

BEST PRACTICE AND MARINE SAFETY CRITERIA BULLETIN 02-2022

Date of issue: 30.12.2022

BPMSCB 02-2022: Safety of Marine Pilot Transfer arrangements

Objective and area of focus - Marine Pilot Transfer arrangements and the transfer process:

The objective of this bulletin is to highlight safety concerns associated with Marine Pilot Transfer arrangements onboard vessels and the marine transfer process. The bulletin provides vessel owners / managers (ISM-Document of Compliance holders) / vessel masters and crew, the necessary guidance and information to enable completion of safe calls at the Port of Fremantle. Vessel operators, masters and crews are required to be fully familiar with this bulletin and are required to comply with the marine safety criteria requirements set out.

Incident occurrence and details

Fremantle Ports' experienced a serious incident during pilot disembarkation from a commercial vessel in August 2022.

A marine pilot while disembarking from a vessel fell from the pilot ladder onto the deck of the pilot vessel from an approximate height of 5 metres. The pilot suffered multiple serious injuries as a result of the fall.

Potential consequence

The incident had the potential of resulting in a fatality.

Contributory factors / Root causes

The immediate cause of the fall was noted to be simultaneous parting of both man ropes accompanying the pilot ladder.

Fremantle Ports conducted a detailed investigation for the incident which included boarding of the vessel to inspect the condition of the vessel's pilot transfer arrangement.

The following were the significant findings noted:

- Through the Fremantle Ports' 48-hour Notice of Arrival process, the vessel's master had declared that the condition of the Marine Pilot Transfer arrangement was safe for use
- The manropes when observed were noted to be in a severely deteriorated condition and not fit for use
- There was no structured process and guidance to crew in relation to inspection, storage, maintenance and retirement criteria for pilot ladders, man ropes and associated equipment

- The Safety Management System did not consider ship-specific safe pilot ladder rigging guidance for ship's crew

Immediate actions implemented by Fremantle Ports'

- The vessel was deemed UNACCEPTABLE to return to the Port of Fremantle, unless rectification of the existing conditions were carried out and objective evidence provided to and verified by Fremantle Ports prior to return. This process was satisfactorily completed.
- As part of an enhanced verification process all vessels arriving at the Port of Fremantle are required to provide additional verification details to Fremantle Ports' Harbour Master's Office to ensure that the vessel's Marine Pilot Transfer arrangements are safe for use.

Significant observations noted through the enhanced verification process are detailed below

- Pilot ladders more than 4 years old and in poor conditions were put in use in some cases
- Poor storage locations used for Marine Pilot Transfer equipment with no protection from the marine environment thereby aiding accelerated deterioration. A recent eight (8) month old ladder was found in a deteriorated condition due to poor storage and exposure to the marine environment
- Safety Management Systems do not have guidance to ships for inspection, storage, maintenance and retirement of pilot ladders, man ropes, deck fittings and associated equipment
- Fraudulent Classification Society certificates provided by suppliers to ships
- Unsafe trap door arrangements that do not comply with the requirements
- Unsafe methods used for rigging and securing of pilot ladders
- Manropes not complying with the size requirements (28mm - 32mm) were noted to be deployed in a few cases
- Emergency procedures on board vessels do not include Marine Pilot Transfer as an emergency
- Non-compliance with SOLAS Chapter V Reg 23, IMO Res. A.1045(27), ISO 799-1:2019 and supplementary standards (ISO 799-2:2021 and ISO 799-3:2022)
- Manropes did not have applicable test certificates and in one case a made-on-board certificate was submitted using the weight of two seafarers as test weights

Vessel operators, masters, crew and boat service providers are to note the following

- Masters are cautioned regarding accurate declaration of the vessel's condition in the Pre-arrival notification process. Any false declarations will result in the vessel being refused to berth or being deemed 'unacceptable' to call at the Port of Fremantle for subsequent voyages
- Recommendations of the IMO Pilot ladder poster are to be strictly adhered to [Pilot Ladder Poster.pdf \(impahq.org\)](https://impahq.org/PilotLadderPoster.pdf)
- Vessel operators are to provide clear guidance to ship's crews for inspection, storage, maintenance and retirement of pilot ladders, man ropes, deck fittings, stanchions, combination ladders and associated equipment
- Maintenance of combination ladders and trap-door arrangements is to be clearly addressed in the company safety management systems and planned maintenance routines, including renewal of hoist wires
- Rigging of pilot ladders must be carried out by trained and competent crew ensuring that safety of the crew and the transfer process is not compromised

