

Pilot Boarding Arrangement Requirements



Port of Milford Haven



Milford Haven Port Authority

This document is intended as a guide for Masters to show examples of the unacceptable and unsafe practice seen at Milford Haven and to show what is deemed acceptable as per **SOLAS Chapter V Regulation 23 and IMO Resolution A.1045 (27)**

Milford Haven Port Authority places the safety of staff at the highest level of importance and will make no exceptions in the interests of safety.

Vessels are expected to meet the requirements of the regulations as laid out in SOLAS Chapter V Regulation 23 and IMO Resolution A.1045 (27)

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Part A – Non-compliant examples

1. Securing of the pilot ladder

There have been numerous issues around the safe and proper securing of pilot ladder arrangements both when used by vessels presenting freeboards less than 9m and with larger freeboards utilising a combination arrangement.

As seen in the next image, shackles over side ropes is a commonly seen practice for securing ladders. This is an **ineffective and unsafe** means of securing the pilot ladder. Weight coming on the ladder will result in the shackles bringing up against steps or the step securing wedges. Steps are rated to 8kNs and side ropes have a breaking strength of 24kNs per side rope with a combined strength of 48kNs. This strength is lost as soon as the weight is held by a step or chock/widget.

IMO Res.1045 (27) 2.11 The securing strong points, shackles and securing ropes should be at least as strong as the side ropes.





This image shows the secondary lashings after being requested by the Pilot. Per good seamanship these secondary lashings should be a rolling hitch¹ with the standing part leading so that the lashing seizes when weight is applied to the ladder.



¹ The Ashley Book of Knots, #1734, #1735

Milford Haven **will not accept** pilot ladders secured around railings or hand rails.

These can have sharp edges that could damage side ropes or have hidden corrosion resulting in a failure.

Milford Haven **will not accept** shackles over side ropes as a securing measure.





2. Accommodation ladders

Combination arrangements

This image shows an accommodation ladder with a non horizontal platform and a distance from the platform to sea level of less than 5m.

If the lower platform is less than 5m above sea level this becomes a hazard for the pilot vessel, the Pilot and crew waiting to embark the vessel. This hazard increases with sea and swell height.

IMO Res.1045 (27) 3.3

The lower platform of the accommodation ladder should be in a horizontal position and secured to the ship's side when in use.

The lower platform should be a minimum of 5m above sea level.

Pilot ladders should be properly secured with both side ropes to the ship's side 1.5m above the bottom platform of the accommodation ladder.

SOLAS Chapter V – Regulation 23

3.3.2.1 When a combination arrangement is used for pilot access, means shall be provided to secure the pilot ladder and manropes to the ship's side at a point of nominally 1.5m above the bottom platform of the accommodation ladder.

Combination ladder - Trapdoor arrangement

A trapdoor design may be through an accommodation ladder, or it may lead to a platform directly to deck in lieu of a "cat flap" arrangement. The platform or ladder combination must ensure that the pilot does not have to climb more than 9m, nor less than 1.5m. Also, the accommodation ladder should be no lower than 5m above the waterline to enable the pilot launch to effect a safe approach.

For a trapdoor arrangement, the pilot ladder must extend above the lower platform to the ship's side rails.

If the trapdoor arrangement is in conjunction with an accommodation ladder, then the latter should also be secured to the ship's side in order to prevent it swinging. In addition, the platform of the accommodation ladder is to be horizontal. The trapdoor, (minimum 750mm x 750mm), should open upwards and be secured vertically.



3. Access to deck

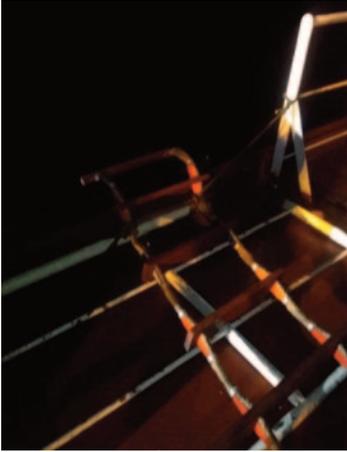
IMO Res.1045 (27) 5

Means should be provided to ensure **safe, convenient and unobstructed passage** for any person embarking on or disembarking from the ship between the head of the pilot ladder, or any accommodation ladder, and the ship's deck; such access should be gained directly by a platform securely guarded by handrails.

