk carriers flying their flag are made aware of the need to implement regular maintenance and inspection procedures for hatch cover closing mechanisms in existing bulk carriers in order to ensure proper operation and efficiency at all times,

NOTING resolution MSC.170(79) by which it adopted, *inter alia*, amendments to regulation XII/7 (Survey and maintenance of bulk carriers) of the 1974 SOLAS Convention, where reference is made to mandatory Standards for owners' inspection and maintenance of bulk carrier hatch covers,

HAVING CONSIDERED the recommendation made by the Sub-Committee on Ship Design and Equipment at its forty-seventh session,

1. ADOPTS, for the purposes of the application of regulation XII/7 of the 1974 SOLAS Convention, the Standards for owners' inspection and maintenance of bulk carrier hatch covers, set out in the Annex to the present resolution;

2. INVITES Contracting Governments to the 1974 SOLAS Convention to note that the annexed Standards will take effect on 1 July 2006 upon the entry into force of the revised chapter XII of the 1974 SOLAS Convention;

3. REQUESTS the Secretary-General to transmit certified copies of this resolution and the text of the annexed Standards to all Contracting Governments to the 1974 SOLAS Convention;

4. FURTHER REQUESTS the Secretary-General to transmit certified copies of this resolution and the text of the annexed Standards to all Members of the Organization which are not Contracting Governments to the 1974 SOLAS Convention.

ANNEX

STANDARDS FOR OWNERS' INSPECTION AND MAINTENANCE OF BULK CARRIER HATCH COVERS

1 Application

These Standards define requirements for the owners' inspection and maintenance of cargo hatch covers on board bulk carriers.

2 Maintenance of hatch covers and hatch opening, closing, securing and sealing systems

2.1 Lack of weathertightness may be attributed to:

.1 normal wear and tear of the hatch cover system: deformation of the hatch coaming or cover due to impact; wear of the friction pads where fitted; wear and tear of the cleating arrangement; or

.2 lack of maintenance: corrosion of plating and stiffeners due to breakdown of coatings; lack of lubrication of moving parts; cleats, joint gaskets and rubber pads in need of replacement, or replaced with incorrect specification parts.

2.2 Insecure hatch covers may be particularly attributed to damage or wear of securing devices, or incorrect adjustment, and incorrect pre-tension and load sharing, of cleating systems.

2.3 Ship owners and operators shall therefore institute a programme of maintenance. This maintenance shall be directed to:

.1 protecting exposed surfaces of plating and stiffeners of hatch covers and coamings in order to preserve overall structural strength;

.2 preserving the surface of trackways of rolling covers, and of compression bars and other steel work bearing on seals or friction pads, noting that surface smoothness and correct profile are important for reducing wear rates on these components;

.3 maintaining hydraulic or mechanically powered opening, closing, securing or cleating systems in accordance with manufacturer's recommendations;

.4 maintaining manual cleats in adjustment, with replacement when significant wastage, wear or loss of adjustment capability is identified;

.5 replacing seals and other wear components in accordance with manufacturers' recommendations, noting the need to carry on board or obtain such spares of correct specification, and that seals are designed for a particular degree of compression, hardness, chemical and wear resistance; and

.6 keeping all hatch cover drains and their non-return valves, where fitted, in working order, noting that any drains fitted to the inboard side of seal lines will have non-return valves for prevention of water ingress to holds in the event of boarding seas.

2.4 The equalization of securing loads shall be maintained following the renewal of components such as seals, rubber washers, peripheral and cross joint cleats.

2.5 Ship owners and operators shall keep a Maintenance Plan and a record of maintenance and component replacement carried out, in order to facilitate maintenance planning and statutory surveys by the Administration. Hatch cover maintenance plans shall form part of a ship's safety management system as referred to in the ISM Code.

2.6 Where the range of cargoes carried requires different gasket materials, a selection of gasket materials of the correct specifications shall be carried on board, in addition to other spares.

2.7 At each operation of a hatch cover, the cover and, in particular, bearing surfaces and drainage channels shall be free of debris and as clean as practicable.

2.8 Attention is drawn to the dangers of proceeding to sea without fully secured hatch covers. Securing of all covers shall always be completed before the commencement of a sea passage. During voyages, especially on loaded passages, cover securing devices and tightness of cleating and securing arrangements shall be checked, especially in anticipation of, and following periods of, severe weather. Hatch covers may only be opened on passage, when necessary, during favourable sea and weather conditions; imminent weather forecasts shall also be considered.