- Vessel operators are to ensure that the pilot ladders supplied to vessels are provided with correct and genuine certificates. It is recommended that pilot ladders and associated equipment (manropes) is procured from genuine suppliers
- It is recommended that incidents related pilot / marine transfers are included into the vessel's Emergency Management Procedures. Man-overboard procedures are to be reviewed to address incidents during marine transfers
- For Personnel transfer (excluding Marine Pilots) carried out on vessels at anchor in Fremantle Ports waters, Boat service providers MUST ensure they carry out a Risk Assessment as per their Safety Management System. Such transfers must not be carried out if it is deemed to be unsafe for personnel transfer to take place, this responsibility lies with both the vessels and the boat service providers

Minimum Marine Safety Criteria effective from 01.04.2023:

- Vessel operators are to provide ship specific guidance to vessel's crews with regards to rigging, testing and inspection of pilot ladders, manropes, deck fittings, stanchions, combination ladders and associated equipment. Guidance provided in the ISO 799-1:2019 and supplementary standards ISO 799-2:2021 and ISO 799-3:2022 is to be used during this process
- Vessel operators are to assess and provide ship specific instructions to vessel's crews regarding storage and care of pilot ladders and man ropes. Industry guidance regarding care of manila ropes / manufacturer's instructions must be referred to when preparing the above instructions. Dedicated and protected spaces on board must be identified
- All Pilot ladders, manropes and associated equipment are to be used only for marine transfers (pilots and other personnel) and must not be used for any other operations onboard the vessel such as for draught readings or any maintenance work. All equipment is to be clearly marked as **"For Marine Transfers only"**
- **Maximum permitted age of pilot ladders** for use when calling at the Port of Fremantle is **30 months**, unless the ladder has been subjected to the ladder and step attachment strength test (as prescribed in ISO 799-1:2019) at not more than 30-month intervals. Evidence of this test, where conducted, must be retained on board for verification purposes. **The period of 30 months is to commence from the date when the ladder was received onboard.** Evidence of the receipt must be retained onboard for inspection when requested by the Harbour Master's office. Expected service life may be less than 30 months, particularly on ladders where side ropes cannot be inspected due to the use of mechanically applied metal clamps
- **Maximum permitted age of manropes** used with pilot ladders is **12 months. The period of 12 months is to commence from the date the manrope was put in service.** A new manrope must not be cut out from an existing coil onboard that is more than 12 months old
- The appendix to this bulletin is to be referred and adhered to for compliant Marine Pilot Transfer arrangements

Any queries regarding the above requirements and recommendations must be submitted to the email address: harbourmaster@fremantleports.com.au

Issued by: Harbour Masters Office - Fremantle Port Authority

APPENDIX

Do's and Don'ts for Marine Pilot Transfer arrangements

- Pilot ladder certification and marking**

Pilot ladders **MUST** be certified by the manufacturer / Classification Society as complying with requirements as mentioned under either IMO Resolution A.1045(27) or International Standard ISO 799-1:2019. **Proof of certification MUST be kept on board and produced when requested by Fremantle Ports'.**

