

Providing safe access to vessels is important for personal safety

During a vessel's port stay, many different people such as pilots, agents, inspectors, and tankermen require access to the vessel. It is important that gangway, brow, or ladder access points are strong, stable, clean, and well-lit to avoid potential injuries.

Accidents that occur while accessing a vessel can result in serious injuries and loss of life. Commercial ships in U.S. ports must meet local port and terminal agreements regarding safe access. However, several safety issues have been observed in spite of the agreements. Those issues include:

- Poorly secured and badly positioned gangway netting.
- Loose and unstable handrails.
- Vertical ladders that are not secured or attended at the top and/or bottom.
- Inadequate lighting.
- Oily or slick ladder treads or gangway.
- Makeshift wooden planks for access between side-by-side vessels.

Legal requirements for access during bunker and oil transfer operations

Washington State rules that address the requirements for safe access to vessels are:

- Washington Administrative Code (WAC) 173-180 [Facility Oil Handling Standards]
- WAC 317-40 [Bunkering Operations]

For the full description of these rules, go to the Washington State Legislature website at <http://apps.leg.wa.gov/wac/>.

For regulated oil transfers, WAC 173-180-225 requires Class 1 facilities (refineries, pipelines, or refueling terminals) and Class 3 facilities (small tank farms and terminals that transfer to non-tank vessels with a capacity of 10,500 gallons or more) provide safe access for personnel if the vessel cannot provide the safe access.

WHY IT MATTERS

Personnel injuries and accidents, including loss of life, have occurred because the access to the vessel was unsafe. Understanding what arrangements are safe and acceptable and what is not can prevent future accidents.

Contact information:

Washington Dept. of Ecology
Spill Prevention,
Preparedness, and Response
Program
Spill Prevention Section
PO Box 47600
Olympia, WA 98504-7600
Phone: 360-407-7455
Fax: 360-407-7288

Document Approval:

Department of Ecology requested and received approval from West of England Insurance Services and the International Maritime Pilots' Association to use the diagrams on pages two and four (via email on 3/12/09).

Special accommodations:

If you need this publication in an alternate format, call the Spills Program at 360-407-7455. Persons with hearing loss, call 711 for Washington Relay Service. Persons with a speech disability, call 877-833-6341.

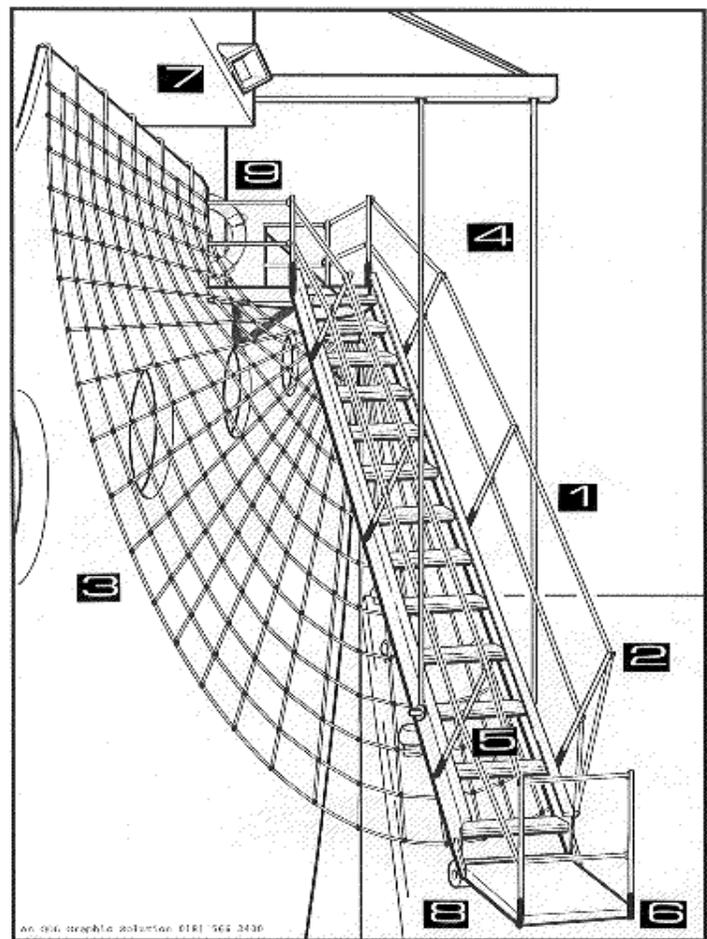
- Access must be secured at both top and the bottom to prevent movement of the access platform.
- The entire ladder and where it is accessed from the vessel and facility must be well lit during low light or low visibility conditions.

For **bunkering operations**, WAC 317-40-050 requires a receiving vessel to have an accommodation ladder between the vessel and facility or to another vessel. If the ladder is inaccessible, another means of access that meets the International Convention for the Safety of Life at Sea (SOLAS), such as a Pilot's ladder, can be used instead. If the vessel master determines access is not safe due to weather or seastate, the master may allow communication either visually, by voice, sound-powered phones, radio, or air horn as required under 33 C.F.R. Sec. 155.785. The International Maritime Organization's "Required Arrangements for Pilots" diagram is included on page 4.

