



Maritime Safety Awareness Bulletin

Shaping Shipping for People



Pilot transfer arrangements

Pilot transfer remains a critical and high-risk operation for the maritime industry. Numerous incidents and fatalities involving seafarers and maritime pilots have occurred worldwide. The safety issues that have been identified include improper maintenance of ladders, rigging of pilot transfer arrangements and inadequate assessment of risks when boarding or disembarking from a ship. These repeated issues indicate a need for improved awareness regarding the importance of pilot transfer arrangements.

At the 110th session of the Maritime Safety Committee (MSC 110) amendments to SOLAS Regulation V/23 and the associated new performance standards to enhance pilot transfer safety were adopted. The amendments to SOLAS and the new performance standards will enter into force on 1 January 2028.

Case study 1 – Failure of pilot ladder

As the harbour pilot started ascending the pilot ladder to board the ship's main deck, the aft side rope of the pilot ladder parted at the sixteenth step. The pilot managed to support their weight with their arms and moved to the step above and onto the main deck without injury (Australian Transport Safety Bureau, 2025).

The investigation found that (amongst other factors):

- The manila side rope had degraded including pre-existing damage, poor quality rope, chlorine contamination, and improper storage.
- The ladder did not comply with the breaking strength requirement of the ISO 799-1:2019 standard.
- The step fixtures (chocks) had steel fixing screws embedded within, which appeared to have chafed against the side ropes

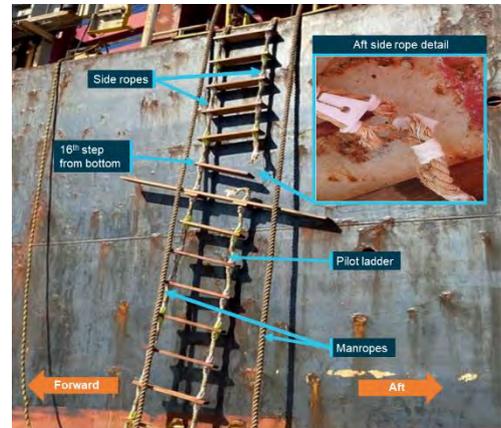


Figure 1: Failed pilot ladder

Pilot ladders are typically manufactured from manila rope, which is a natural fibre. Natural fibre ropes are susceptible to damage and loss of strength from UV exposure, dirt and chemicals. Regular inspections, comprising visual and physical examinations, are required to ensure that the ladders are stored and maintained in a suitable environment.

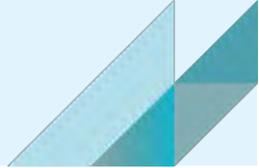
Case study 2 – Fatal fall from pilot ladder

A crewmember fell into the water while climbing down the pilot ladder of a bulk carrier to board a crew transfer boat and was fatally injured (Australian Transport Safety Bureau, 2023).

The investigation found that there was a significant breakdown of communications between all crew involved in the transfer on both the ship and launch with different understandings and expectations of the transfer. There were no procedures in place to ensure the plans and details of the transfer were shared and understood between all parties before the task was underway. There were different expectations of the people involved in the transfer, particularly those in positions of influence over the progress of the transfer, and these were not identified and addressed.

Inspection data

Tokyo MOU data for 2024 reported 523 deficiencies and 12 detentions related to pilot transfer arrangements (Tokyo MOU, 2025). A trial Focused Inspection Campaign (FIC) was carried out by the Tokyo MOU member authorities state in February 2025 on pilot ladder/transfer arrangements. A total of 2,357 inspections were conducted during the campaign. Three ships were detained and 176 deficiencies related to the FIC were identified on 169 ships.



Regulatory requirements

The requirements for pilot transfer arrangements are outlined in SOLAS Chapter V, Regulation 23 and supporting standards. These standards are incorporated in:

- MSC.1/Circ. 1428 – Required Pilot Transfer Arrangements for Pilots and Other Personnel (which will remain until the new MSC.1/Circ. 1428/Rev.1 come into force in April 2030).
- IMO Resolution A.1045(27) – Pilot transfer arrangements.
- ISO 799-1:2019 – Standard for pilot ladder construction and specifications

To address risks associated with pilot transfers, MSC 110 adopted amendments to SOLAS chapter V, regulation 23 ([Resolution MSC.572\(110\) – Amendments to Chapters II-2 and V of the International Convention for the Safety of Life at Sea, 1974](#)). These amendments introduce strengthened global requirements for pilot transfer arrangements, effective 1 January 2028.