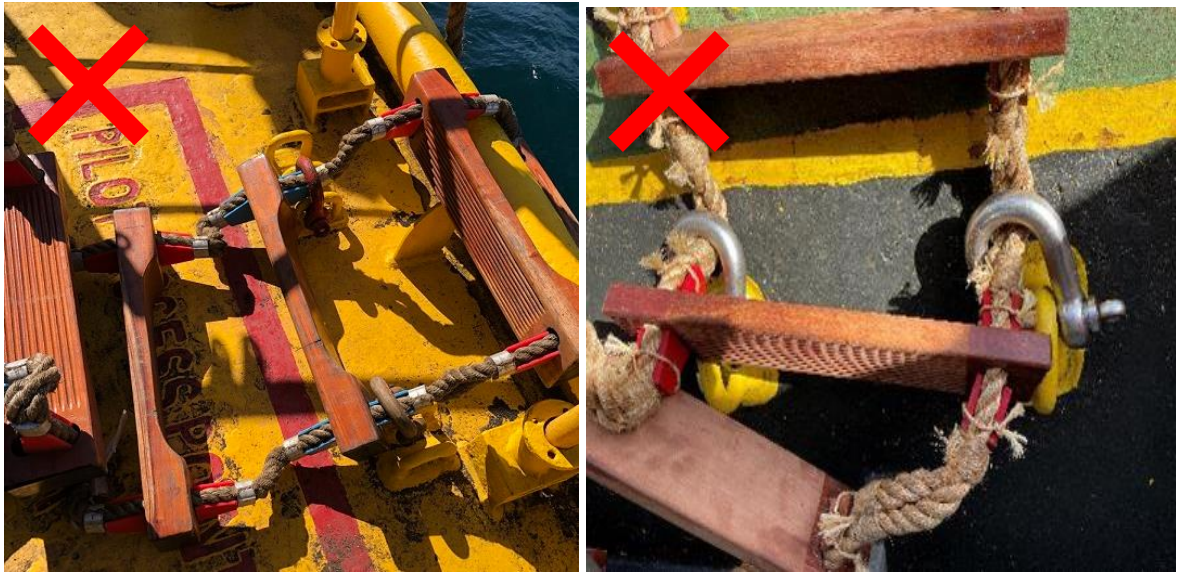


(Examples of compliant identification plates)

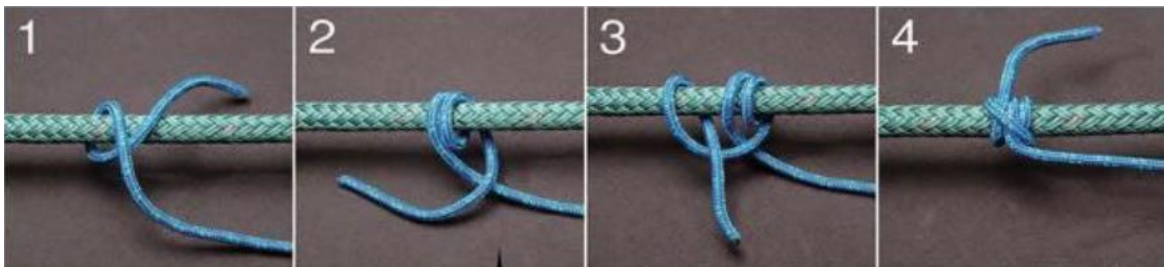


(Example of a compliant pilot ladder certificate)

- **Use of shackles for securing - The use of shackles to secure / choke pilot ladder side ropes when securing on deck is PROHIBITED.** Using shackles to shorten / secure ladders causes the weight of the ladder to be taken up by the shackles impacting directly against the mechanical securing clamps (widgets) which secure the ladders treads in place, including the seizing twine and will eventually damage them



(Examples of non-compliant securing methods using shackles)



(The rolling hitch)