This also shows a secondary lashing spliced around a hard angle. This is not a dedicated securing point.



4. Winch reel arrangements



Another example showing obstructed access at the head of the ladder.



These images show a pilot ladder and winch reel arrangement that does not:

- Secure the pilot ladder at deck level
- Have any secondary lashings

IMO Res.1045 (27) 7.4.1

The pilot ladder winch reel **should not** be relied upon to support the pilot ladder when the pilot ladder is in use.

IMO Res.1045 (27) 7.4.3

The pilot ladder should be secured at deck level.

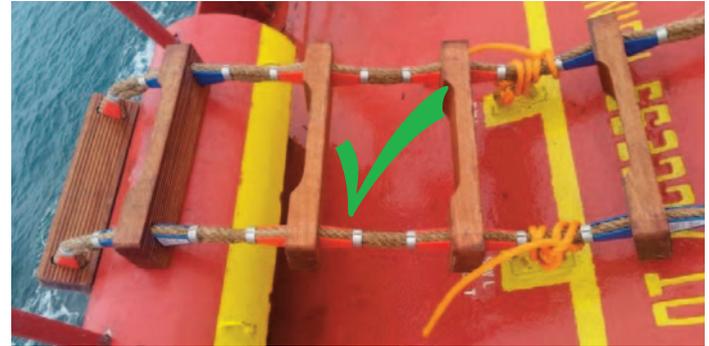


This example shows a winch reel that has not been mechanically secured.

IMO Res.1045 (27) 7.5.6

A mechanical device or locking pin should also be utilised to lock powered winch reels.

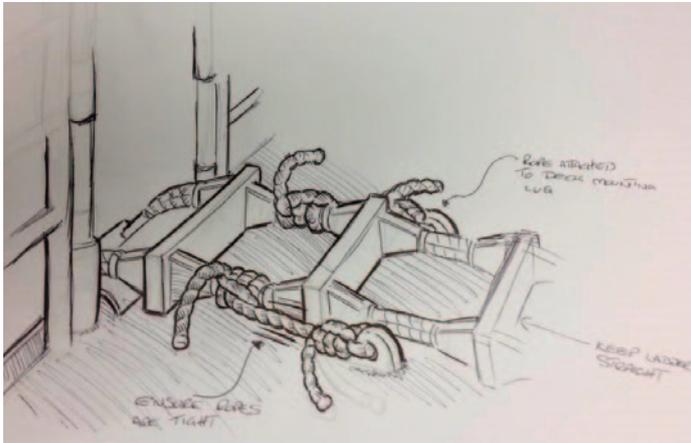
Part B – Compliant examples



The above shows a correct secondary securing method for a ladder coming off a winch reel.



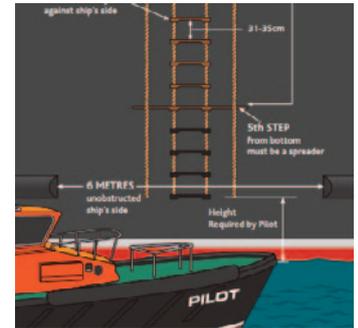
(Left) Showing mechanically secured winch reel.



Belting arrangements

SOLAS requires an area of at least 6m clear of belting for pilot boat access unless the vessel has been exempted.

“The ladder position shall be within the parallel body length of the ship and, as far as is practicable, within the mid-ship half length of the ship.”



Whilst the above example shows the lashing tied to the deck secure point, it would be preferable to have dedicated lashings shackled to a strong point.

The straps (left) can be removed when not in use, preventing UV degradation of the lashing.

Tripping lines if used should not be attached to the bottom of the ladder.

