

The fatal accident on board Hong Kong registered chemical tanker “*Alpine Magic*” at sea on 14 November 2015.

1. The incident

- 1.1 On 14 November 2015, the Hong Kong registered oil/chemical tanker *Alpine Magic*, under ballast condition, was en-route at Bay of Bengal from Tanjung Pelepas, Malaysia to Fujairah, United Arab Emirates (UAE). Cargo oil tank (COT) cleaning operations were in progress for loading clean petroleum product.
- 1.2 After verifying the tank conditions of the No.3 port side (3P) COT, the master authorized tank entry into 3P COT for tank inspection. A team, consisted of able bodied seaman (AB) and Training Ordinary seaman (TOS), entered into the 3P COT. After the completion of tank inspection, the TOS fell from the access ladder while he was exiting from the tank and then hit on the tank top to his death.
- 1.3 The investigation into the accident revealed the main contributory cause was that: the risks of fall from cargo oil tank access ladder were not identified properly while the TOS was climbing up the access ladder in 3P COT, thus failing to prevent the falling of the TOS.
- 1.4 The investigation also revealed the following safety factors:
 - a) the vertical ladder had no guard rings and the gap of the side rail of inclined ladder near the uppermost platform might allow TOS to fall sideways when he lost his balance on the ladder; and
 - b) the TOS did not utilize fall arrestor device while he was climbing the access ladder aloft.

2. Lessons learnt

- 2.1 The oil/chemical tanker management company should consider fitting arrangements, such as guard rings on the vertical ladders and intermediate bar for the inclined ladder, inside cargo oil tanks on all similar vessels.
- 2.2 The oil/chemical tanker management company should review its Safety Management System (SMS) and relevant procedures or guidelines to enhance the safe accessing of cargo oil tanks.
- 2.3 All officers and crew shall take extra precaution to avoid falling when climbing on cargo oil tank's access ladder, and use fall arrestor devices as far as practicable.
- 2.4 A specific risk assessment should be properly conducted before entering into cargo oil tank by the access ladders.