

Fatal Accident On Board Hong Kong Registered Ship COSCO Indian Ocean in the port of Rotterdam, Netherlands on 13 December 2009

1. The Incident

- 1.1 On 13 December 2009 at time between 2140 and 2150, a sailor on board the Hong Kong registered container vessel *COSCO Indian Ocean* was killed while he was operating the starboard pilot ladder winch after picking up the pilot at the port of Rotterdam, Netherlands.
- 1.2 At the time of the accident, the weather was cold (ambient temperature 8 degree Celsius) with strong wind (force 5). The deceased wore thick winter clothes while he was working on deck.
- 1.3 There was no witness of the accident. The circumstances leading to the accident can be deduced that, while the deceased was operating the pilot ladder winch to hoist the ladder, he was dragged / pulled into the reel accidentally after being entangled by the reeling pilot ladder. He sustained fatal injury and was certified dead.
- 1.4 The investigation revealed the main contributory factors to the accident are : -
 - the deceased was not aware of the dangers of a reeling pilot ladder and to avoid himself from coming close to it;
 - the directional control valve for controlling the winch could not return to the neutral position for stopping the air motor as the valve was not of the self-return type; and
 - the potential risks associated with operating the pilot ladder winches on board were not fully appraised by the Master and the relevant crew of the vessel.
- 1.5 The investigation also revealed the following safety factors : -
 - the deceased, who was a new seaman with limited working experience on ship, was not properly supervised by senior crewmembers on board and was allowed to work alone at the time of the accident ;
 - there were no warning signs for crewmembers about the dangers in the operation of pilot ladder winches, nor were there any such markings as “NO ENTER” zone in vicinity of the machines;
 - excessive grease had been accumulated inside the valve body of the directional control valve; and
 - the areas around the pilot ladder winches might be tight for crewmember during working and posing dangers to them while operating the pilot ladder winches.

2. Lessons learnt

2.1 The lessons learnt from this accident are:

- The safety of crew in operating the pilot ladder winch should be assessed, particularly when the winch is driven by air motor controlled by non-self-return type directional valve.
- The safety measures and precautions in relating to the operation of pilot ladder winches for preventing operators from injury should be strictly followed;
- The machinery and its control system should be properly maintained; and
- Adequate and relevant training should be provided for operators; and if the operator is a new crewmember, proper supervision and monitoring should be given by officers or other experienced crewmembers.