

## GREAT LAKES REGION

### BOARDING ARRANGEMENTS FOR PILOTS

All ships must have pilot transfer equipment and arrangements that are compliant with section 74 of the Transport Canada, Marine Safety, *Navigation Safety Regulations*, the IMO Convention for *Safety of Life at Sea* (SOLAS Chapter V, Regulation 23) and the annex to IMO Resolution A.1045(27), *Pilot Transfer Arrangements*.

Subsection 74(4) of the Transport Canada, Marine Safety, *Navigation Safety Regulations* stipulate the following:

*In the case of a Canadian ship in the waters of the Great Lakes or St. Lawrence River, if the distance from the water to the point of access of the ship is more than five metres, the ship shall provide an accommodation ladder, or other equipment that provides equally safe and convenient access to and egress from the ship, so that the climb on the pilot ladder does not exceed five metres.*

A pilot ladder must be rigged within the parallel body length of the ship and, as far as is practicable, within the midship half-length of the ship.

#### **1. Rigging of pilot ladders for freeboards of 9 meters or less (International ships) or 5 metres or less (Canadian ships):**

- The steps of a pilot ladder are generally made of hardwood and should be made in one piece, free of knots or any irregularities. It should be free of any sharp edges;
- The steps should be horizontal and should rest firmly against the ship's side;
- The last four steps of the pilot ladder should be made of rubber as they are vulnerable to failure on being squeezed between the ship's side and the pilot boat. The 5<sup>th</sup> step from bottom must be a spreader. The spreader prevents the pilot ladder from twisting. It should be minimum 180 cm. long. Maximum 9 steps are allowed between two spreaders. The spreaders should not be lashed between the steps;
- The surface of the steps must provide a safe and slip resistant foothold. Use of ordinary paints resulting in slippery surfaces should be prohibited;
- Two continuous side ropes of minimum 18 mm in diameter should run on either side of the ladder. These are Manila ropes. The gap between the side ropes should not be less than 40 cm. The steps should be 115 mm wide and 25 mm in depth. The steps are equally spaced and the distance between each step should not be more than 35 cm or less than 31 cm;
- The pilot ladder should be permanently marked at regular intervals so that it can be rigged to the required height without any difficulty;

- Two man ropes should be kept at hand ready for immediate use. The diameter of man-ropes should not be less than 28 mm. It is for use at the request of the pilot(s);
- The distance between the sea level and the lower end of the pilot ladder depends on the size of the pilot boat being used. This is decided by the pilot. The officer in charge should confirm beforehand rigging the pilot ladder. In no case shall the lower end of the pilot ladder become awash in the water;
- The head of the pilot ladder should be rigidly secured to the deck. Adequate handholds should be provided to ensure safe and convenient passage from the head of the pilot ladder and the ship's deck. These handholds should be minimum 70 cm and maximum 80 cm apart.

**2. Combination arrangement for ships with a freeboard of more than 9 meters (International ships) or of more than 5 metres (Canadian ships):**

- The accommodation ladder should be sited leading aft so that the pilot boat does not get in below the accommodation ladder when the ship is proceeding forward;
- The accommodation ladder should be secured to the ship's side;
- The angle of slope of the accommodation ladder used in conjunction with the pilot ladder shall never exceed 45 degrees;
- The lower platform of the accommodation ladder shall be so adjusted that it is in a horizontal position. It should be at a minimum of 5 m above the sea level;
- The platform and the ladder should be equipped with stanchions and should be fitted with suitable fencing preferably rigid handrails or hand rope for safe access;
- The pilot ladder should be rigged adjacent to the lower platform of the accommodation ladder and should extend at least 2 m above the lower platform;
- The pilot ladder must be firmly attached to the ship's side 1.5 m above the accommodation platform;
- It is recommended that a 9 m mark (or 5 metres mark) be indicated so that the pilot can readily find whether the distance from the sea level to the point of access exceeds 9 m (5 m) or not.

3. **Combination arrangement for ships with a freeboard of more than 9 meters (International ships) or of more than 5 metres (Canadian ships) using an accommodation ladder that involves a trapdoor in the platform of the accommodation ladder with the pilot ladder hanging from a cross beam near the bottom of the platform and with the top step of the ladder hanging from a cross beam near the bottom of the platform, and with the top step of the ladder significantly below the level of the platform:**



This type of arrangement requires a pilot to pull himself or herself up through the trapdoor while twisting to get a secure footing on the platform. This trapdoor arrangement is currently found on a number of ships with accommodation ladder-pilot ladder combinations, despite the facts that it has long been considered by pilots to be unsafe and that the IMO has recognized that it is unsafe by taking steps to eliminate it.