Example of **PROPER ACCESS** to a vessel

The following recommendations and illustration are provided by the West of England P&I Club.

1. Rope guardrails tight.
2. Stanchions free of distortion and all in place.
3. Safety net positioned between ladder and ship.
4. Hoisting arrangements clear of head height.
5. Steps free of oil, grease and ice.
6. Bottom platform level (where fitted).
7. Lighting arrangements positioned effectively.
8. Base clear of obstructions.
9. Lifebuoy with light/line with float available.

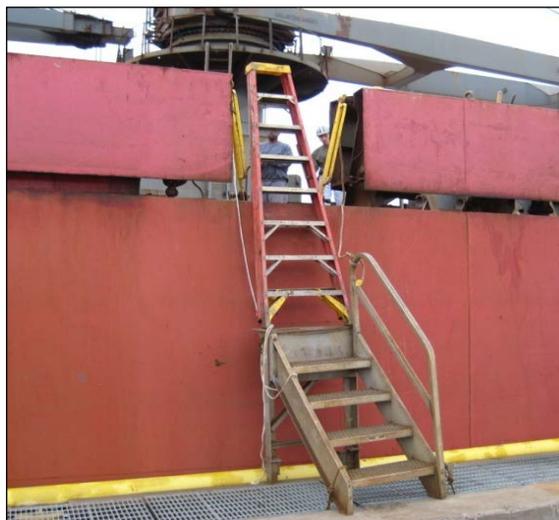


Safety Management System (SMS)

The use, care and regular maintenance of access systems require a high level of attention to ensure safe operation. Therefore, these processes should be incorporated into a vessel operator's Safety Management System (SMS) or a facility's operations manual or standard operating procedures.

Examples of UNSAFE vessel access

This is a 10-meter [nearly vertical] climb and the ladder is not safely secured at the top or bottom.



It is impossible to safely secure the upper ladder to the short platform ladder - it is not safe access.



Laying down wooden planks to span the open gap between the gangway and the deck does not ensure safe access.



The net needs to be pulled out under the gangway to prevent a fall.

More information is available at:

Occupational Safety & Health Administration - Access to Vessels

www.osha.gov/SLTC/etools/shipyard/standard/access/vessels.html

Accidents related to gangway and ramp failures

www.osha.gov/dts/maritime/sltc/longshoring/section2/summary7.html

www.osha.gov/dts/maritime/sltc/longshoring/section2/summary5.html

REQUIRED BOARDING ARRANGEMENTS FOR PILOT

In accordance with I.M.O. requirements and I.M.P.A. recommendations

INTERNATIONAL MARITIME PILOTS' ASSOCIATION

H.Q.S "Wellington", Temple Stairs, Victoria Embankment, London WC2R 2PN Tel: +44 20 7240 3973 Fax: +44 20 7240 3518

RIGGING FOR FREEBOARDS OF 9 METRES OR LESS

HANDHOLD STANCHIONS
Min. diam. 32mm
120cm above bulwark
min. 70cm max. 80cm apart

MAN-ROPEs without knots
min. diam. 28mm
IF REQUIRED BY PILOT

SPREADER
Min. 180cm long

Max. 8 steps between spreaders

Min. 40cm

30-38cm

5th step must be a spreader

Height required by pilot

SHIPS WITH HIGH FREEBOARD (MORE THAN 9M) When no side door available

PILOT LADDER
Must extend at least 2 metres above lower platform

Officer in contact with bridge

ACCOMMODATION LADDER
Should rest firmly against ship's side
Should lead aft
Maximum 55° slope
Lower platform horizontal
Rigid handrails preferred

Ladders to rest firmly against ship's side

A PILOT LADDER COMBINED WITH AN ACCOMMODATION LADDER is usually the safer method of embarking or disembarking a pilot on ships with a freeboard of more than 9 metres

0.5m

2m

2m

3 to 7 metres depending on size of pilot launch and height of swell

Recommended 9 metre mark

Stern ← Bow

MECHANICAL PILOT HOIST

Davit

Two man-ropes ready for immediate use. Min. diam. 28mm

Rigid part

Guard ring

Flexible part

A pilot hoist made and rigged in accordance with SOLAS Chapter V, together with a pilot ladder rigged alongside for immediate transfer, may be used subject to agreement between the Master and the Pilot. It should be noted that the distance between the nearest side ropes of the pilot hoist and pilot ladder will be at least 1.4 metres.

NO!

No shackles
No knots
No splices

NO!
The steps must be equally spaced

NO!
The steps must be horizontal

NO!
Spreaders must not be lashed between steps

NO!
The side ropes must be equally spaced

NO!
The loops are a tripping hazard for the pilot and can become foul of the pilot launch

NO!

Very dangerous ladder too long

Two handhold stanchions rigidly secured to ship's structure

Responsible officer

NO OBSTRUCTIONS

Lifebuoy with self-igniting light

Bulwark ladder secured to ship

AT NIGHT

Pilot ladder and ship's deck lit by forward shining outside light