IMCA Safety Flash 11/11

October 2011

These flashes summarise key safety matters and incidents, allowing wider dissemination of lessons learnt from them. The information below has been provided in good faith by members and should be reviewed individually by recipients, who will determine its relevance to their own operations.

The effectiveness of the IMCA safety flash system depends on receiving reports from members in order to pass on information and avoid repeat incidents. Please consider adding the IMCA secretariat (imca@imca-int.com) to your internal distribution list for safety alerts and/or manually submitting information on specific incidents you consider may be relevant. All information will be anonymised or sanitised, as appropriate.

A number of other organisations issue safety flashes and similar documents which may be of interest to IMCA members. Where these are particularly relevant, these may be summarised or highlighted here. Links to known relevant websites are provided at www.imca-int.com/links Additional links should be submitted to webmaster@imca-int.com

1 Failure of Pressure Washer

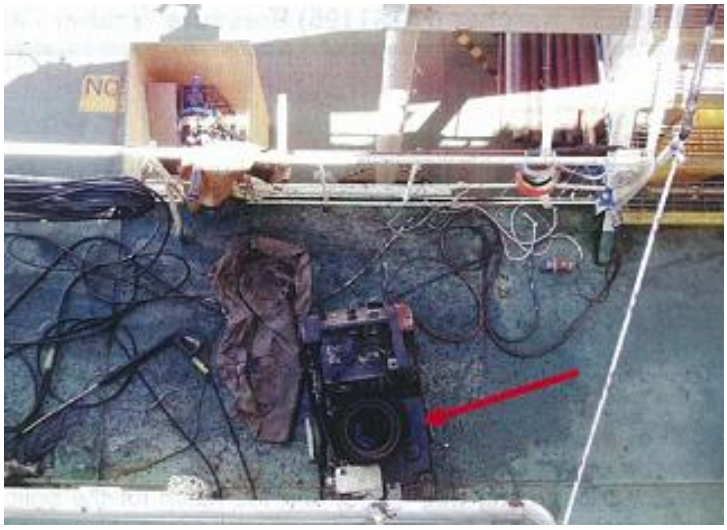
A member has reported an incident in which a Karcher HDS1195 pressure washer failed when a technician was conducting a test run after maintenance. The model involved was a portable unit designed for domestic and industrial use, and was three years old. A technician had completed the replacement of an electrical switch, and was checking that the switch was working correctly. On successful completion of the tests, the unit was powered up to ensure it was fully operational. The technician saw water emerging from the nozzle of the cleaning gun, and proceeded to shut down power to the washer. As this was done, there was a loud bang and the hatch for the boiler was blown off into the air. The technician received two small cuts to the face and minor droplet burns to the right arm.

Following investigation, the following was revealed:

- A pressure relief valve, designed to prevent system overpressure, was found to be corroded and unserviceable;
- A switch, designed to regulate the boiler, was also found to be defective. As a result, overpressure within the system caused the heating coil to rupture, and the escaping water and steam blew the hatch off the boiler unit and into the air.

The following recommendations were:

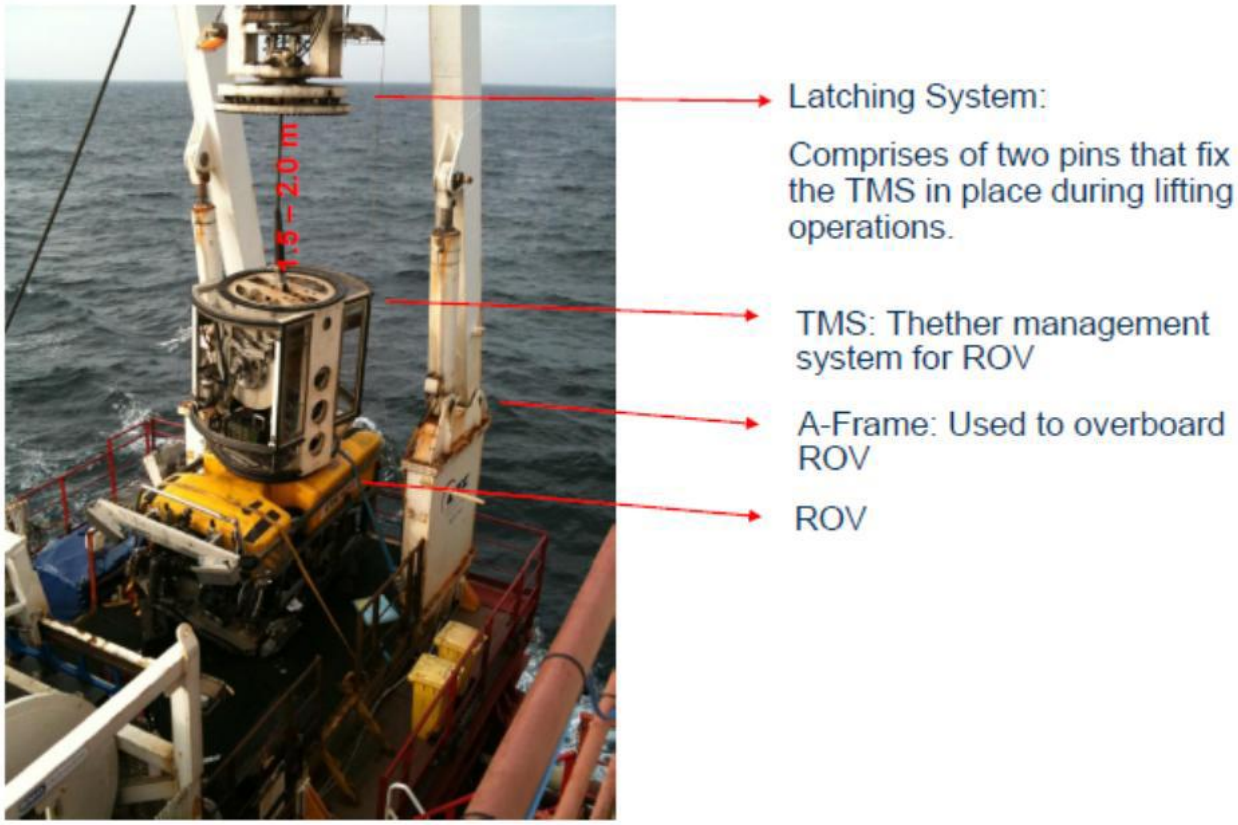
- A thorough inspection of similar portable pressure washing devices, particularly those using a heating system, would be beneficial;
- Portable pressure washing devices should be part of the planned maintenance schedule.



Pressure washer with boiler hatch missing

2 Equipment Damage – Dropped ROV/Tether Management System (TMS)

A member has reported an incident in which an ROV was dropped to the deck from between 1.5m (metres) and 2.0m, resulting in significant damage. The work-class ROV was being launched via the launch and recovery system (LARS) A-frame when the LARS operator failed to recognise that both latches were not engaged. Visual inspection had only been conducted on the aft latch. The umbilical was not managed effectively resulting in unnecessary slack which allowed the system to fall the 1.5-2m to deck.



The following corrective actions were taken and a number of recommendations were made:

- As an interim measure, an audible alarm indicator was installed to confirm and notify that the latch mechanism has been engaged. This alarm sounds for 7 seconds;
- Markers were painted on each latch to clearly identify the latch position;
- Cameras were installed to view the latch position;
- Additional communication checks were implemented and recorded;
- Task job safety analysis (JSA) was updated to reflect additional control requirements.

The following further preventative actions were undertaken:

- An engineering review of this particular system to include development of an interlock system that would prevent over boarding or recovery of ROV unless the latch mechanism was engaged;
- An engineering review of all ROV LARS operations within the company to identify opportunity for improvement and potential hazard impacts.

3 Grinding Disc with Defects

A member has reported an incident in which a welder discovered a defect in a new grinding disc. When grinding, the defect could have resulted in the disc cracking leading to possible serious injury or damage. The defect seemed to be a disc steel inner ring that had melted into the disc during fabrication.