2.9 Operators shall consult the Cargo Securing Manual when planning the loading of containers or other cargo on hatch covers and confirm that they are designed and approved for such loads. Lashings shall not be secured to the covers or coamings unless these are suitable to withstand the lashing forces.

3 Inspection of hatch covers and hatch opening, closing, securing and sealing systems

3.1 Statutory surveys of hatch covers and their coamings are carried out by the Administration as part of the annual survey required by article 14 of the International Convention on Load Lines, 1966, as modified by the 1988 Protocol relating thereto, and in accordance with the requirements for enhanced surveys contained in resolution A.744(18), as amended. However, the continued safe operation is dependent on the shipowner or operator instituting a regular programme of inspections to confirm the state of the hatch covers in between surveys.

3.2 Routines shall be established to perform checks during the voyage and inspections when the hatch covers are opened.

3.3 Voyage checks shall consist of an external examination of the closed hatch covers and securing arrangements in anticipation of, and after, heavy weather but in any event at least once a week, weather permitting. Particular attention shall be paid to the condition of hatch covers in the forward 25% of the ship's length, where sea loads are normally greatest.

3.4 The following items, where provided, shall be inspected for each hatch cover set when the hatch covers are opened or are otherwise accessible on each voyage cycle, but need not be inspected more frequently than once per month:

.1 hatch cover panels, including side plates, and stiffener attachments of opened covers for visible corrosion, cracks or deformation;

.2 sealing arrangements of perimeter and cross joints (gaskets, flexible seals on combination carriers, gasket lips, compression bars, drainage channels and non-return valves) for condition and permanent deformation;

.3 clamping devices, retaining bars and cleating for wastage, adjustment, and condition of rubber components;

.4 closed cover locating devices for distortion and attachment;

.5 chain or wire rope pulleys;

.6 guides;

.7 guide rails and track wheels;

.8 stoppers;

.9 wires, chains, tensioners and gypsies;

.10 hydraulic system, electrical safety devices and interlocks; and

.11 end and inter-panel hinges, pins and stools where fitted.

As part of this inspection, the coamings with their plating, stiffeners and brackets shall be checked at each hatchway for visible corrosion, cracks and deformation, especially of the coaming tops and corners, adjacent deck plating and brackets.

Australian Government
Australian Maritime Safety Authority

MARINE NOTICE

Marine Notice 2023/04
Supersedes 2022/03

Pilot transfer arrangements

Purpose

This Marine Notice reminds ship owners, operators, masters, crews, recognised organisations, marine pilots and pilotage providers about their obligation to provide and ensure continued safe pilot transfer arrangements on ships.

Background

Since November 2017 several pilots' lives were placed at risk, in multiple separate incidents where a man rope parted, or its securing point failed. Additionally, AMSA received several incident reports on safety issues related to pilot transfer arrangements.

Ship owners, operators, masters and crews are reminded that pilot transfer arrangements, including pilot ladders, must comply with Marine Order 21 (Safety and emergency arrangements) 2016 (MO21) which sets out Australia's obligations under the International Convention for the Safety of Life at Sea (SOLAS) Chapter V Regulation 23 (SOLAS V/23).

Pilot transfer arrangement standards

Whenever a pilot or other person embarks or disembarks from a ship by ladder, they entrust their safety to the pilot transfer arrangements provided by the ship and the pilot boat crew.

SOLAS V/23 sets out the minimum standards for pilot transfer arrangements on ships on or after 1 July 2012. The International Maritime Organisation (IMO) standards related to pilot transfer arrangements are found in:

- IMO Resolution A.1045(27) – Pilot transfer arrangements.
- IMO Resolution A.1108(29) – Amendments to the Recommendations on Pilot Transfer Arrangements (Resolution A.1045(27)).
- MSC.1/Circ. 1428 – Pilot Transfer Arrangements – Required boarding arrangements for pilots
- MSC.1/Circ.1495/Rev.1. – Unified Interpretation of SOLAS Regulation V/23.3.3 on Pilot Transfer Arrangements

SOLAS V/23.2.3 also states a pilot ladder shall be certified by the manufacturer as complying with SOLAS V/23 or "with an international standard acceptable to the Organization" and refers to ISO 799-1:2019 "Ships and marine technology – pilot ladders". Compliance with this particular provision of SOLAS V/23 can be met when a manufacturer has certified the pilot ladder complies with either of the IMO or ISO standards, noting they are not identical.

Where a pilot ladder has been certified under the ISO standard, AMSA expects that the ladder is strength tested according to the standard. Where this test has not been conducted within 30 months, the ladder should not be used until the test is conducted, or the ladder is replaced.