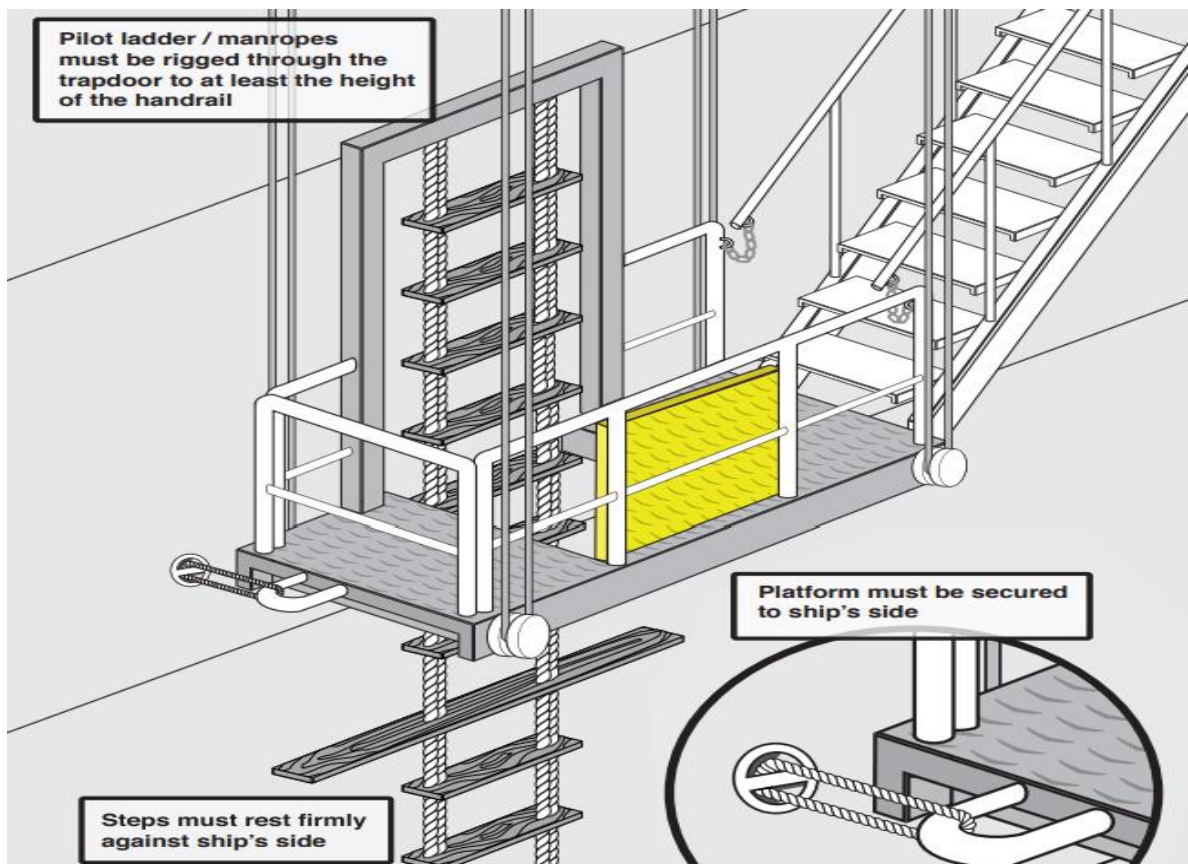


(Compliant securing methods - Use of rolling hitches)