Since at least 1979, IMO guidelines have recommended that pilot ladders used with a trapdoor extend to the height of the platform's handrail. The purpose of that recommended practice is to bring the ladder steps up to a level from which the pilot can step across to the platform rather than pull himself or herself up to it.

To address the pilot ladder-platform transition issue, Regulation 23 specifies that a pilot ladder "shall be rigged through the trapdoor and extend to the height of the handrail" (V/23.3.3.2.1) and, in addition, "means shall be provided to secure the lower platform of the accommodation ladder to the ship's side, so as to ensure that the lower end of the accommodation ladder and the lower platform are held firmly against the ship's side." (V/23.3.3.2).

Similarly, Resolution A.1045 provides that when a trapdoor is used in a combination arrangement, "the pilot ladder should extend above the lower platform to the height of the handrail and remain in alignment with and against the ship's side." (A.1045, paragraph 3.7).

Ships with a trapdoor arrangement are to bring their arrangements into compliance with the current IMO standards in order to avoid potential disruptions to ship schedules and port operations. Ships can either:

- (1) switch to the more traditional system of a pilot ladder hung from the ship's deck, positioned adjacent to the accommodation ladder platform, and secured to the ship's hull at a point nominally 1.5 m above the platform; or
- (2) ensure that the trapdoor arrangement meets the following IMO standards:
  - a) pilot ladder rigged through the trapdoor extending above the platform to the height of the handrail;
  - b) lower platform of accommodation ladder secured to the ship's side, so as to ensure that the lower end of the accommodation and the lower platform are held firmly against the ship's side; and
  - c) pilot ladder remains against the ship's side.

## **Precautions to be taken during embarkation and disembarkation of pilots**

- The access area shall be kept free and clear at all times and can also be marked with permanent signs;
- The pilot ladder should be checked after it is rigged preliminary to ensure it is properly secured to the ship;
- The duty officer should closely monitor continuously and observe the pilot all the time while he is on the ladder. He/she should always remain in contact with the bridge via hand held radio communication, report every event, and inform the bridge once the pilot has safely arrived onboard;
- A canvas bag or net and a rope should be kept ready at the embarkation position to hoist aboard any baggage the pilot might have with him/her;
- A pilot dedicated lifebuoy with water actuated automatic light and lifeline should be readily available;
- If a retrieval line is being used, care should be taken that it does not hinder the pilot nor obstruct the safe approach of the pilot boat;
- At night, the access area should be well illuminated to facilitate safe boarding and disembarking;
- Periodic inspection of the boarding arrangement, especially the pilot ladder should be an ongoing process and should be inculcated into the planned maintenance system onboard ships;
- Each pilot ladder, accommodation ladder and its associated equipment's should be properly checked and stowed after every use;
- Ropes should also be checked for any kind of deterioration;
- A spare pilot ladder should always be available onboard;
- The recommended practice is the use of a pilot ladder. Pilot ladders remain the most efficient way for pilots to board ships. The transfer of a pilot between pilot boat and ship is a significant risk that needs to be carefully managed.

## **Shipping companies should ensure that:**

- Pilot ladders and pilot ladders/accommodation ladders arrangements are SOLAS compliant;
- The inspection regime and records are adequate;
- Replacement ladders are quickly and readily available on board;
- Seafarers involved receive the necessary training and have full understanding of the requirements.

**The Master and officers should:**

- Closely supervise the rigging of pilot ladders and pilot ladder/accommodation ladder arrangements;
- Closely observe the shipping/landing of pilots from ladders, ensuring that SOLAS requirements are met;
- Maintain a lee until the pilot boat is well clear.

Pilots have the right to decline to board ships offering defective pilot ladders or pilot ladder/accommodation ladder arrangements, which can result in serious delay.

Pilots are also entitled to report defects in boarding ladders to Port State Control authorities, which could lead to a full Port State Control inspection with the risk of delay and financial penalties.

# REQUIRED BOARDING ARRANGEMENTS FOR PILOT



INTERNATIONAL MARITIME ORGANIZATION

In accordance with SOLAS Regulation V/23 & IMO Resolution A.1045(27)

INTERNATIONAL MARITIME PILOTS' ASSOCIATION

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