When purchasing a pilot ladder, care should be exercised that the product supplied actually meets the above requirements - relying on the manufacturer's documentation may not be sufficient in some cases. If in doubt, the ship's Recognised Organisation should be requested to confirm that the ladder meets the minimum standards.

Pilot transfer arrangements

IMO Circular MSC.1/Circ.1428 illustrates the pilot transfer arrangements required by SOLAS V/23.

When using a combination pilot ladder arrangement, the pilot ladder and accommodation ladder are required to be secured to the ship's side. A common means of securing both the pilot ladder and accommodation ladders is with magnetic pads (refer to photo 1 below as an example).

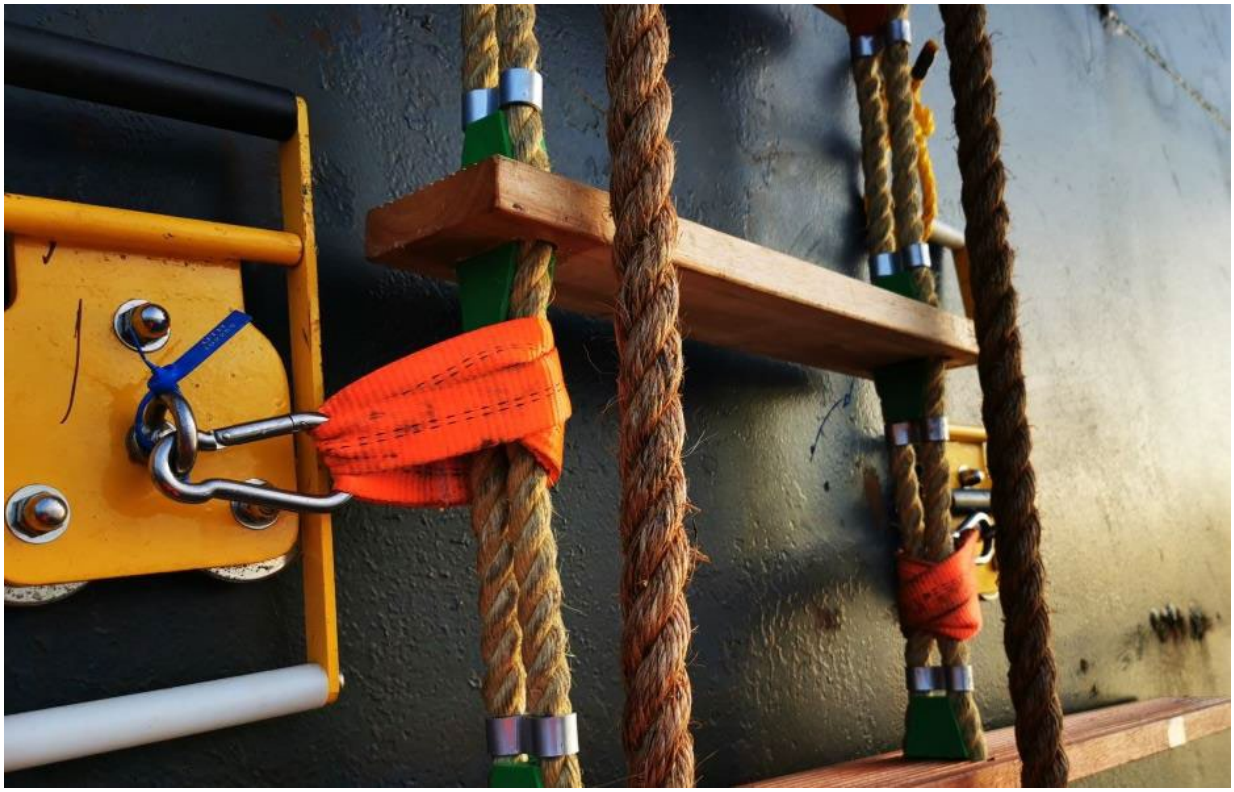

Photo 1: Example of securing both the pilot ladder and accommodation ladders with magnetic pads (Reproduced with permission from Fremantle Ports).

Clear and efficient communication with the pilot boat master is essential to ensure the safety of the pilot transfer arrangements before a person uses the ladder. The pilot boat master is best positioned to judge correct height of the bottom of the ladder and identify any potential issues with the ladder or ropes once in place.

One common issue found is that the pilot ladder does not extend the required 2.0 m past the accommodation platform when a combination arrangement is used. Photo 2 illustrates an example of a pilot ladder not extending the required height past the platform.