Key changes include new mandatory performance standards for the design, manufacture, installation, inspection, stowage, maintenance, replacement, and familiarisation of all pilot transfer equipment ([Resolution MSC.576\(110\) – Performance Standards for Pilot Transfer Arrangements](#)). The amendments also prohibit mechanical pilot hoists and require adequate lighting at all pilot transfer areas and embarkation points.

Marine Order 54

[Marine Order 54 \(Coastal pilotage\)](#) requires vessels navigating prescribed compulsory pilotage areas embark a licensed coastal pilot and comply with all pilotage-related safety obligations, including reinforcing the Master's responsibility to ensure safe pilot transfer arrangements.

Coastal pilots play a vital role in the safe navigation of vessels, and their ability to embark and disembark safely is essential. Masters are reminded that there are clear obligations to ensure pilot transfer arrangements fully comply with SOLAS Chapter V, Regulation 23 and all associated standards. Failure to provide safe transfer conditions not only places coastal pilots and crew at risk but can compromise the vessel's ability to safely navigate through high-risk coastal pilotage areas.

Managing risks

Securing pilot ladder arrangements

It is the responsibility of the ship owners, operators, masters and crew to ensure that the pilot transfer arrangement is rigged safely and securely for the safety of all users.

Crew are to ensure that pilot ladders are rigged in the manner in which they were designed to be deployed. Ladders must be rigged clear of obstructions on the ship's side that might present a hazard to the pilot vessel when alongside.

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 purpose and do not have sufficient strength. Shackles, bars and tongues must not be used to secure the ladder to the deck, as they may damage the ladder.

Rigging is to be carried out only by trained crew, and the arrangement must be verified by a responsible officer before use to ensure safe transfer.



Communication, procedures and training

Clear and efficient communication is essential to ensure the safety of the pilot transfer arrangements. It is important that all parties involved in the operation communicate and exchange vital information with each other, such as the exact requirements for rigging the ladder before the ship arrives at the agreed pilot boarding location. This should include the position of the pilot ladder, the height above the water, as well as any potential issues with the ladder arrangement.

Operators are to ensure crew are appropriately trained. It is essential that crew members are familiar with the vessel's pilotage requirements, proper rigging procedures in line with SOLAS and IMO/ISO guidelines and remain vigilant and proactive when conducting safety-critical tasks (Tokyo MOU, 2025).

The operator is to ensure procedures and risk assessment for the safe transfer of people by pilot ladder, or other means, are documented as part of the ship's safety management system. This should include identification of risks, control measures, safety procedures, training and maintenance provisions of any pilot transfer arrangement.

It is important to ensure the procedures and instructions are developed to align with the way tasks are actually conducted onboard, to ensure safety and practicality. Operators should regularly review the procedures to ensure they are up to date and fit for purpose.

Maintenance and inspection

Ongoing inspection and maintenance of pilot ladders and boarding arrangements are an essential part of ensuring their continued safe operation.

Operators are to provide clear guidance and instructions to crew members for inspection, storage, maintenance and retirement of pilot ladders, associated ropes, deck fittings, stanchions, combination ladders and associated equipment. Such procedures should include regular inspections of the pilot transfer arrangements and storage to prevent damage of such equipment when not in use.

Ladders and associated ropes must be stored to avoid exposure to chemicals, sunlight, or other degrading conditions. Accommodation ladders and gangways, including associated winch and fittings, should be properly maintained and inspected at appropriate intervals, in accordance with manufacturers' instructions. Additional checks and examination should be made before the ladder and gangway is rigged, looking out for signs of distortion, cracks and corrosion.

Maintenance of pilot transfer ladders and equipment (including stanchions, shackles, and fittings) must be addressed and recorded in the planned maintenance system. Maintenance processes and procedures should be regularly reviewed for continued effectiveness.

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 are to comply with 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.

Key messages

The ship's safety management systems should capture, and address risks associated with pilot ladder and transfer arrangements. The control measures should be regularly reviewed to ensure they remain up to date, considering new information or a change in operational condition.

When considering the risk of use of a pilot ladder for transfer, as a minimum, the following should be considered and addressed:

- weather conditions and sea state
- use of other means of transfer which present a lower risk
- ensuring all persons involved in the transfer are aware of the risks and the pilot transfer arrangement plan before the disembarkation or embarkation occurs
- measures to prevent falls, including emergency response if a fall occurs.

References

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