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Safety of pilots boarding ships with pilot transfer arrangements that use non-approved methods to secure pilot ladders

This update is issued to raise awareness of the potential risk of using improperly rigged pilot ladders.

This safety update is for

- Ship owners and operators
- Surveyors and recognised organisations
- Maritime Administrations, their officers, investigators and technical advisors



Figure 1. Pilot ladder incorrectly secured to the deck using D-shackles to choke the side ropes.

Ships that use non-standard methods to shorten pilot ladders which are too long for the vessel's freeboard

Persistent reports received from pilots and pilot associations indicate that vessels are improperly securing their pilot ladders to the ship.

A large number of reports relate to the use of pilot ladders which are too long relative to the vessel's draughts. As a result the excessively long ladders require shortening up before being deployed for boarding pilots. In these cases, pilot ladders are shortened up by ship's staff using D-shackles to choke the side ropes at the required height along the ladder's length.

In this method, the D-shackle is first secured to a hard point on the deck, such as a pad eye, and the ladder rope threaded through the shackle. By shortening ladders using the D-shackle method causes the weight of the ladder to be taken up by the D-shackle impacting directly against the mechanical securing clamps (widgets) which secure the ladders treads in place.



Figure 2. Pilot ladder incorrectly secured to the deck using D-shackles to choke the side ropes.

D-shackles used to shorten ladders

Requirements for pilot ladders are given in SOLAS V/23 (Pilot Transfer Arrangements) and related standards adopted by IMO (MSC.1/Circ.1331) and ISO (ISO 799-1:2019).

SOLAS V/23.3.3.1 requires that pilot ladders be used for all situations wherein pilots are required to climb a height of between 1.5m to 9.0 metres.

SOLAS V/23 introduces mandatory design, construction and certification requirements.

Risk to safety

Ladders constructed in compliance with the standards established by SOLAS V/23 and Res.A.1045 (27) will secure their treads in position using mechanical clamping devices (referred to as widgets), seized in place immediately above and below each tread.

Using D-shackles to choke pilot ladder side ropes can eventually damage these widgets and also destroys their seizing. When the seizing is destroyed, or the widget is damaged, this can lead to adjacent tread becoming loose

By taking the weight of the ladder onto the widgets causes the widget seizing to become damaged. This leads to the steps no longer being held firmly in the horizontal position. This in turn means that the steps can become free to rotate underfoot as the pilots climb the ladder.



Figure 3. This ladder is too long for the freeboard.



Figure 4. Pilot ladders are required to be provided at the rope ends with strong thimbles for securing the ladder.

What you should do

1. Masters and senior officer should physically check the current method of securing their vessel's pilot ladders to ensure that crews are not making this rigging mistake.
2. Refer to the ship's construction drawings to ensure that the actual securing method is the same as the method given in the ship's drawings, or approved safety management system.
3. To avoid vessels being delayed in port, where existing pilot ladders are too long for the expected range of freeboards, Masters must find an appropriate safe method for securing the ladder at the rope-end thimbles. If the existing arrangement cannot be shortened correctly, then masters should consider contacting their local port agent to obtain a shorter ladder for use a required.
4. In summary, you cannot rig your ladder safely if it is too long for your vessel's freeboard.