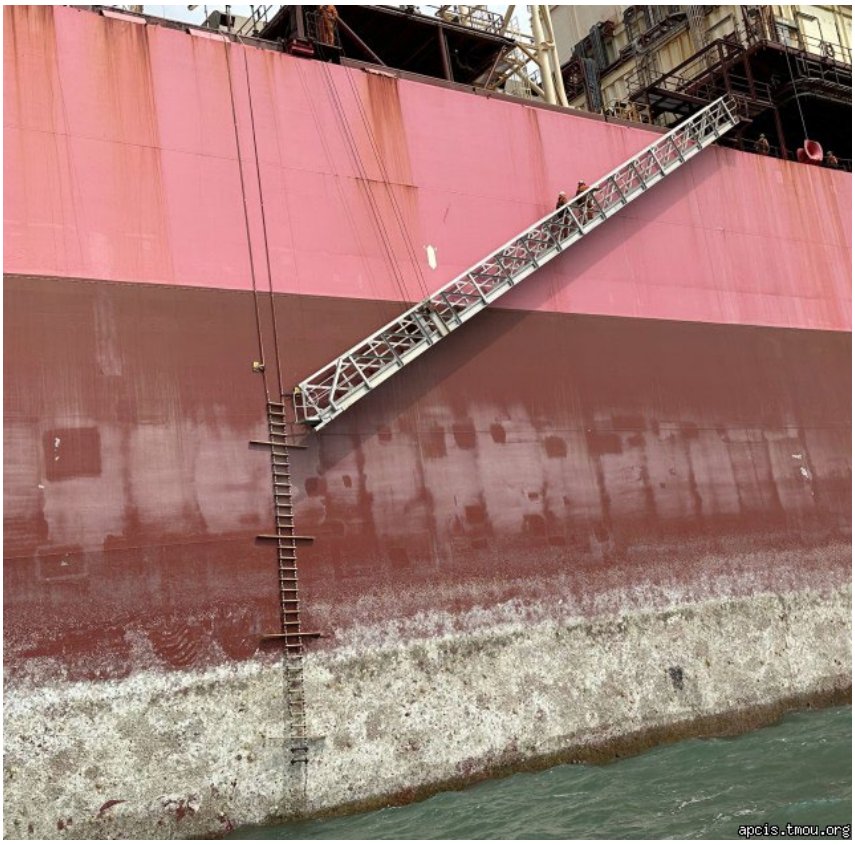

Photo 2: Example of non-compliant combination pilot ladder arrangements.

As shown in photos 2 and 3 persons cannot climb the pilot ladder to a level where they can move safely onto the accommodation ladder.

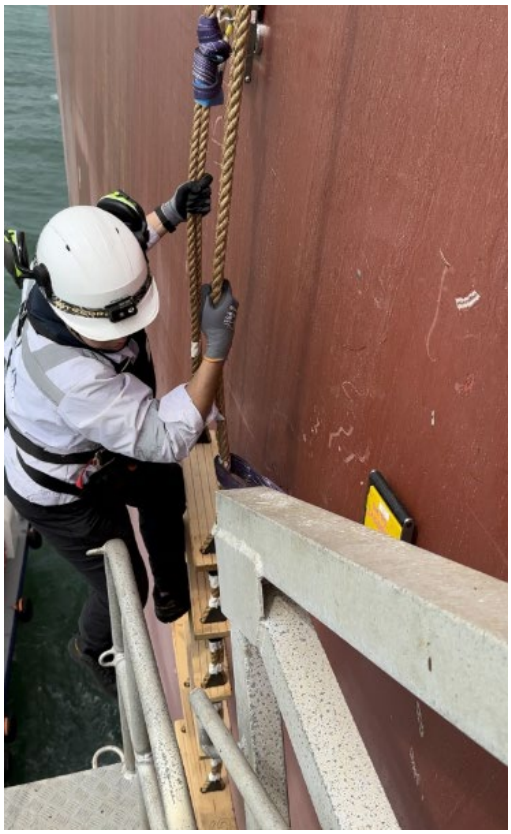

Photo 3: Person unable to safely access accommodation ladder platform from pilot ladder.

Securing of Pilot Transfer Arrangements

The pilot ladder is normally secured at its thimble end with shackles. However, due to the varying freeboard at specific loading conditions, the pilot ladder cannot always be secured at full length by the thimble ends. Under such circumstances it must be secured at an intermediate length. That can only be done in a safe way by ensuring that the weight of the ladder is transferred from ladder's side ropes to the approved strong point on deck directly.

