PILOT LADDER REQUIREMENTS AND GUIDANCE
Introduction

Peel Ports Group consider the safety of its personnel and those who work within the Clydeport Harbour area, as their number one priority. Every organisation, company and individual has a collective responsibility to ensure that risks are identified and mitigated, with robust procedures and practices properly supervised.

The International Maritime Pilots Association (IMPA) recently conducted a safety campaign to identify some of the issues with pilot ladders and associated equipment. From the European area, over 16% of all ships inspected had non-compliant pilot ladders. A precis of their findings is shown below:

<table>
<thead>
<tr>
<th>DEFECTS OF PILOT LADDER</th>
<th>TOTAL</th>
<th>AS %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not against ship’s hull</td>
<td>52</td>
<td>13.3</td>
</tr>
<tr>
<td>Steps not of suitable material</td>
<td>11</td>
<td>2.81</td>
</tr>
<tr>
<td>Poorly rigged retrieval line</td>
<td>61</td>
<td>15.6</td>
</tr>
<tr>
<td>Steps broken</td>
<td>8</td>
<td>2.05</td>
</tr>
<tr>
<td>Steps not equally spaced</td>
<td>18</td>
<td>4.6</td>
</tr>
<tr>
<td>Pilot Ladder more than 9 metres</td>
<td>7</td>
<td>1.79</td>
</tr>
<tr>
<td>Steps dirty/slippy</td>
<td>14</td>
<td>3.58</td>
</tr>
<tr>
<td>Sideropes not of suitable material</td>
<td>7</td>
<td>1.79</td>
</tr>
<tr>
<td>Pilot Ladder too far forward/Aft</td>
<td>12</td>
<td>3.07</td>
</tr>
<tr>
<td>Steps painted</td>
<td>3</td>
<td>0.77</td>
</tr>
<tr>
<td>Incorrect step fittings</td>
<td>20</td>
<td>5.12</td>
</tr>
<tr>
<td>No bulwark ladder</td>
<td>6</td>
<td>1.53</td>
</tr>
<tr>
<td>Steps not horizontal</td>
<td>68</td>
<td>17.39</td>
</tr>
<tr>
<td>Other</td>
<td>104</td>
<td>26.5</td>
</tr>
<tr>
<td>TOTAL</td>
<td>391</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DEFECTS OF BULWARK / DECK</th>
<th>TOTAL</th>
<th>AS %</th>
</tr>
</thead>
<tbody>
<tr>
<td>No faulty handheld stanchions</td>
<td>49</td>
<td>41.88</td>
</tr>
<tr>
<td>Ladder not secured properly</td>
<td>57</td>
<td>48.72</td>
</tr>
<tr>
<td>Other</td>
<td>11</td>
<td>9.4</td>
</tr>
<tr>
<td>TOTAL</td>
<td>117</td>
<td></td>
</tr>
</tbody>
</table>
Required Boarding Arrangements for Clydeport Pilots

The IMPA have produced the following well-recognised poster following the SOLAS Regulation V/23 and IMO Resolution A.1045(27) agreements for Ship Owners, Operators, Master’s and crew to follow:

To emphasise this poster and Clydeport Harbour Authority requirements, the detail of boarding arrangements are broken down on the following pages:

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<tr>
<th>Page</th>
<th>Topic</th>
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</thead>
<tbody>
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<td>Rigging for Freeboards of 9 metres of less.</td>
</tr>
<tr>
<td>5</td>
<td>Securing arrangements on deck.</td>
</tr>
<tr>
<td>7</td>
<td>Combination arrangement for ships with a freeboard of more than 9 metres (when no side door available)</td>
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<tr>
<td>8</td>
<td>Safe rigging of retrieval lines.</td>
</tr>
<tr>
<td>9</td>
<td>Use of Pilot Ladder winch reel.</td>
</tr>
<tr>
<td>10</td>
<td>Use of ship’s side doors.</td>
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</table>
Rigging for Freeboards of 9 metres or less.

