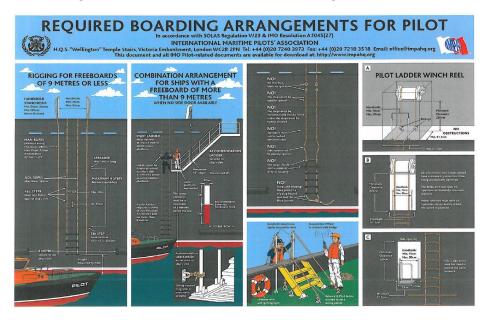
PILOT LADDER POSTER

The well known pilot ladder poster is displayed on the bridge of every ship nowadays. Often another copy of the poster is displayed at the pilot boarding point. Crews rather use this poster to install the pilot boarding arrangement than reading another set of rules and regulations, after all a picture tells us more than a 1000 words.

In this article I would like to share my thoughts on this pilot ladder poster. Is it as good as we think or is there room for improvement? By taking you through this poster step by step I hope to explain what needs to be changed to make it similar to IMO an SOLAS regulations.



Pilot ladder poster issued by IMPA

I will tick of a number of improvements and get into a very important issue more extensively.

Combination arrangement section:

- pilot steps up from the ladder to the platform, where he should step only sideways.
- Pilot mark has been placed in the wrong position with the result some ship's do the same thing.
- Someone on the platform welcoming the pilot. The only place where this is mentioned is on the poster, nowhere else. Imho he could better stay on board instead of taking risks.
- Gangway is secured tot he hull by means of rope, a magnet is also allowed. Similar for the ladder: secured by magnets, but rope is also allowed.

Bulwark section:

• Pilot ladder without thimble eyes at the top end, secured with a wrong knot, similar for the sideropes.

Figure A,B and C:

 Drawing suggests pad eyes are the only solution to guide the ladder from vertical to horizontal, as we know more ways are possible.

- IMO A.1045(27) states in 7.4.2: "The pilot ladder shoud be secured to a strongpoint, independent of the pilot ladder winch reel". Not the case in any of the 3 figures
- IMO A.1045(27) states is 7.4.3:"the pilot ladder should be secured at deck level inside the ship opening or, when located on the ship's upper deck at a distance of not less than 915 mm measured horizontally from the ship's side inwards". Not the case or made clear in any of the 3 figures
- In figure C, the ladder is not secured to the ship's hull 1,5m above the platform as required.

Let's now focus on the most dangerous remark on the poster, the 9 m freeboard....

In the combination section is printed: "a pilot ladder requires a climb of not less than 1,5m and not more than 9m."

This suggests that a pilot is allowed to climb a 9m ladder despite the required height above the water. Should, as for example, the pilot boat require the ladder to be rigged at a height of 3.5 meters above the water as we do in our region when we get boarded by swath, this would mean an additional climb of 9 meters would be allowed, wich makes 12,5 meters in total. Absolutely dangerous as the table below explains.

SOLAS ch. V reg.23 tells us very clearly in 3.3.1: a pilot ladder requiring a climb of not less than 1.5 m and not more than 9 m **above the surface of the water so positioned and secured that.....**

This is quite different than the maximum climb of 9 meters the pilot ladder poster mentions. People have died falling from heights. Dropping from a height of more than 9 m will most certainly result into fatal injuries. Falling from lesser heights gives you a chance of survival. The table below in which I put dropping height in relation to speed illustrates this. Dropping from a height of even 3m will result in a final dropping speed of almost 28 km/h before you'll hit the deck...from 10 meters even 50km/h, like driving into a wall...

| height in m | speed in km/h |
|-------------|---------------|
| 1 | 15,94 |
| 2 | 22,54 |
| 3 | 27,61 |
| 4 | 31,88 |
| 5 | 35,64 |
| 6 | 39,04 |
| 7 | 42,17 |
| 8 | 45,08 |
| 9 | 47,81 |
| 10 | 50,4 |
| 15 | 61,73 |
| 20 | 71,28 |

As you can see, gravity pulls hard on us....

All together it shall be clear that the poster is a very good asset to give a general idea, but it must be correct and similar to IMO and SOLAS rules, therefore an update is required.

Arie Palmers

Reg. Pilot