8 Pilot Ladder Failure

The Marine Safety Forum has published Safety Flash 11-29 (attached) regarding a recent incident in which a pilot ladder parted whilst the pilot was attempting to board the vessel by means of this ladder. The pilot fell backwards onto the deck of the pilot boat and suffered injuries as a result.

Further information can be found from: www.marinesafetyforum.org/upload-files//safetyalerts/msf-safety-flash-11.29.pdf.



Marine Safety Forum – Safety Flash 11-29

Issued: 4th August 2011

Subject: PILOT LADDER INCIDENT IN ABERDEEN BAY

Introduction

A recent incident occurred on a Platform Supply Vessel where the pilot ladder on the starboard side parted whilst the pilot was attempting to board the vessel by means of this ladder. This resulted in the pilot falling backwards approximately 2 metres onto the deck of the pilot boat where he was caught by the pilot boat deckhand.

The pilot suffered whiplash injuries and the pilot boat deckhand suffered slight injuries to his neck and lower back. However, there was a high potential that this incident could have resulted in more serious injury to the pilot and pilot boat deckhand, including the possibility of fatalities.

Incident

Whilst the PSV was underway in Aberdeen Bay proceeding at approximately 5 knots in a South Westerly direction towards the entrance to the harbour, the two on duty ABs deployed the starboard pilot ladder over the vessel's side at a height of 1.5m above the water line.

The vessel then altered course by two points to starboard to create a lee for the pilot boat and the pilot boat came alongside the vessel's starboard side.

The pilot then attempted to board the vessel by means of the pilot ladder but when one foot was on the bottom of the ladder and whilst attempting to place his other foot on the ladder, the ladder parted causing the pilot to fall backwards onto the pilot boat where he was caught by the pilot boat deckhand.

Although a pilot ladder is always used for boarding a pilot, the shipboard personnel had not changed out this pilot ladder which had previously been reported as defective by one of the Aberdeen pilots and therefore this ladder remained in use for boarding the pilot.

Investigation Findings

The investigation of this incident revealed many findings including the following:-

- The pilot ladder was in poor condition and the pilot ladder ropes were worn by contact with the sheerstrake.
- There were no measures in place to reduce the effect of the sharp edge of the vessel's sheerstrake on the pilot ladder ropes.
- The wear on the pilot ladder ropes from contact with the sheerstrake was not considered as the company risk assessment process was not effectively implemented on board.
- Experience Transfer highlighting the potential hazard from the deployment of a pilot ladder over the sheerstrake was not yet issued to the fleet.
- The pilot ladder was stowed on the open deck by the pilot boarding station and was not covered and suffered deterioration from the weather.

- The pilot ladder was not adequately inspected before use and the defects in the pilot ladder were not recognised by the ABs prior to the pilot boarding.
- The shipboard personnel did not comply with the appropriate pilot boarding protocols and the requirement to have a responsible officer in attendance to supervise the pilot boarding was not followed.
- The previously reported defective pilot ladder was not removed from service and quarantined and was used for boarding the pilot.
- The company requirement to use the DocMap system for the formal reporting of defects by means of the 'property damage' or 'equipment failure' categories was not used.
- There was no unused spare pilot ladder on board and the vessel was awaiting delivery of a
 new pilot ladder although there was another available 'in service' pilot ladder rigged on the
 port side.

Damaged Pilot Ladder

Pilot Ladder Where Parting Occurred



Pilot Ladder Deployed Over Sheerstrake



Pilot Ladder In Stowed Position





-2-

Actions

A total of 14 corrective actions have been identified by the pilot ladder incident investigation which, when fully implemented, are considered to be suitable and sufficient to address all of the investigation findings helping prevent any future similar pilot ladder incidents.

In addition, a 'Pilot Ladder Questionnaire' has been developed and this has been completed by all vessels.

This questionnaire (copy attached) shall be completed for all vessels and shall be forwarded to the relevant Fleet Managers and Vessel Managers.

The purpose of the questionnaire is to obtain feedback and thereafter ensure that certain immediate actions are implemented on each vessel, namely:-

- 1. Any sharp edges with the potential to affect pilot ladders to be removed
- 2. A new and unused spare pilot ladder to be provided
- Gratings to be installed to raise pilot ladders from deck (if not stored in a dry and clean environment)
- Weather proof covers to be provided for pilot ladders (if not stored in a dry and clean environment)
- 5. Regular inspections of pilot ladders to be carried out by a competent person on board
- 6. Inspections of pilot ladders to be recorded in the TM Master planned maintenance system
- Bi-annual inspection of pilot ladders to be carried out by an independent competent person during LOLER inspections
- 'Certificates of Conformity' and 'Inspection Certificates' for pilot ladders to be maintained in a file on board
- 9. A responsible deck officer to supervise pilot boarding
- The requirements contained within the IMPA 'Required Boarding Arrangements for Pilots' poster to be re-emphasised to all relevant shipboard personnel

In addition, it has been noted that other ropes in use on board could potentially be exposed to wear and deterioration by the same means as those which affected the pilot ladder ropes.

Therefore, the actions to address the causes of the pilot ladder incident must be applied to all ropes on board which could potentially be exposed to wear and deterioration by the same means as those which affected the pilot ladder ropes.

-3-

Pilot Ladder Questionnaire

No.	Question	Yes	No	Comments
1	Can pilot ladders be affected by sharp edges			
	when in the deployed position?			
2	If yes, what has been done to prevent this?			
3	How many pilot ladders are on board?			
4	How many pilot ladders are in use?			
5	Is there a new / unused pilot ladder on board?			
6	Are any pilot ladders permanently deployed?			
7	Are pilot ladders in contact with the deck when in the stowed position?			
8	Are pilot ladders stowed on a grating above the deck?			
9	Are pilot ladders covered to offer protection from the weather?			
10	When were pilot ladders delivered on board?			
11	When were pilot ladders first brought into			
	service?			
12	How often are pilot ladders and their securing			
	arrangements inspected?			
13	Who carries out the inspections?			
14	Is this recorded?			
15	If yes, where?			
16	How often are pilot ladders inspected by an			
	independent third party?			
17	Are 'Certificates of Conformity' and			
	'Inspection Certificates' for pilot ladders			
	maintained in a file on board?			
18	Are pilot ladders inspected whilst in the			
	deployed position?			
19	Are pilot ladders always deployed at the			
- 20	same level from the upper deck?			
20 21	Who supervises pilot boarding?			
21	Is there a copy of the International Maritime			
	Pilots Association (IMPA) 'Required Boarding Arrangements for Pilots' poster displayed on			
	board?			
1	Duarus		I	

Vessel:

Completed by:

Date:

- 4 -