

Securing pilot ladders

Improperly secured pilot ladders are putting lives at risk. A culture change is urgently needed

Captain Winston Singh

AFNI

On a daily basis, pilots worldwide are confronted with non-compliant pilot ladders which are dangerously unsafe, and secured without due regard to the safety of the pilot's life.

The International Maritime Pilots' Association (IMPA) Safety Campaign 2015 revealed that 59% (63 out of a total of 107 defects) of non-compliant ladders were not secured properly.

When Masters are advised diplomatically of the non-compliant deck securing arrangements, the usual answers are, 'We have always rigged it this way' and 'The vessel has been to several ports worldwide and no pilot has ever complained except you.' Of course I complain, because this is the most dangerous part of my job! My life depends on a properly secured pilot ladder. Unfortunately, I can only see the securing arrangements when I get on deck or examine and test before disembarkation. Whether I fall from a height of nine metres, drown or get mangled by the ship's propellers all depends on the competence and knowhow of the crew.

Non-compliant securing arrangements that I have actually encountered include:

- Side ropes shackled to deck pad eyes only;
- Angle iron deck hooks;
- Side ropes lashed to the top of inboard railings e.g. bulk carrier;
- Side ropes lashed to stanchions;
- Rounded steel bars passing through pad eyes and squeezing side ropes;
- Bracket device at ship's side into which the step fits;
- Side ropes shackled to stanchions;
- Spreader pressed up against stanchions;
- Side ropes secured with steel chains around stanchions and shackled to pad eyes close to sheerstrake;
- Extensions of side ropes lashed to pipelines (no deck fittings provided).

The background

A pilot ladder is now considered a part of the ship's safety equipment and therefore subject to the ISM Code (Sections 1.2.3 and 10). Inspections are made within the scope of surveys concerning the Passenger Ship Safety Certificate or the Cargo Ship Safety Equipment Certificate according to SOLAS Chapter 1, regulations 6, 7 and 8. Flag States are legally required to consider pilot ladders and their associated items of equipment on a regular basis during mandatory SOLAS inspections.

It is imperative that the pilot ladder certificates, periodic inspection reports and records are maintained on board and detail the actual condition of the pilot ladders. The verification of these records should be included in shore side internal audits.

Why does the situation continue?

With the plethora of inspections, surveys and audits carried out on merchant ships nowadays including flag state, classification, Port State

Control, P&I Club, OCIMF and SIRE, these levels of non-compliance are not acceptable. So why do we continue to see non-compliant securing arrangements?

From the ship's side, issues may include:

- Lack of crew training and competence. A poorly rigged ladder is the first sign of issues with a vessel's safety standards and safety culture on board;
- The Master and crew are unaware of the new regulations in force since July 2012. The onboard version of the 'Required boarding arrangements for pilot' poster is outdated;
- Vessel design issues, e.g. no stanchions or deck fittings to secure ladders;
- Masters are quite happy with the arrangements in place since there have been no accidents or complaints. Where Masters are actually aware of their own securing arrangements, unfortunately they deem them to be acceptable when they are not.

Regulatory issues may include:

- Port State Control enforcement is non-existent;
- The absence of robust reporting systems within one's own jurisdiction. No enforcement mechanism for follow-up action. Why report when nothing will come out of it?
- The responsible authorities take a lot of time to rectify reported problems;
- The existing blame culture needs to be transformed into an open reporting and positive safety culture.

Pilots themselves may contribute to the problem:

- Lack of pilot training in regulations and pilot ladder safety;
- Complacency by pilots. This comes from having to do the same job time after time, same passages/ships/berths;
- Lack of consistency in reporting defects amongst pilots within the same country, and worldwide. A conscientious pilot reports a securing arrangement which is dangerous, but the pilots in the previous port of call just two hours away found no defects;
- Lack of reporting by pilots.