HANDHOLD STANCHIONS
Min. Diam. 32mm
Min.120cm
Above Bulwark

Handholds
Min. 76cm
Max. 80cm

MAN-ROPES (without knots)
Min. Diam. 28mm
Max. Diam. 32mm
IF REQUIRED BY THE PILOT

SPREADER
Min. 180cm Long

SIDE ROPES
Min. Diam. 18mm

MAXIMUM 9 STEPS Between spreaders

ALL STEPS Must rest firmly against ship’s side

31-35 cm

5th STEP From bottom must be a spreader

6 METRES unobstructed ship’s side

Height Required by Pilot

PILOT

June 2019
Securing Arrangements on the deck

Checklist

- Lifebuoy with self-igniting light;
- Bulwark and Pilot ladder secured to deck strong points (welded in, tested, deck eyes);
- Rigidly secured to deck handhold stanchions;
- Rope work in good condition (not frayed or contaminated with oil and greases);
- Supervisor/Responsible Officer in communication with the bridge;
- If requested; heaving line to embark/disembark pilot's bag and equipment;
- Good lighting on the pilot embarkation area.
Securing Arrangements on the deck

The weight of the ladder should be transferred to the ship structure through the ladder side ropes. The pilot ladder should be secured to a **CERTIFIED STRONG POINT** and any shackles or securing ropes should have a breaking strength of at least 24KN.
Combination Arrangements for ships with a freeboard of more than 9 metres (when no side door available)

Checklist

- The ladder should continue 2m above the lower platform of the gangway.
- Ladder must be firmly attached to ship’s side 1.5m above the accommodation platform.
- The bottom platform of the accommodation ladder should be horizontal.
- The accommodation ladder should be secured to the ships side.
- The lower platform shall be a minimum of 5 metres above the sea.
- The Pilot ladder requires a climb of not less than 1.5m and no more than 9 metres.
Safe Rigging of Retrieval Lines
(sometimes called tripping lines)

IMO Resolution A.1045(27) 2.1.5

When a retrieval line is considered necessary to ensure the safe rigging of a pilot ladder, the line should be fastened at or above the last spreader step and should lead forward. The retrieval line should not hinder the pilot or obstruct the safe approach of the pilot boat.
Use of Pilot Ladder Winch Reel

Upper deck arrangement:

Side Door or Between Deck arrangement:
Use of Ship’s side doors

- Minimum Clearance: 220 cm
- Handholds: Min. 70 cm, Max. 80 cm
- Minimum: 91.5 cm

Ship’s side doors used for transfer should not open outward.
Unacceptable Pilot Ladder rigging and practices

There can be many potential defects with a pilot ladder. Below are a number of prohibited practices/defects which will result in a Clydeport pilot refusing to board or disembark the vessel:
Below are some incidents that will not be tolerated in the Clydeport Harbour area. Clydeport Pilots will refuse to board vessels with defective or incorrectly rigged pilot boarding arrangements, and vessels will be diverted outside pilotage waters until correct pilot boarding arrangements, in accordance with SOLAS regulation V/23 and IMO Resolution A.1045(27), have been met. **THE ADDITIONAL PILOT CANCELLATION AND BOARDING AND LANDING FEES WILL BE APPLIED IN ALL CASES.**

In the above picture the pilot ladder is situated too far aft. The pilot boat would sit in the cut-away of the hull (also note that the tripping line is rigged too low).
There aren’t many things correct with this ladder. How many issues can you see?
No lifebuoy with light. No Officer in communication with the bridge.

Ladder should not lead over the ship’s rails.

Ladder secured to the uncertified ship’s rails

Spreader and bitt’s are a trip hazard.

Duct tape used to cover chocks.

Ladder not flat against the ships side.

Step damaged and not made of rubber.

Overboard discharge is sited at this pilot embarkation point.
The weight of the ladder is held by the shackles.

The seizing on the spreader has obviously parted. 1 man rope too far away to be any use.
Diagrams of incorrectly rigged Retrieval Lines (sometimes called tripping lines)

Could interfere with the Pilot embarking/disembarking the ladder.
Could become snagged when the cutter is alongside.
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Could become snagged when the cutter is alongside.
Ineffective as secured in the aft position of the vessel.
Ineffective as secured in the aft position of the vessel.

**Vessel Master’s Responsibility.**

The Master of the vessel being boarded must ensure that his crew have correctly rigged the pilot boarding arrangements in accordance with SOLAS regulation V/23 and IMO Resolution A.1045(27); equipment is certified, in date for tests and is fit for purpose.

**Cutter Crew and Pilot Responsibility.**

Good observation and checking of the pilot ladder can save lives.

If there is any doubt, the pilot should not board until you and the pilot are satisfied that the ladder appears to be correctly rigged.
REFERENCES

SOLAS regulation V/23

IMO Resolution A.1045(27)

Code of safe working practices for merchant seafarers (COSWP) 2018
