A fatal fall onto the tank top of a cargo hold during cleaning operation

To: Shipowners, Ship Managers, Ship Operators, Shipbuilders, Classification Societies, Masters, Officers and Crew

Summary

A crew member on board a Hong Kong registered bulk carrier accidentally fell down onto the tank top of No.3 cargo hold (the Hold) when he was walking along the elevated passageway of the permanent means of access (PMA) platform. He was seriously injured and pronounced death a few hours later. This information note draws the attention of Shipowners, Ship Managers, Ship Operators, Shipbuilders, Classification Societies, Masters, Officers and Crew to the lessons learnt from this accident.

The Incident

1. A Hong Kong registered bulk carrier under ballast condition was en route to Kalama, USA from Busan, Republic of Korea. The cargo hold cleaning operations were in progress for loading grain at the next port.

2. In order to rinse the Hold, one able-bodied seaman (the AB) entered into the Hold by climbing down the vertical ladder through a manhole and reached on the elevated passageway of the PMA platform. While the AB was walking along the gratings of the passageway, one of them detached from its support frame. Losing his balance, the AB fell onto the tank top together with the detached grating. He was seriously injured and pronounced death a few hours later.

3. The investigation into the incident revealed the main contributory factors as follows:
   - the AB failed to take extra precaution to avoid falling and did not follow the requirements of risk assessment to wear safety belt while he was walking on the elevated passageway in the Hold; and
   - the dislocation of the grating of the PMA platform in the Hold with its securing bolts and nuts missing might be caused by the vibration of the ship or the sloshing effect of the ballast water during her heavy ballast voyage to the loading port.
4. The following safety issues were also found in the investigation:

- the risk of the dislocation of the grating was not identified during the risk assessment for cargo hold cleaning operation; and
- there was no procedure in the ship's safety management system to ensure all means of access arrangement remained in serviceable condition before being used.

Lessons Learnt

5. The management company with similar access arrangements on board its vessels should consider to establish a regular inspection procedure in the ship’s safety management system to ensure that all means of access arrangements including securing devices are regularly inspected and maintained in serviceable condition, especially after loading with ballast water in cargo hold.

6. The following extra precautions should also be taken by the officers and crew members in order to avoid falling when engaging in aloft works on cargo hold means of access arrangements.

- To use safety belt or fall arrestor devices as far as practicable;
- To inspect means of access to ensure they are in proper condition before using it; and
- To assess the hazard of loosening or missing of the securing nuts and bolts of the grating of PMA platform which may result in the dislocation of the gratings and the risk of fall.

7. The attention of Shipowners, Ship Managers, Ship Operators, Shipbuilders, Classification Societies, Masters, Officers and Crew is drawn to the lessons learnt above.

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