



USING PILOT LADDERS

Introduction

This information sheet provides supporting information on the use of pilot ladders to complement that included in Marine Notice 2015/19.

The safety of a person suspended over the ship's side on a pilot ladder is dependent on the material state of the ladder and on personnel maintaining a firm hold on that structure. Accordingly, embarkation, disembarkation and other over-side uses of a pilot ladder by a pilot or other persons should be treated as a safety critical shipboard operation.

A number of serious accidents have occurred with pilot ladders in recent years, with those investigated by the Australian Transport Safety Bureau (ATSB) including:

- *Atlantic Princess* off Whyalla SA on 3 July 2013 (ATSB Report 300-MO-2013-007 issued 9 May 2014) in which a company representative fell onto the pilot launch deck while boarding using a pilot ladder and subsequently died from his injuries.
- *Golden Concord* off Goods Island in Torres Strait on 4 July 2013 (ATSB Report 300-MO-2013-007 issued 20 March 2014) in which a pilot ladder manrope gave way and the disembarking coastal pilot fell to the deck of the pilot launch without sustaining serious injuries as his fall was arrested by the launch's deckhand.
- *Hyundai Dangjin* off Karratha WA on 10 July 2015 (ATSB investigation 321-MO-2015-004) in which a ship's officer fell from a pilot ladder while reading draught marks and subsequently drowned.

AMSA frequently receives reports from marine pilots in relation to pilot ladder arrangements that they have assessed as not being in accordance with recognised international standards. In some cases these reports have involved near-misses, while in others delays have resulted from pilots correctly refusing to use unsafe ladder arrangements.

SOLAS Requirements

The measures implemented under regulation 23 of Chapter V of the *International Convention for the Safety of Life at Sea, 1974* (SOLAS) (including the standards adopted by IMO resolution MSC.1045(27), and required under ISO 799:2004, and MSC.1/Circ.1428) are designed to prevent such accidents.

It is recognised that there is some difference in the detail between ISO 799:2004 and MSC.1045(27) standards, and that there are variable options within each of these configurations. However, compliance with any option within either standard is acceptable from a regulatory viewpoint, provided the ladder fully complies with the standard against which it is certified.

Any construction or repair work carried out on pilot ladders must be in accordance with the provisions of the standard to which it is certified.

Rigging Pilot Ladders

Irrespective of the design and construction standard for a particular ladder configuration, ship's crews are to ensure that pilot ladders are rigged in the manner in which they were designed to be deployed. Where it is possible to rig a ladder in more than one manner, care should be taken to ensure that the non-slip surface is on the upper surface of the ladder rungs.

AMSA recommends that pilots, where possible, visually inspect the pilot transfer arrangements before embarking/disembarking a ship. Where boarding or disembarking arrangements do not comply fully with the requirements, the pilot should require the vessel to make appropriate changes.

It should be noted that delays may result from the need to change an improperly rigged, inadequately maintained or poorly positioned pilot ladder.

Masters and deck watchkeepers are also reminded that they should confirm with the pilotage provider the exact requirements for rigging the ladder before the vessel arrives at the agreed pilot boarding place. This should include the position of the pilot ladder and the height above the water.

In all cases, ladders must be rigged clear of sponsons and other obstructions on the vessel's side that might present a hazard to the pilot vessel when alongside.

Masters and watchkeepers should also comply so far as possible with requests from pilots as to the course and speed required to provide a safe lee for boarding or disembarking vessels.

Based on AMSA Port State Control inspection data, there is growing evidence of the use of non-compliant or poorly configured pilot ladders by ships calling at Australian ports. These deficiencies include:

- Splices in side ropes (which are not permitted) (refer Fig. 2)
- 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 Fig. 2)
- 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 Fig. 1 and 3)
- 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 Figs. 4 & 5).
- 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, and 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.

- 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.
- Retrieval lines (where considered necessary) not rigged in accordance with IMO Resolution A.1045(27).
- Man ropes, if required by pilots, not available or of incorrect diameter.
- Steps broken, not level or unevenly spaced (refer Fig. 6).

The first two of these points have been observed in relation to pilot ladders to which type approval certificates issued by recognised organisations have been provided.



Figure 1



Figure 2



Figure 3



Figure 4



Figure 5

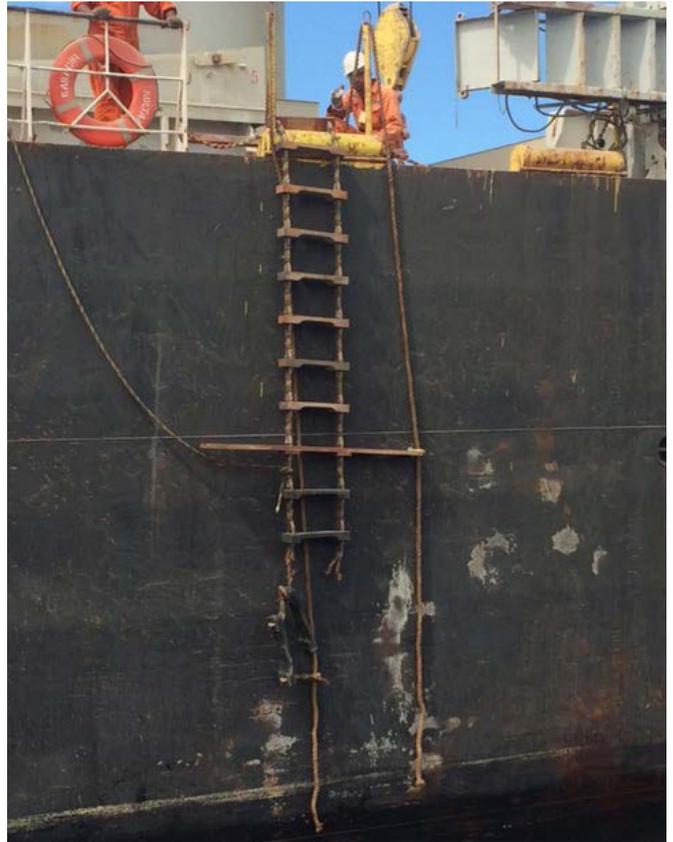


Figure 6

AMSA urges all parties to acknowledge the inherent risks associated with all personnel transfer and over the side operations, and to adopt and follow the recognised international industry standards and practices.

AMSA's Port State Control operations are directed towards improving the safety of ships and all seafarers, and will be used to aid the avoidance of accidents related to the use of pilot ladders.

Further information on using pilot ladders may be obtained from the [inspecting Marine Surveyor](#) or by writing to:

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