The ladder's steps, spreaders or chocks should not be used to carry the weight of the ladder as they are not designed for this and do not have sufficient strength. For this reason, shackles, bars and tongues should not be used to secure the ladder to the deck. They will damage the ladder and put weight on the parts which are not designed to carry the weight.

Photo 4 shows an example of an unsafe use of shackles to secure pilot ladders.

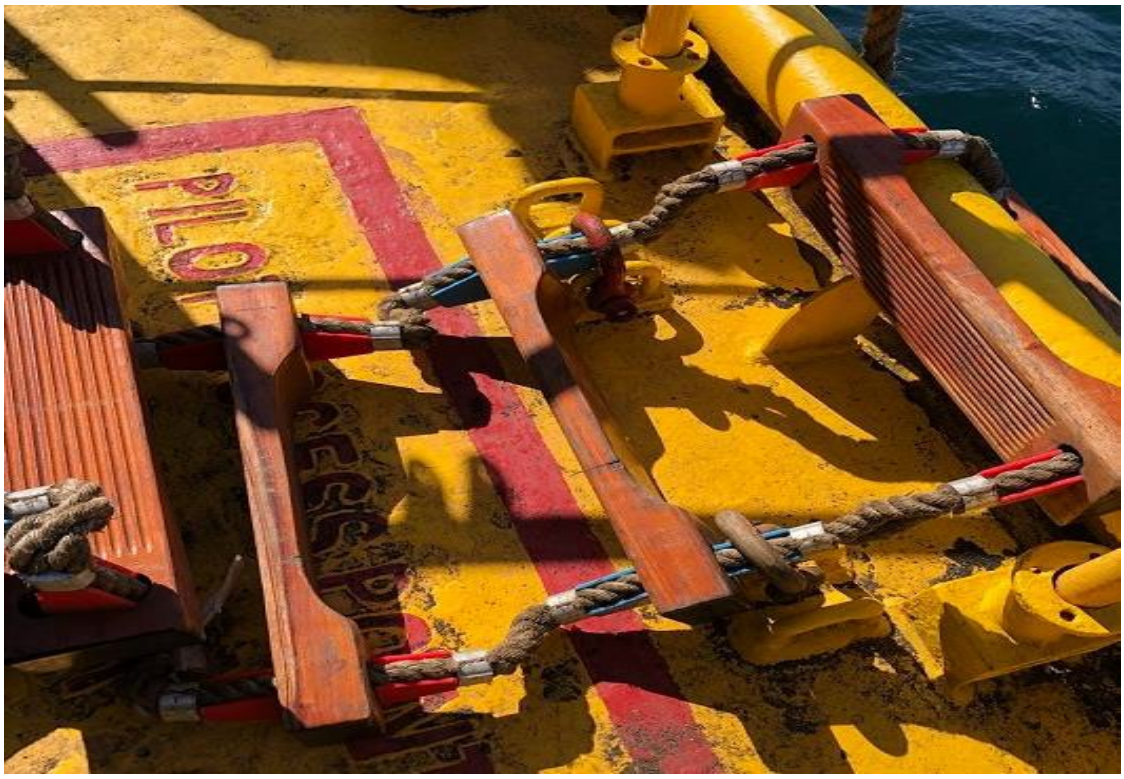

Photo 4: Unsafe pilot ladder securing arrangements (Reproduced with permission from Fremantle Ports).

Photo 5: Unsafe pilot ladder securing arrangements.

Photos 5 shows the pilot ladder being secured to the strong point by using a shackle passed through the pilot ladder side ropes. This puts increased load on the single part of the side rope and the chock securing arrangements.

It is common industry practice to use a rope stopper usually in the form of a rolling hitch knot between the pilot ladder sides ropes and the approved strong point on the main deck. This will transfer the weight of the ladder arrangement directly onto the designated strong point and will not damage the ladder.

It is suggested that two strong (at least 2 x 24 kN) manila ropes be used to secure the pilot ladder. Photo 6 illustrates a method of tying a rolling hitch knot.

