



Pilot safety: a crucial component of navigational safety

Every year and worldwide, accidents happen with pilots, resulting in injuries or even fatalities in the process of pilot transfer. Major contributory factors to these accidents are found in non-compliant pilot transfer arrangements, often in combination with irregular or ineffective maintenance and inspection of same. With this circular, MSIG Specialty Marine hopes to increase awareness of the risks involved in Pilot transfers.

Ships' voyages, by nature, have a starting point and a point of destination, each with their own unique characteristics. These can have a significant effect on the safety of navigation, and consequently on the safety of vessels, their crews and cargoes as well as the environment. Thorough knowledge of these characteristics is therefore vital but may not always be found in nautical publications – which is where local pilots come in. Their job is to advise the master and bridge team on up-to-date local circumstances and, whilst also taking the vessel's manoeuvring particulars into account, to assist them in navigating local waters. This can only be done properly if the pilot actually has boarded the vessel and is on the bridge.

It is the responsibility of the vessel's master to provide a suitable pilot boarding arrangement in compliance with constructional and safety requirements as laid down in various regulations and to actively communicate by VHF with the pilot or pilot tender. The purpose of such communication is to discuss the details (including the height of the ladder's lowermost step above the waterline) prior to the pilot's boarding or disembarking.

Safety of Life at Sea Convention (SOLAS)

The Safety of Life at Sea Convention (SOLAS 1974, as amended), in its Chapter V (Safety of Navigation, Regulation 23), lists the basic requirements for the transfer arrangements used by pilots to embark and disembark safely. These arrangements are to be clean, well maintained and stowed, and they shall be regularly inspected to ensure that they are safe to use. Pilot transfer arrangements shall be used solely for the embarkation and disembarkation of personnel: not only pilots but also, for example, while at anchor, for bunker boats' or supply tenders' personnel, or for the vessel's own crew members if and when applicable.

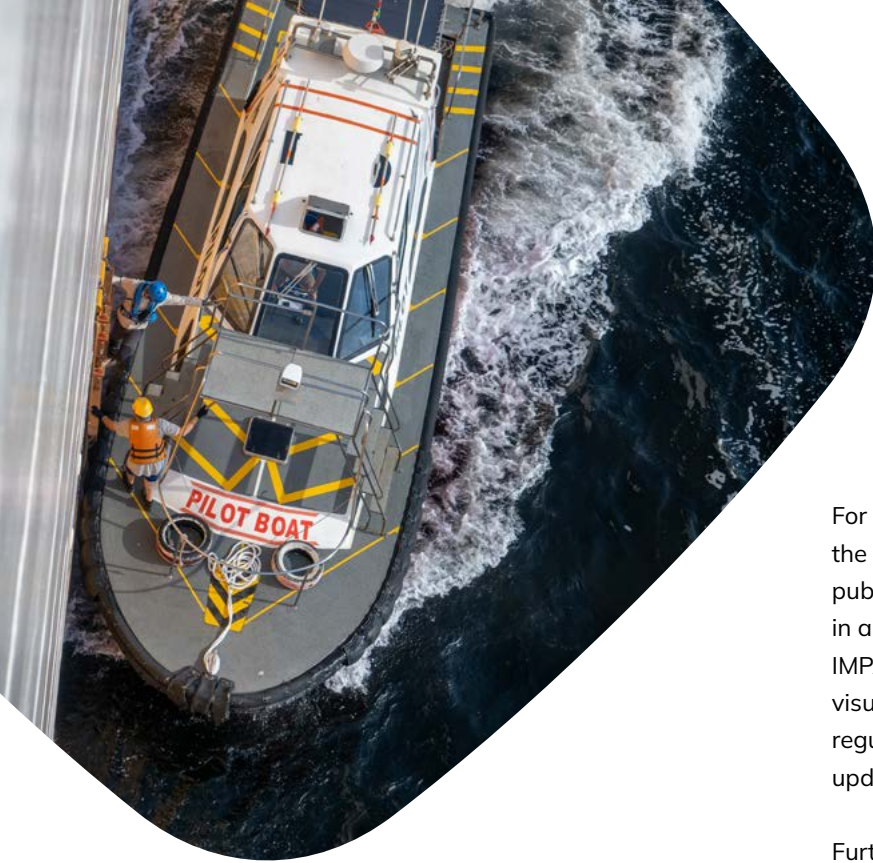
Moreover, the rigging of boarding arrangements prior to use is to be done by trained personnel, and the equipment used for this rigging is to be inspected and tested before use. This rigging, as well as the actual embarkation or disembarkation of the pilot, should be supervised on site by a responsible ship's officer with means of direct communication with the navigation bridge. A Risk Assessment is recommended to be performed beforehand which should reflect all these factors.



It is further stipulated that ships' side doors in the hull plating, in case they will be used by the pilot, shall not open outwards and that mechanical pilot hoists shall not be used. With respect to the latter, one should avoid devices such as fall arresters, which are otherwise widely used elsewhere in situations where people have to work at height. The reason is that these present additional risks for pilots as they work with two independently moving platforms – the vessel and the pilot tender.

Equipment

Typically, the pilot embarks or disembarks a vessel by means of a ladder and, if necessary, in combination with an accommodation ladder depending on the height to be climbed. Ladders are used for heights between 1.5 metres and 9 metres, and they must in any case be secured to a strong point on the embarkation deck. Ladders should not be rigged in way of a vessel's outer fendering. They must be clean, well-maintained and free from unacceptable wear and tear and damages.



