



香 港 商 船 資 訊

HONG KONG MERCHANT SHIPPING INFORMATION NOTE

Fatal Accident Resulting from Sudden Hook Detachment of a Lifeboat

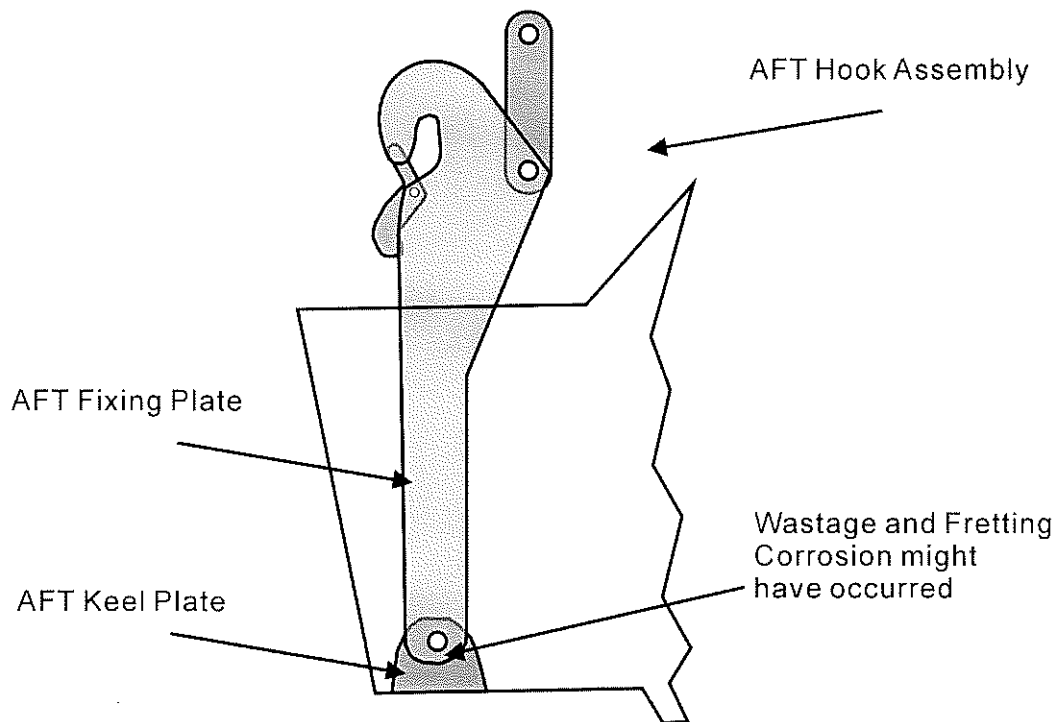
To : Shipowners, Ship Managers, Ship Operators, Classification Societies, Marine Institutes, Masters, Officers and Crew

Summary

A recent accident on a Hong Kong registered ship involving a sudden hook detachment of a lifeboat resulted in loss of two lives and three severe injuries. This information note draws the attention of the shore management and shipboard staff to the importance of adequate maintenance and inspection for lifeboats and the guidance on safety of crew during abandon ship drills using lifeboats.

The Incident

1. On 7 October 2004, a fatal lifeboat incident occurred during a lifeboat launching operation on a Hong Kong registered ship. The port lifeboat plunged into the sea from a height of about 16 m after the stern of the lifeboat detached from the hook arrangement. Two seamen died and three others suffered from serious injury in the incident. The lifeboat sustained structural damage to the top canopy and severe damage to the equipment inside. The fatal accident took place in good weather conditions while the vessel was anchoring at Port Hedland, Australia.
2. The investigation revealed that the cause of the accident was due to the shearing off of the fixing plates (sketch) from the lifeboat structure during launching operation. The fixing plates are used to take up the load of the lifeboat while it is in suspension. It is believed that the shearing off of the fixing plates could have caused by either:
 - a. Corrosion in the form of mainly wastage and probably fretting; or
 - b. Metallic defects



Excessive Corrosion at Contact Surface of the Securing Bolt and the Lower Part of the Fixing plates

Lessons

3. The lessons learnt from the incident are as follows:
 - (a) The lifeboats are stowed on davits without resting on chocks. As a result, the lifeboat hook assemblies and the fixing plates are always subject to heavy and fluctuated stress, particularly in rough seaways. The combination of the direct and fatigue stresses would have additional loading on the aft hook assembly and the fixing plates.
 - (b) The fixing plates were housed in a glass-reinforced plastics enclosed compartment fitted with an access door. As most of the ships are invariably sailing in a trimmed condition by stern, rain, seawater, or condensation could accumulate from time to time in the aft enclosed compartment, which would present favourable conditions for the corrosive process to take place.

- (c) The fixing plates of the lifeboats appeared to have not been inspected and maintained properly. However such items of inspection as part of the structure of the lifeboat are not included in the maintenance manual. The fixing plates were housed inside a compartment fitted with an access door, the crew should have opened the door to check for the condition. To improve the situation, the lifeboat maintenance manual should incorporate the checking of condition of the fixing plates as a lifeboat structure inspection items.
- (d) The fixing plates as part of the lifeboat design were manufactured by the Blue Sea Industrial Co. Ltd. in Taiwan which had been closed down. As the shearing off of the fixing plates was probably caused by wastage due to excessive corrosion, this might have been inherited from design faults or defects in the manufacturing of the lifeboat. The company should consider seeking for technical assistance from a renowned lifeboat manufacturer or the classification society to look into the structure and holding arrangement if their lifeboats were manufactured by the Blue Sea Industrial Co. Ltd. in Taiwan.
- (e) In an earlier issue of Merchant Shipping Information Note No. 15/2005 on the Guidance on Safety of Crew during Abandon Ship Drills Using Lifeboats, para.2.3.3 of the Annex states that for lifeboats lowered by means of falls, before placing persons on board a lifeboat, it is recommended that the boat first be lowered and recovered without persons on board to ascertain that the arrangement functions correctly. The boat should then be lowered into the water with only the number of persons on board necessary to operate the boat.

4. The attention of shipowners, ship managers, ship operators, classification societies, marine institutes, masters, officers and crew is drawn on the lessons learnt above.

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7 November 2005