It was noted that safe grinding starts and ends with a visual inspection of the grinding equipment. The welder followed recommended process and identified a defective disc before it was used.

Iron ring melted into the disc

Top side of grinding disc with no marks of defect

4 Gas Detector Safety Alert

The UK Health and Safety Executive (HSE) has issued an alert relating to gas detectors, following investigations by the UK HSE into the Status Scientific Controls portable gas detector type Mentor PGD2. It has been discovered that in certain circumstances these instruments could continue to remain active when there is insufficient battery power for them to work accurately.

Further information can be found from www.hse.gov.uk/safetybulletins/gasdetectors.htm

5 Collision Between OSV and Barge

The Australian Transport Safety Board (ASTB) has published a report into a collision in port between an OSV and a barge. Both vessels suffered minor damage as a result of the collision but there were no injuries or pollution.

Further information can be found from www.atsb.gov.au/media/3442445/mo2010006.pdf

6 Oil Spill in Port whilst Discharging Waste Oil

The Marine Safety Forum has published Safety Flash 11-26 (attached) regarding an oil spill in port which occurred whilst a vessel was discharging waste oil. The root causes of the incident were considered to be a failure to follow established procedures.

Further information can be found from www.marinesafetyforum.org/upload-files//safetyalerts/msf-safety-flash-11.26.pdf

MSF marine safety forum

Marine Safety Forum – Safety Flash 11-26

Issued: 13th July 2011

Subject: Oil Spill in Port whilst Discharging Waste Oil

A recent incident highlighted a complete breakdown in procedure.

- The vessel was involved in the discharging of waste oil to a barge, the operation commenced at 0825 hrs using the port side waste oil connection.
- At 0850 hrs the pumping of waste oil was stopped to facilitate a crew change.
- The joining 2nd Engineer was informed during handover that everything was lined up and that the pumping of waste oil could be resumed when he was ready.
- After the pumping had been stopped the off signing Chief Engineer instructed the Motor man who was watching the hose on deck to remove the vent plug from the starboard side connection to de pressurise the line – this information was not passed on to the joining 2nd Engineer.

Starboard Waste Oil Connection

- At 0940 hrs the 2nd Engineer checked with the barge if it was ok to resume pumping and the pump was restarted.
- At 0955 hrs the Motor man heard a noise from the starboard side and noticed waste oil spraying out from the starboard connection. The motor man immediately stopped the pump using the Emergency Stop.
- Approximately 20 litres was spilt on the vessels deck with one litre going over the side into the water.

Contributory Factors as follows:

- No check list was in use prior to commencing discharge of waste oil
- During the handover all the relevant information was not passed on.
- The joining crew did not use a check list before resuming operations.
- The scupper plug under the waste oil saveall was not in place
- The unused (stbd.) connection was not properly capped with the valve closed.
- A secondary check of the lines after resuming discharge of waste oil would have indicated the starboard connection was leaking
- Company procedures were not adhered to.
- Poor Communication
- No evidence of a checklist being used for waste oil discharge since early 2010.

All personnel are reminded to ensure that Company Procedures are followed at all times. The use of a checklist would have prevented this incident from occurring. This incident also highlights the importance of a proper handover whether during crew change or change of watch.

7 Fire Extinguisher Recall – Faulty Equipment

The Marine Safety Forum has published Safety Flash 11-27 (attached) regarding faulty fire extinguisher equipment.

Further information can be found from www.marinesafetyforum.org/upload-files//safetyalerts/msf-safety-flash-11.27.pdf.