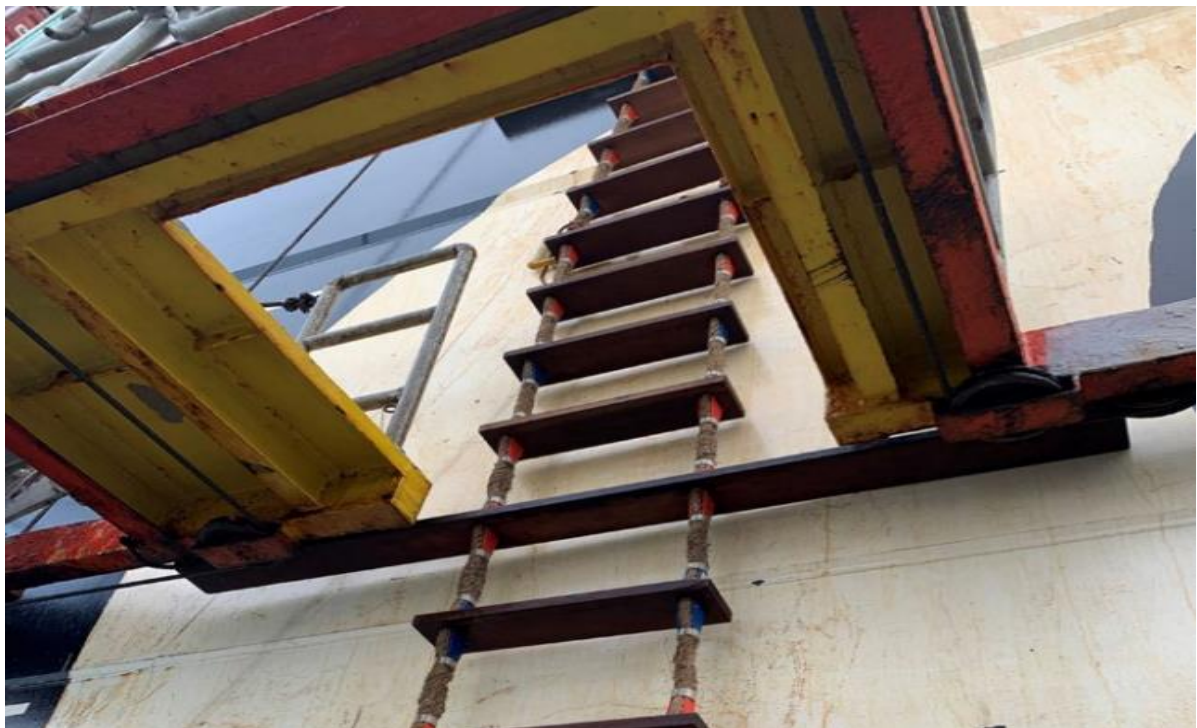
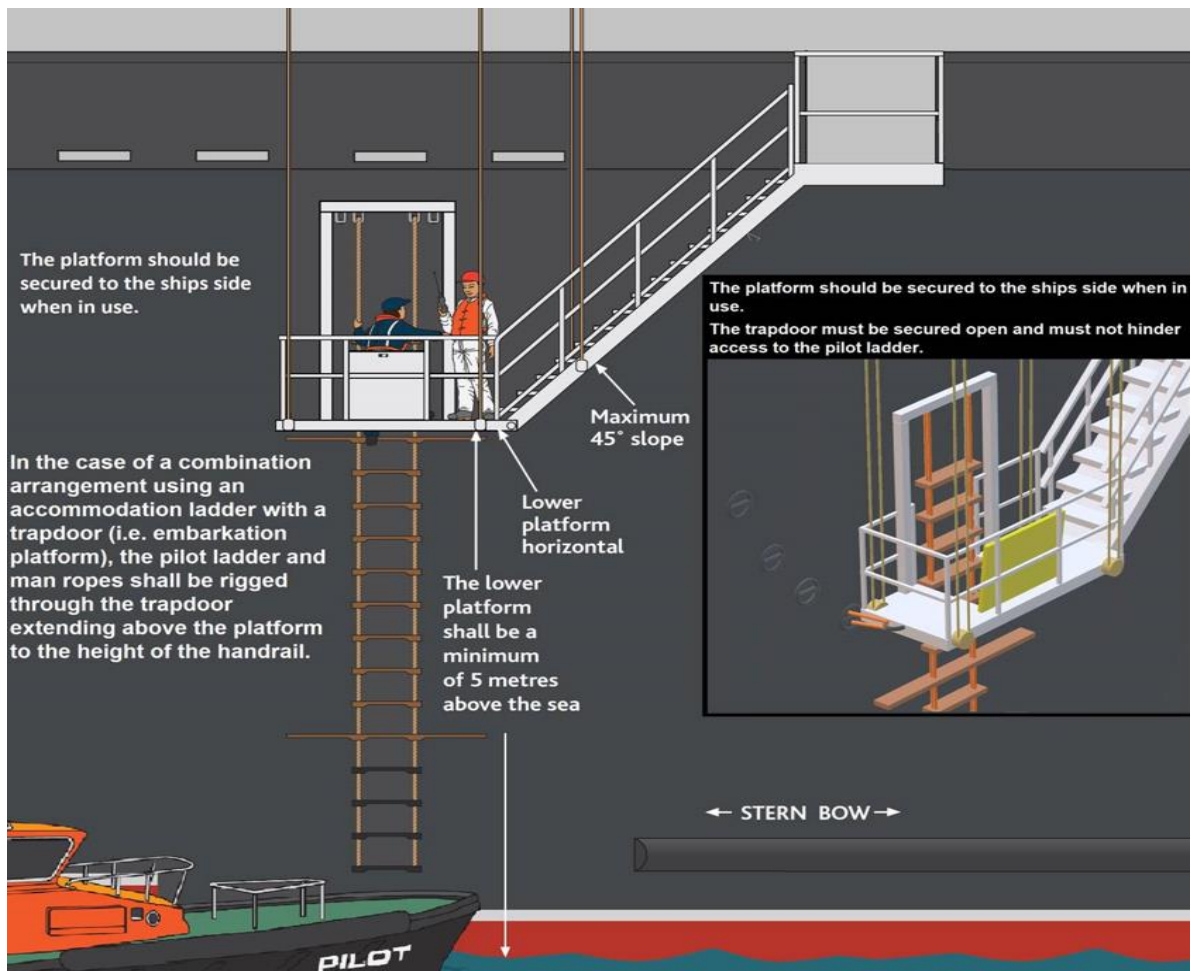
- **Attention to end points (Thimbles)** - Corroded end point thimbles can damage the side ropes, thereby leading to the failure of the side ropes. The rope portion around the thimble must be inspected as part of the inspection routine. Heat shrunk plastic covering for end points must not be used as it prevents detailed inspection of the rope area



- **Trap door arrangements and use of combinations ladder** - Refer to below guidance