Pilots and reporting culture

This last point may seem unfathomable. However, there is a general lack of reporting culture by pilots and this also leads to a poor safety culture. The IMPA Safety Campaign 2015 was held for two weeks and there were 303 entries - fewer than in 2010, when it was held for one week with a similar number of organisations reporting (IMPA and European Maritime Pilots Association).

Sometimes, pilots just don't care to inspect securing arrangements and are quite willing to let things pass especially with ships regularly visiting their ports. Many pilots don't report due to commercial pressure. Fear of losing clients does not allow them to report all the incidents they see. Commercial pressure has a direct effect on the safety culture of the association. Initiating a report may have negative consequences for their relationship with their pilotage service provider and also with investigating bodies.

In his foreword to the results of the 2007 IMPA safety campaign, Mr Nick Cutmore, Secretary General of IMPA said 'Pilots themselves bear some responsibility for the tacit acquiescence in this state of

affairs. Pilots have a ‘can-do’ mentality which extends away from the bridge and leads them sometimes to use less than satisfactory boarding equipment. They are also reluctant to report defects to port state control, preferring just to mention them to the Master. This is borne out of empathy with Masters, a post many pilots used to hold. There is also some ‘commercial’ pressure on pilots by ports, who are anxious to develop trade and calls, not to report defects and so not to deter vessels in the future.’ Similar comments were expressed in the forewords of the 2010 and 2015 safety campaign reports.

Rigging the pilot ladder

The only proper way to secure a pilot ladder is by the use of rope lashings to the side ropes attached to approved strong lashing points on deck.

The pilot ladder should be directly lashed tightly to a ring plate provided near the ship’s side for exclusive service, with no other items connected. If the full length of the ladder is not used, each of the two stopper ropes of an adequate length should be connected to a rigid structure such as the ring plate using shackles to rig the ladder firmly.

The publication ‘Pilot Ladder Safety’ (M.Armstrong, 2012) makes



Figure 1 Steel bar used to secure ladder – not SOLAS compliant

reference to three methods for securing the pilot ladder to the deck:

- Use the four extended side ropes (at least 3m) beyond the top of the ladder to secure it to adequate deck pads or cleats;
- Shorten and thimble splice two of the four suspension ropes (one on each side). The unshortened ropes are then passed through the thimbles and through the deck pads and secured with half hitches;
- A steel bar that passes through a ring on deck on each side of the ladder (Figure 1). This method must be very carefully installed and used or it will not safely secure the ladder.

This last method is frequently encountered (see photo). However, it does not appear to conform with SOLAS.

Of all the non-compliant deck securing arrangements listed in the introduction, the side ropes being shackled to deck eye pads close to the sheerstrake and without the use of lashings are most frequently encountered. Two cases are summarised below:

Case studies

On 31 May 2013, a pilot ladder failure on the MV *Wilson Leith* resulted in an injury to the pilot during disembarkation (European Maritime Safety report 140-1409). Two shackles secured the sides of the pilot ladder to the pad eyes fitted close to the sheerstrake. Before disembarkation, the pilot examined the ladder and found it to be satisfactory and well secured. The safety investigation report issued by Transport Malta concluded, among other things, that the anchoring of the pilot ladder close to the ship’s side led to abrasion and progressive weakening of the rope fibres resting over the sheerstrake and the pilot ladder was not made fast using the side ropes. The report recommended that the ship managers consider appropriate securing arrangements which prevent local deformation of the pilot ladder ropes.

On 4 August 2011, a pilot ladder parted on a Platform Supply Vessel (Figure 3) while the pilot was attempting to board (Marine Safety Forum, Safety Flash 11-29). The pilot fell backwards approximately two metres onto the deck of the pilot boat, suffering whiplash injuries which could have been more serious including fatal. Two shackles secured the sides of the pilot ladder to pad eyes close to the sheerstrake.