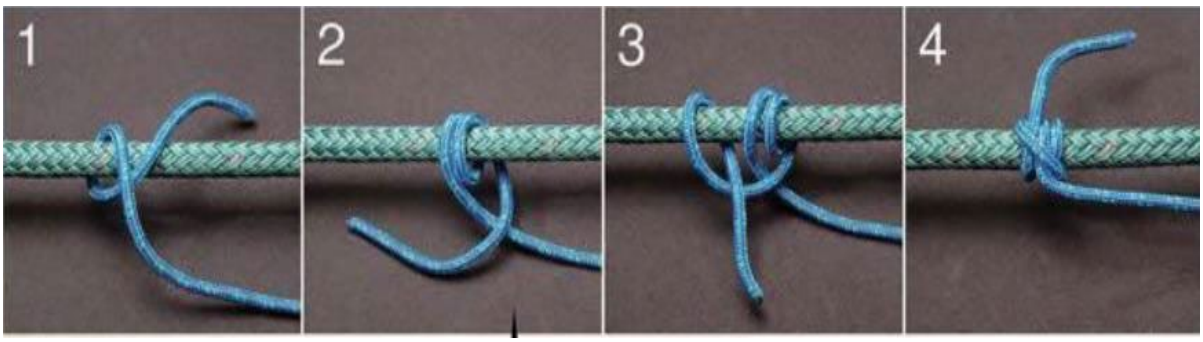

Photo 6: The rolling hitch knot. (Reproduced with permission from Fremantle Ports).

Photo 7 provides an example of rolling hitch knots being used to secure pilot ladders to approved main deck strong points.

Photo 7: Rolling hitch knots being used to secure pilot ladders to approved main deck strong points (Reproduced with permission from Fremantle Ports).

Inspection and Maintenance

Ongoing inspection and maintenance of pilot boarding arrangements are an essential part of ensuring their continued safe operation. Paragraph 10.1 of Part A of the International Safety Management Code (ISM) requires ship operators establish procedures to ensure a ship is maintained in conformity with the relevant rules and regulations, including pilot transfer arrangements. Such procedures should include regular inspections of the pilot transfer arrangements and storage to prevent damage of such equipment when not in use.

Photo 8: Pilot ladder where side ropes parted when in use (Reproduced with permission of the MAIB).

Common areas of defects can be the thimble ends of the pilot ladder. Corroded end point thimbles as illustrated in photo 9, can damage the side ropes leading to failure.

Photo 9: Example of corroded end point thimbles (Reproduced with permission from Fremantle Ports).

Another common area is the frayed or damaged side ropes as illustrated in photo 10. These should be detected during routine visual inspections.

Photo 10: Frayed side rope.

If side ropes are frayed, or in any way degraded the ladder should not be used.

The man ropes which are used as part of the arrangements should also be regularly inspected. There have been two recent incidents of man ropes parting during transfer operations. Though rope type is not specified in SOLAS the Australasian Marine Pilots Institute recommends grade 1 manila be used. These should be tagged and included in onboard inspection and maintenance procedures. Good practice dictates these should be removed from service at the same intervals of not more than 30 months or sooner if required.

Trap door arrangements and use of combinations ladder

There has been an increase in ships fitted with trapdoor arrangements. The additional requirement for their use is "the pilot ladder and man ropes shall be rigged through the trapdoor extending above the platform to the height of the handrail".

