

# **Surveyor's Notebook**

## **CAUSES OF PORTABLE LADDER CLAIMS**

Ships' crew frequently sustain injuries when using portable ladders. Such accidents are often attributed to poor maintenance, inadequate risk assessments and a lack of a safety culture. Portable ladders are parts of everyday working life on ships and are commonly overlooked in planned maintenance systems. Safety harnesses and other essential safety equipment used in combination with portable ladders are frequently neglected when it comes to maintenance, repair and training procedures.

### – CAUSES OF PORTABLE LADDER P&I CLAIMS 2000 TO 2010

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| 1. Accidents caused by lack of safety equipment            | 54% |
| 2. Accidents caused by inadequate portable ladder training | 38% |
| 3. Accidents caused by poor planned maintenance            | 8%  |

## **COMMON HAZARDS ASSOCIATED WITH PORTABLE LADDERS AT SEA**

- falls resulting from ladder failure (poorly-maintained or damaged ladders)
- falls from ladders placed at incorrect angles
- falls from ladders placed on or against unstable surfaces or platforms
- falls resulting from ladders slipping outwards at the bottom and sideways at the upper resting point
- injuries resulting from handling of ladders
- falls from ladders caused by electric shock
- falls from ladders in adverse weather conditions
- falls when working alone

– CASE STUDY A

In a recent incident, an experienced engineering officer fell 20 ft from a straight aluminium ladder (without ladder extensions) onto the tank top of a cargo hold. The engineer was found unconscious, wearing a safety harness with a fall arrestor by his side that was clearly not attached. He had planned to connect the arrestor to a pad-eye above the area where the work was intended. The ladder was not tied down, and movement of the ship made the ladder fall from beneath him. The ladder was not secured at the base and no other crew members were present. The worker suffered a fracture of the skull, two broken ribs, and permanent damage to his sensory functions.

The incident was caused by the unsafe angle of the ladder and the fact that the rubber surface on one of the ladder's two feet was missing, therefore offering little grip. Crew members from the ship later testified that portable ladders were rarely inspected or maintained and were primarily used above deck to plug in refrigerated containers.

– LESSONS LEARNT

Always conduct a full risk assessment for the work activity. Make sure the equipment, area where work is taking place, personnel and weather conditions have been factored into the assessment.

Never allow any ladder to be used if it is not in good conditions, of suitable height and construction, and properly maintained.

– CASE STUDY B

An experienced seafarer was rigging a chain block to an outboard crane davit close to the ship side. He was working alone and not wearing any personal protective equipment (PPE) nor a life vest, and no risk assessment or permit to work had been issued. He had taken a portable ladder (without proper rubber pads on its feet) from the deck store room. While the ladder was resting on the davit arm, it slipped on the deck. The seafarer fell overboard and his body was never recovered. The ladder was found resting horizontally on the deck.

– LESSONS LEARNT

Always:

- use a ladder that is in good condition
- secure the ladder
- work in teams of at least two crew members
- conduct a risk assessment and obtain a permit to work
- wear PPE, including a life vest, if necessary

– CASE STUDY C

A subcontracted electrician was carrying out electrical installations 6 m above a working deck while the ship was alongside in port. The subcontractor, who was wearing full PPE with a safety harness that was not secured to a strong point, fell to the deck. Because he was working alone, the incident was not witnessed. He later died from his injuries.

– LESSONS LEARNT

Always:

- monitor the work of subcontractors
- conduct a risk assessment and obtain a permit to work
- ensure subcontractors work in pairs or that crew members are designated to assist individual contractors
- secure the ladder

– CASE STUDY D

Two seafarers were cleaning and scraping rust scale from the hopper side of a bulk carrier hold. The ladder was laid on top of the hopper side. One crew member was at the top of the ladder scraping rust scale and the other was holding the bottom of the ladder. Sea conditions were good and the ship was rolling easily.

The crew member carrying out de-scaling asked his colleague to fetch a long-handled scraper so he could reach higher up. The seafarer holding the bottom of the ladder left to fetch the tool from the fore-castle store while the other man remained at the top of the ladder.

When he returned to the hold 10 minutes later, he found the seafarer who had been on the ladder lying on the tank top with severe back and head injuries. The injured party was evacuated from the ship soon afterwards.

– LESSONS LEARNT

Always:

- work in pairs – never allow any crew members to work on a ladder alone
- secure the ladder
- inspect the ladder before use
- use only ladders in good condition

(Article extracted from The Standard Club's publication – Standard Safety)