The findings of the investigation included, among other things, that the pilot ladder ropes were worn by contact with the sheerstrake, and no measures were in place to reduce the effect of the sharp edge of the

- **SOLAS Chapter V: Safety of navigation** – Regulation 23, Pilot Transfer arrangements. This addresses the statutory requirements for pilot transfer and pilot transfer equipment and arrangements. In general, it deals with the ship-borne side of matters and attendance on the pilot by the crew.
- **IMO Resolution A.1045(27)** – Recommendation of Pilot Transfer Arrangements. This encourages ship designers, equipment designers and manufacturers to consider all aspects of pilot transfer arrangements at an early stage in design, particularly with respect to the requirements for pilot ladder steps and accommodation ladders used in conjunction with pilot ladders.
- **ISO799**: (currently under review) – Ship and marine technology: Pilot Ladders. This document provides technical information on the construction of pilot ladders only. It is intended to supplement existing IMO requirements for pilot ladders. The tests include specific requirements for prototype testing of pilot ladders for approval.
- **MSC Circular MSC.1/Circ.1428** – This introduced the IMO Ladder Poster, “Required boarding arrangements for Pilots.” It is a guide for the correct rigging and procedure when embarking or disembarking a pilot.

- **Code of safe practice for the embarkation and disembarkation of pilots** produced by the United Kingdom Maritime Pilot Association, British Ports Association and the United Kingdom Major Ports Group. This code gives guidance to the best of safe practices and improves the management of the perceived risk.
- **Guidance for naval architects and shipyards on the provision of pilot boarding arrangements** – Produced by the International Maritime Pilots’ Association as a result of numerous enquiries from naval architects and shipyards as to the sources and standards for pilot ladder design and corresponding ship-borne fittings for rigging.
- **Shipping industry guidance on pilot transfer arrangements ensuring compliance with SOLAS** – produced by the International Maritime Pilots’ Association and the International Chamber of Shipping. It reminds seafarers and shipping companies of the vital importance of adhering to the rules and established procedures concerning the provisions of safe boarding arrangements for pilots.
- **Bridge procedures guide** produced by the International Chamber of Shipping. The guide contains a section on ‘Safe Pilot Boarding’ and also the poster ‘Required boarding arrangements for pilots’ is reproduced in the annexes.



Damaged pilot ladder on Platform Supply Vessel (Marine Safety Forum)
vessel's sheerstrake on the pilot ladder ropes.

Corrective actions included removing any sharp edges with the potential to affect pilot ladders, and the requirements contained within the IMPA 'Required boarding arrangements for pilots' poster to be re-emphasised to all relevant shipboard personnel.

Creating a safety culture

On a daily basis, pilots worldwide are confronted with pilot ladders which are dangerously unsafe, non-compliant, and secured without

due regard to the safety of the pilot's life. Through all the hard work undertaken by IMPA, a noticeable improvement has been seen, but unfortunately a large number of ships continue to arrive with equipment which does not comply with the regulations. It is also unfortunately obvious that pilots and their associations disregard the regulations which are established for their own benefit.

There is a certain amount of speculation as to which securing methods are approved and acceptable internationally by Pilots, Classification Societies, Port State Control, Auditors and IMPA. There must be a concerted effort to address this so that everyone knows what is expected.

SOLAS sets minimum standards and pilots must agree that these are applicable to their service and familiarise themselves with these standards. Pilot associations worldwide should conduct annual safety campaigns on pilot boarding arrangements. All shipping agents, owners, operators and the local pilotage authority should be advised that within the campaign dates, all ships using pilots would be expected to comply with the agreed standards. An education campaign should also be carried out on ships with deficient equipment.

After the campaign, a pilot will be faced with the most unpleasant task of refusing to use defective equipment. Deficiencies detected after boarding must be rectified before sailing and port state control informed. If this is not supported by all pilots, then there will be no improvement and many more accidents. Lives will be lost. 🇺🇸

THE SHIPMASTER'S BUSINESS SELF-EXAMINER TENTH EDITION 2016

- The fundamentals of business and law
- The latest maritime regulations and procedures
- For the day-to-day management of a commercial ship
- Includes over 4200 questions and answers



Connect with us
Find out more
Let us know what you think
#NautInst