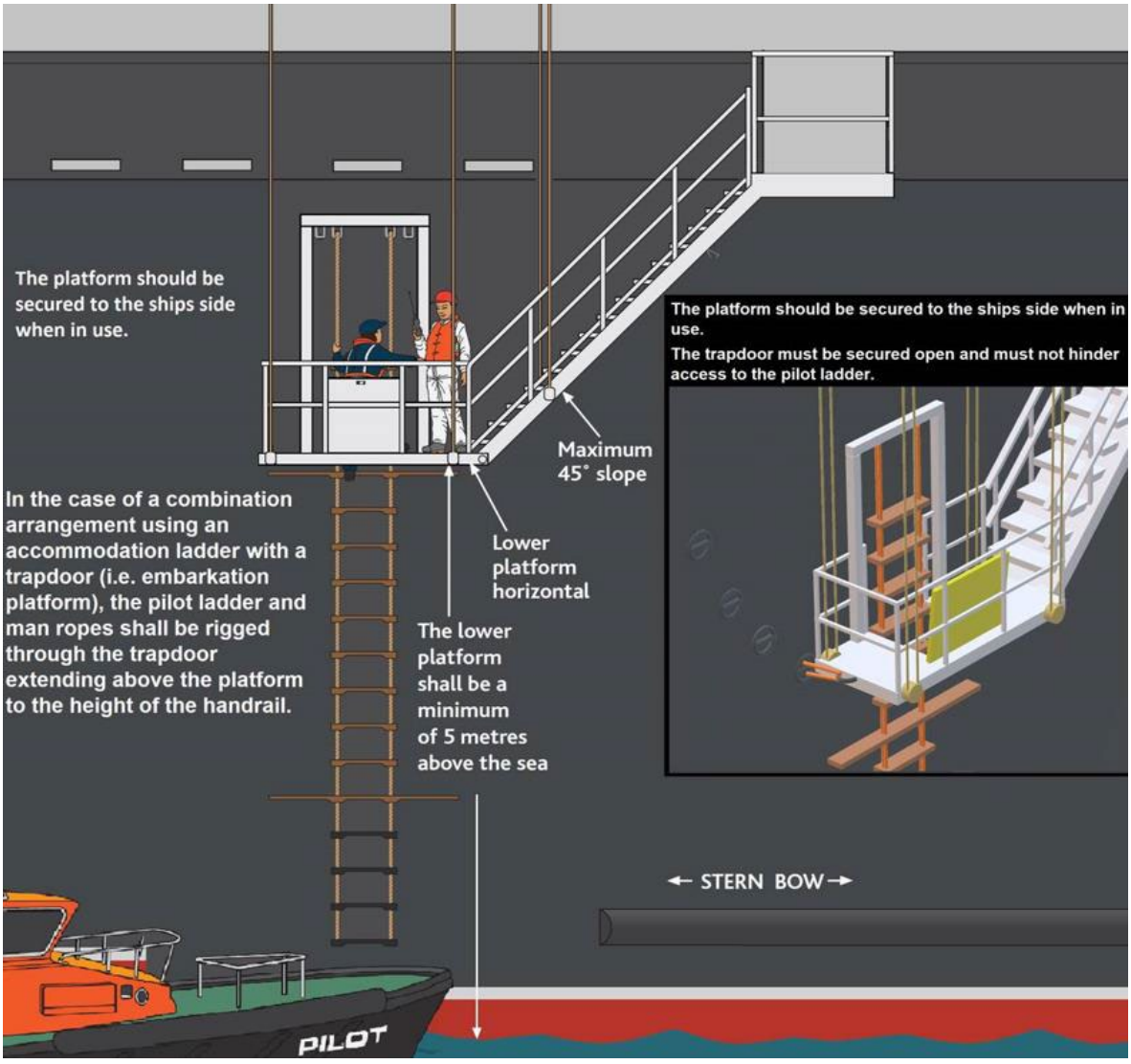

Figure 1: Pilot card depicting trap door arrangements.

If the pilot ladder and man ropes are not rigged through the trapdoor this creates an unsafe arrangement for persons as illustrated in photo 11