For heights exceeding 9 metres, the accommodation ladder is to be rigged as well, from deck pointing aft ward with a slope of maximum 45 degrees. At that point, the accommodation ladder – which itself has to comply with the requirements of SOLAS Chapter II-1, Regulation 3-9 – effectively becomes part of the pilot boarding arrangement.

The full arrangement also comprises, amongst others, manropes (if required by the pilot) which are to be secured on the deck, a lifebuoy equipped with self-igniting light on site and ready for immediate use, and a retrieval line which should be tied to the ladder just above the lowermost spreader and should be leading forward.

Furthermore, the access point of the vessel, between the ladder's head and the ship's deck, shall be safe, unobstructed and convenient. For that purpose, there should be handholds in the gateway or bulwark and (two) handhold stanchions must be provided. They should be rigidly secured to the ship's structure at or near their bases and at higher points. Moreover, the pilot ladder is to be properly secured at (boarding) deck level, so as to provide a safe and unobstructed step for the pilot.

Lighting should be fitted, directed forward both overside and on deck, and at the positions where the pilot climbs the ladder, embarks or disembarks. These are factors which should also be taken into account in the design stage of the vessel. For example, the arrangement should not be hindered by hard fendering on the hull or other structural obstacles on the hull or on deck.

For better understanding, the IMO, in conjunction with the International Maritime Pilots' Association ([IMPA](#)), has published a schematic overview of the basic requirements in a [poster](#), which can be found on the website of the IMPA. It is to be noted that this poster only aids in visualising the basics of what is outlined in the applicable regulations, and it is in the process of being corrected and updated.

Further details regarding the design of, materials used for and lay-outs of the rigging of the pilot transfer arrangement, including the accommodation ladder, can be found in [IMO Resolution A.1045\(27\), as amended](#), and in standards as laid down in ISO 799-1:2019 and ISO 799-3:2022. Other useful resources can be found on the websites www.pilotladdersafety.com, <https://www.marine-pilots.com/articles> and the website of the [European Maritime Pilots Association \(EMPA\)](#).

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Non-compliance

In their day-to-day work, pilots frequently note and report cases of non-compliance with regard to pilot boarding arrangements. In some instances, they even – and understandably – decline boarding for fear of their own personal safety. In the worst case scenario, pilots can report the non-compliance to the Port State Control (PSC) authority upon which a PSC inspection may be initiated.

Below we have illustrated a few examples:

- **Damaged ladders**

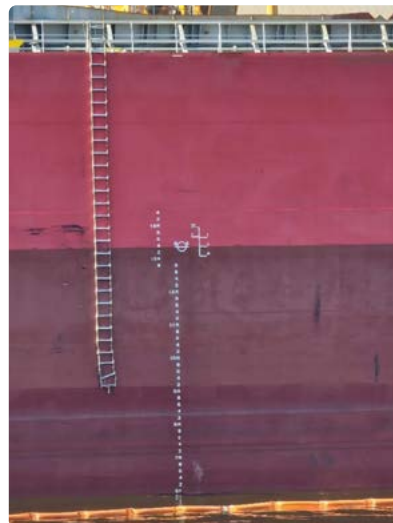
The fact that the vessels' crews even deemed it appropriate to rig these ladders, shows a fundamental lack of safety awareness on their part, to say the very least.



- **Wrong equipment and wrong rigging**

This arrangement does not provide proper and safe access to the vessel.

Similar and at a greater height: there are no spreaders, no safe access, no stanchions, no lifesaving appliances and, considering its length, the accommodation ladder should have been rigged.



- **Wrong rigging**

The ladder's spreader is wrongfully used to 'secure' the ladder.

There are no stanchions provided.



There are no stanchions, the ladder is not secured to the deck, and there is a trip hazard as the pilot needs to 'crawl' onto deck.



- **Non-compliant combinations**

The gangway's lower platform is not provided with outer stanchion and horizontal guard line. Furthermore, the pilot ladder is tied to the gangway, whereas both the gangway's lower platform and the pilot ladder should have been independently secured to the hull.



We are grateful for the input received from Mr Arie Palmers, registered maritime pilot in the Netherlands and for his consent to use photographs from his archives.

Getting pilots on board a ship and letting them disembark must be done in accordance with the highest safety standards as the pilots' lives may quite literally hang in the balance. Aside from regulations and technical requirements which should be met, safety and situational awareness is key at all times. Pilot operations need to be planned, crew members need to be instructed, and it is vital to establish adequate communication with pilot stations, pilot tenders and individual pilots throughout the process.

Shipowners and ships' masters should verify full compliance of ladders when the latter are purchased and delivered. Among others, the certificates of the ladders should be checked and it should be verified that the certificates match with what has actually been supplied. Moreover, the inspections, maintenance, strength tests and timely renewal of the equipment should be incorporated in the applicable part of the vessel's Planned Maintenance System as part of the vessel's Safety Management System (SMS).

It is to be noted that Regulation 23 of SOLAS Chapter V and associated instruments for the improvement of the safety of pilot transfer arrangements, are currently under revision and amendments will be proposed at the IMO

Maritime Safety Committee (MSC 109) in December 2024. Upon approval, they are expected to be submitted for adoption at MSC 110 in May/June 2025. This will include a resolution with regard to performance standards for pilot transfer arrangements becoming a mandatory instrument.

For the sake of completeness: sometimes pilots are transferred by helicopter. For such instances, reference is made to the latest (5th) edition of the [International Chamber of Shipping \(ICS\) Guide to Helicopter/Ship Operations](#), which is to be used in conjunction with local regulations and specific pilots' requirements and instructions as applicable.

If you require further information or assistance, please don't hesitate to contact our Loss Prevention Services department: LPS@msigspecialtymarine.com



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