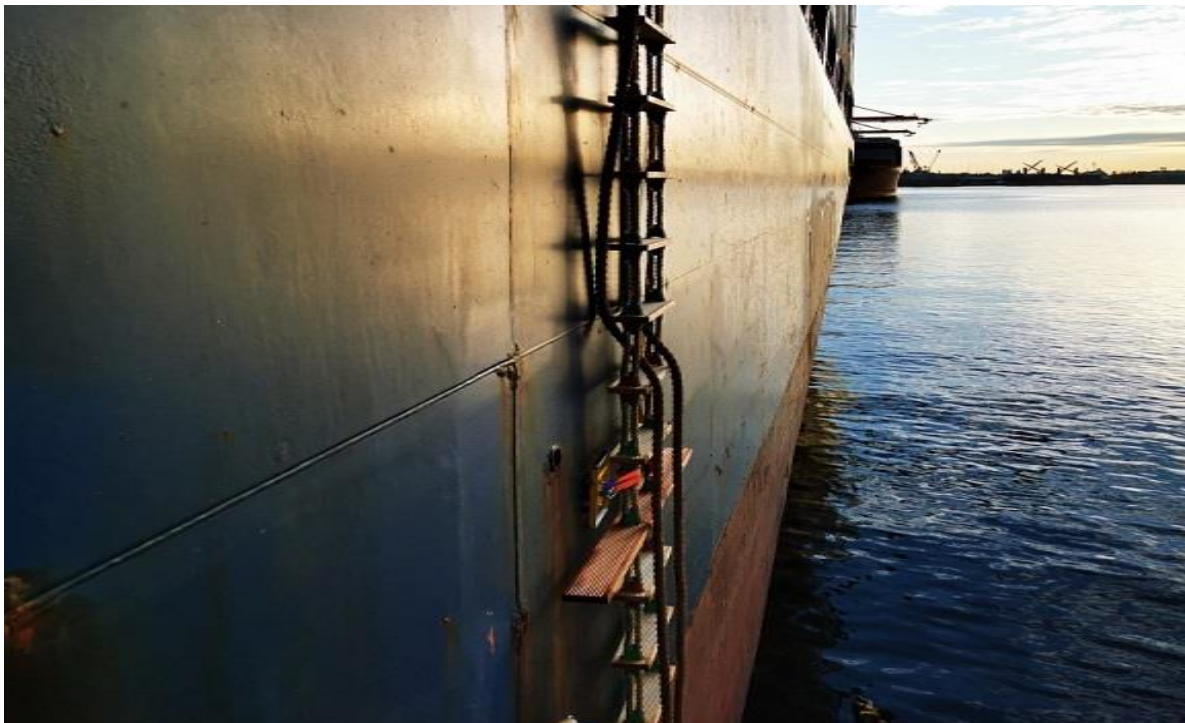
(Reference - American Pilot Association)



(Reference - ICS Shipping Industry Guidance on Pilot Transfer Arrangements)

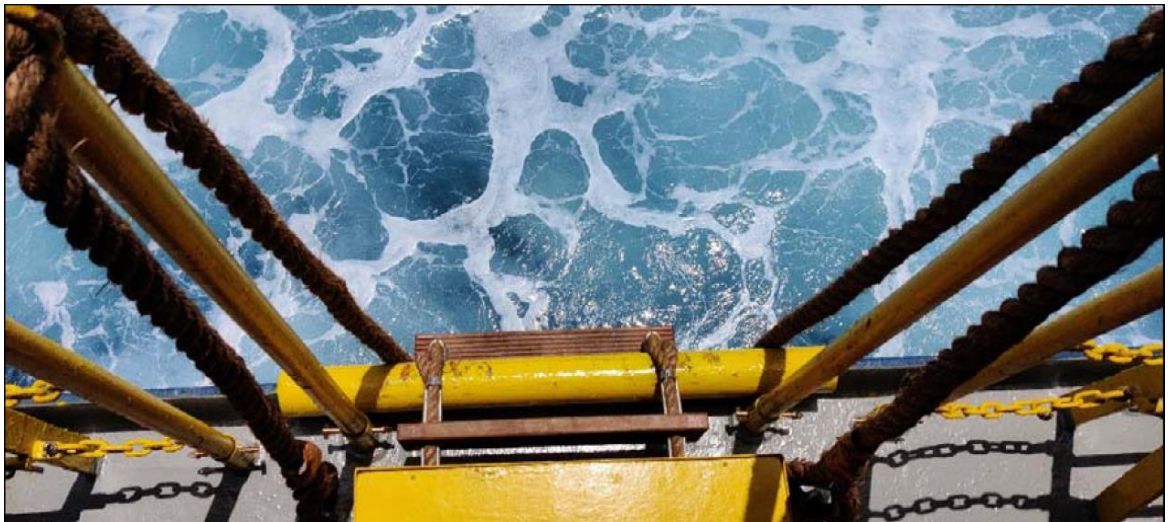
The pilot ladder and manropes shall be rigged through the trapdoor extending to a height of at least 2 metres above the platform.