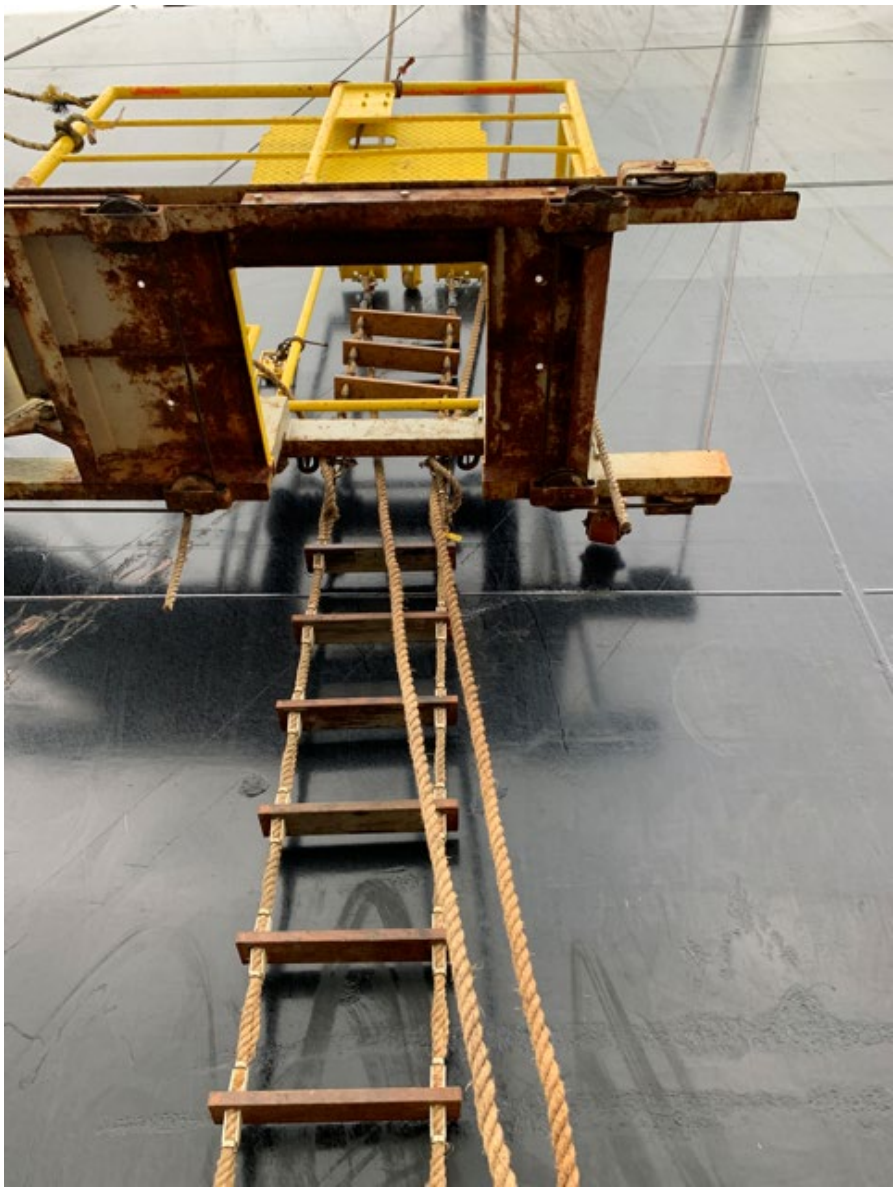

Photo 11: Unsafe trapdoor pilot transfer arrangement.

Responsibility for safe pilot transfer arrangements

Responsibility for safe practices for personnel transfers rests with each person involved in the activity including the ship owners, operators, master and crew, pilotage providers, pilots and pilot boat crew, as well as the person being transferred. All parties should observe both the spirit and intent of the regulations, to ensure safety is not compromised.

Where a person suspects that the pilot transfer arrangement provided is unsafe, they should refuse to use the arrangement until it is made safe by the master and crew and report the circumstances to AMSA[1] and their employer. Where such situations occur, AMSA will endeavour to follow-up to determine the cause and actions taken. Where a ship is not calling into an Australian port, AMSA will follow up with the flag State.

When not in use, the pilot ladder and man ropes should be stowed appropriately to avoid exposure to contaminants or other elements that will degrade the ladder and man ropes. The ladder and man ropes should be regularly inspected by the ship's crew to ensure they remain ready for use.

Additional information

The IMO/IMPA Pilot Ladder Poster provides further guidance on pilot transfer arrangements This and other useful guidance material are available on the AMSA website and in the AMSA Pilot mobile App.

Implementation of standards

When conducting port State control (PSC) inspections, AMSA inspectors will pay particular attention to the material state of all equipment and the implementation of Marine Order 21, Res.A.1045(27) as amended by Res.A.1108(29), ISO 799-1:2019, MSC.1/Circ.1428 and MSC.1/Circ.1495/Rev.1. The relevant IMO circulars and resolutions can be obtained from AMSA or www.imo.org.

During recent PSC inspections AMSA surveyors have noted pilot ladders which have been constructed with splices in the side ropes.

Photo 12: Example of non-compliant pilot ladder with splices in side ropes.

[1] These should be reported using a incident alert (AMSA 18), report (AMSA 19) or marine safety concern. See Incident reporting (amsa.gov.au)

Pilot ladders constructed like this are considered non-compliant by AMSA. Ship operators and masters are recommended to check their pilot ladders for splices in the side ropes. It should be noted by operators coming to Australian ports that the availability of compliant pilot ladders is limited in Australia. To prevent avoidable delays operators are recommended to have spare compliant pilot transfer arrangements onboard.

Compliance with the referenced standards does not of itself assure safety in each case. A pilot transfer arrangement that complies with the standards but is incorrectly rigged still presents a hazard to anyone using the arrangement. Crew members assigned to rig a pilot transfer arrangement should be sufficiently familiar with the task. The master or responsible officer supervising the rigging of the pilot transfer arrangements should assess whether supplementary measures, such as lifejackets, harnesses, lifelines be made available to enhance the safety of personnel rigging the pilot transfer arrangement. Where a pilot transfer arrangement is rigged incorrectly, this may contribute to evidence that the master or crew are not familiar with essential shipboard procedures relating to the safety of the ship. A number of documents have been produced as referenced in this Marine Notice to assist in the rigging of a pilot transfer arrangement correctly.

Australian Maritime Safety Authority

GPO Box 2181 CANBERRA ACT 2601