Marine Safety Forum – Safety Flash 11-27

Classification News

July 7, 2011 No. 14/2011

Safety alert	**Faulty safety equipment – 2kg and 5kg aluminium CO_2 fire extinguishers manufactured between 2006 and April 2011**
Applicability	All shipbuilders, owners and operators
Information	TOTAL, a manufacturer of portable CO_2 fire extinguishers has contacted Lloyds Register to advise that faulty extinguishers have been identified in service. In a small number of cases the valve has failed and released unexpectedly. This has the potential to cause serious injury as the valves may be ejected at high speed. We have been further advised that, although these extinguishers were primarily used on land, a number have been supplied to the marine industry. The affected extinguishers are 2kg and 5kg CO_2 aluminium cylinders and were manufactured between 2006 and April 2011. The screw thread on the valve cannot be seen. The following brands are affected: • TOTAL - Classic K2A, Classic K5 • COSMOS - COSMOS K5 • Hansa • Hoenig • IDS • Neuruppin • Optimal • NWT • Stoll-Luxemburg • Waßmann Due to the possibility of the valves failing and causing injury, the affected extinguishers must not be touched or moved. Owners and operators must identify any possibly affected extinguishers on board their vessels and contact the manufacturer for advice **immediately**. TOTAL has provided a product notice, issued with this Classification News, to help clients identify affected equipment.

IMPORTANT PRODUCT NOTICE – 2 KG AND 5 KG CO_2 ALUMINIUM FIRE EXTINGUISHERS MANUFACTURED BETWEEN 2006 AND APRIL 2011

How to identify affected extinguishers!

Tyco has been made aware of an extremely small number of incidents where stress corrosion cracking appears to have caused the valve to fail. This has resulted in the valve being released unexpectedly. Tyco has learned that these valves, purchased by Tyco from a supplier, did not meet the supplier's specifications.

The risk of an incident is extremely small, but it may increase if the extinguishers are handled without our instructions. In rare occasions the valves may be ejected under high speed and cause serious injuries.

The safety of our customers and employees is our upmost priority and as a precaution, we must ask you not to service these fire extinguishers.
Do not use, service and/or move the affected extinguishers in any way and, following standard safety practices, do not lean directly over the head of the extinguisher.

1 Brands
Affected fire extinguishers will be branded **TOTAL**, COSMOS, Hansa, Hoenig, IBS, Neuruppin, Optimal, NWF, Stoll Luxemburg or Waßmann.

2 Capacity and extinguishant: CO_2
CO_2 extinguishers with 2 kg or 5 kg capacity containers.
Only CO_2 fire extinguishers are affected.

3 Type
The following markings are visible on the sticker of affected extinguishers (valid only for TOTAL and COSMOS extinguisher): TOTAL Classic **K 2 A**, TOTAL Classic **K 5**, COSMOS K 5. However products from other companies can be marked in other ways and use other names.
NOT AFFECTED ARE TOTAL TYPES: K 2 SE, K 2 i, K 2 g, K 2 c, K 5 SE, K 5 i, K 5 g, K 5 c

4 Valve
The valve looks the same on 2 kg and on 5 kg extinguishers.
The screw thread cannot be seen.

5 Aluminium
Only aluminium cylinders are affected.
Steel canisters are not affected. Perform an magnetic test to check what your cylinders are made from.