When a combination ladder is used, the lower platform of the accommodation ladder should be in a horizontal position and secured to the ship's side. If a trapdoor is fitted in the lower platform to allow access from and to the pilot ladder, 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.

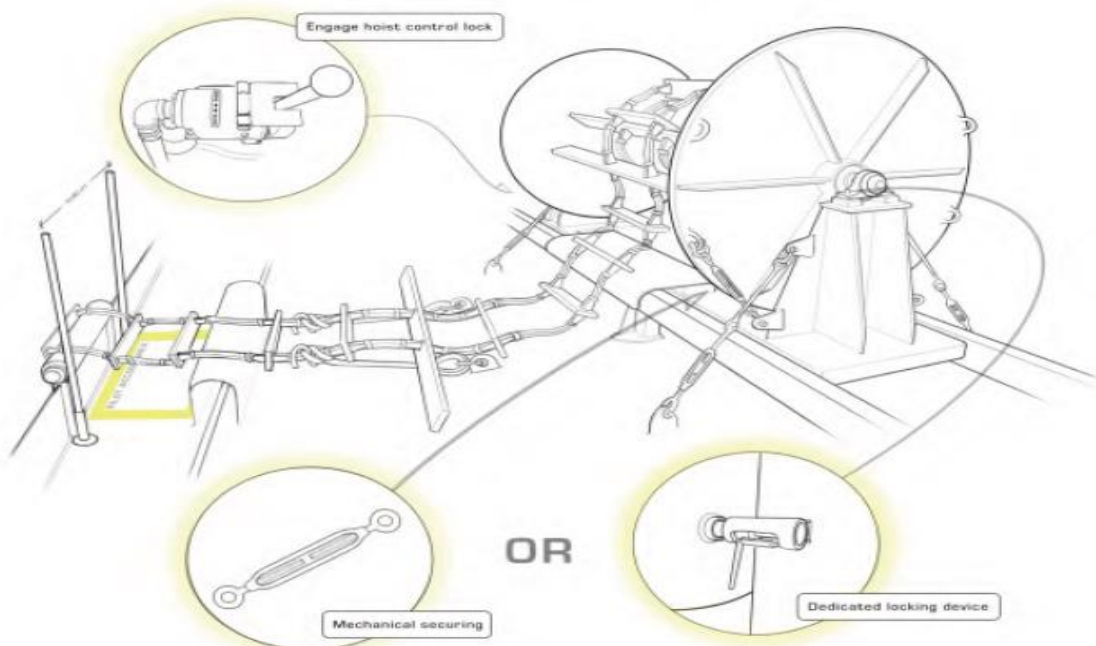


Each step of the pilot ladder **MUST** rest firmly against the ship's side. The pilot ladder **MUST** be secured to ship's side using eye pad or handhold or by a mechanical device such as magnetic clamps or a pneumatic suction pad.

- **Two good manropes of not less than 28 mm and not more than 32 mm in diameter** 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. Manropes shall be made of grade 1 manila rope.



- **Use of winch reels** - 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
 - The winch reel should not take the weight of the ladder
 - The pilot ladder should be secured to a strong point at deck level inside the ship side opening and independent of the pilot ladder winch reel
 - As an additional safety measure the winch reel should be secured by a mechanical fastening or via a dedicated reel bolt or the hoist controls be locked to prevent accidental use
 - If no lock is present, the air supply should be isolated from the reel



(Reference - Fathom Safety - A Guide to Pilot Ladder Securing)

- **Safe, convenient, and unobstructed passage to be provided from the pilot boarding area to and from the vessel's navigation bridge**



- **The rigging of the pilot transfer arrangements and the embarkation of a pilot MUST 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.**