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Sicherheit und Feuerschutz
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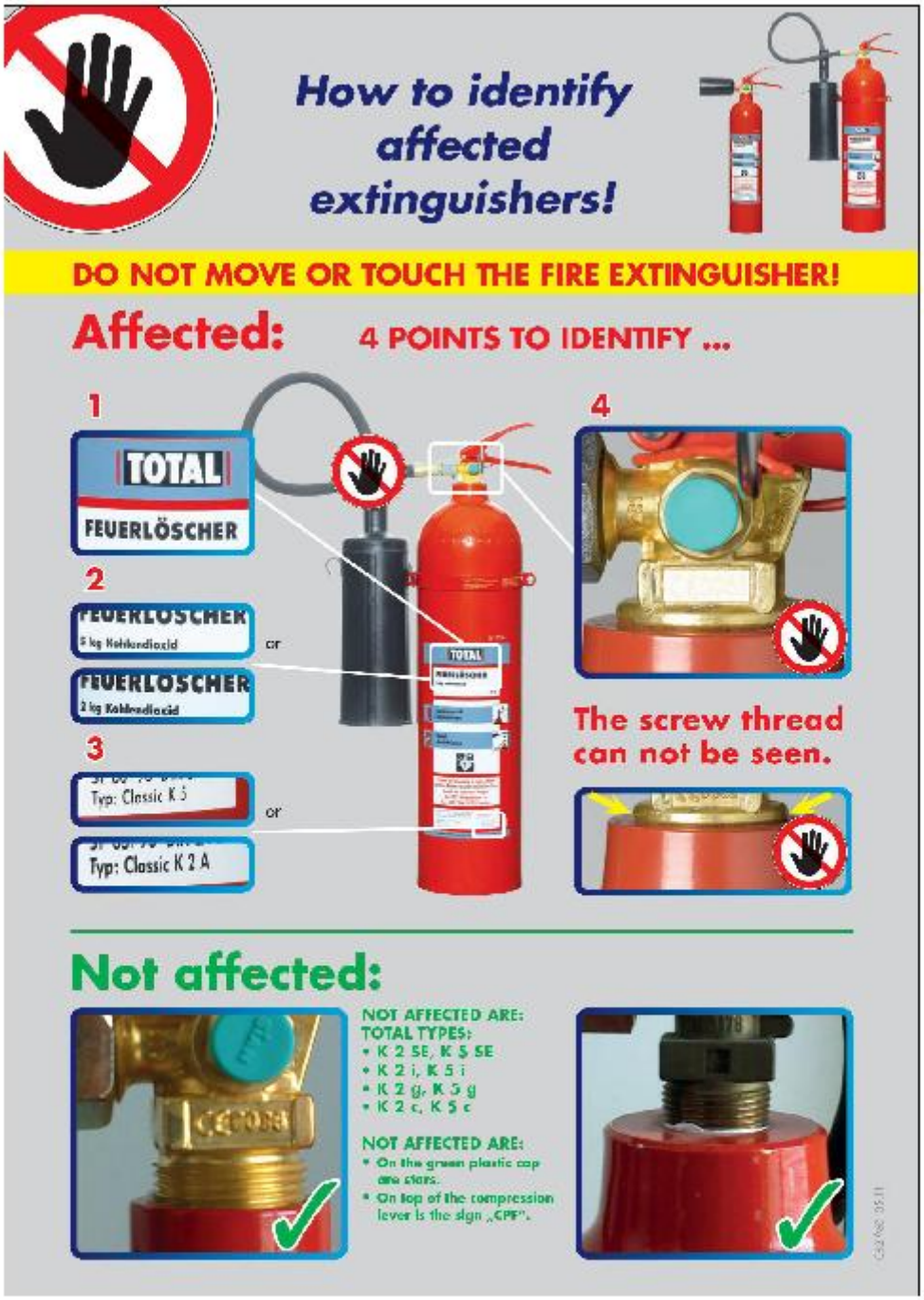
How to identify affected extinguishers!
DO NOT MOVE OR TOUCH THE FIRE EXTINGUISHER!
Affected:
4 POINTS TO IDENTIFY ...
1
TOTAL
FEUERLÖSCHER
2
FEUERLÖSCHER
5 kg Kohlendioxid
or
FEUERLÖSCHER
2 kg Kohlendioxid
3
Typ: Classic K 5
or
Typ: Classic K 2 A
4
The screw thread can not be seen.
Not affected:
NOT AFFECTED ARE:
TOTAL TYPES:
• K 2 SE, K 5 SE
• K 2 i, K 5 i
• K 2 g, K 5 g
• K 2 c, K 5 c
NOT AFFECTED ARE:
• On the green plastic cap are stars.
• On top of the compression lever is the sign „CPF".

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

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
3. Gratings to be installed to raise pilot ladders from deck (if not stored in a dry and clean environment)
4. 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
7. Bi-annual inspection of pilot ladders to be carried out by an independent competent person during LOLER inspections
8. '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
10. 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.

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 same level from the upper deck?			
20	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?			

Vessel: **Completed by:** **Date:**