



# 香 港 商 船 資 訊

## HONG KONG MERCHANT SHIPPING INFORMATION NOTE

### Engine Room Fire Caused by Improper Oil Filter Maintenance

*To : Shipowners, Ship Managers, Ship Operators, Masters and Officers*

#### *Summary*

A fire broke out in the engine room of a Hong Kong registered ship while she was en route from China to India. The fire resulted in serious injury of a mechanic and damage to the engine room. The fire was caused by improper maintenance of the oil filter for the generator engine. This Notes draws the attention of the shore management and shipboard staff to ensure proper maintenance of ship's machinery and lessons learnt from this incident.

#### **The Incident**

1. A fire broke out in the engine room of a Hong Kong registered ship while en routing from China to India. A mechanic suffered serious injury and the accident caused damage to the engine room.
2. The investigation into the accident revealed that the fire was caused by improper maintenance of the lubricating oil filter for the generator engine. The third engineer did not use the maker's tool and also did not follow the maker's instruction to bleed off the air from the lubricating oil filter after replacing the filter element. The air plug of the lubricating oil filter came off, the oil spurting onto the hot exhaust pipe and caused the fire.
3. Foam extinguishing system was used on board. The foam tank and its control panel were installed inside the steering room located adjacent to the engine room. At the time of the accident, the doors of both the engine room and the steering room were left open. Therefore when the fire broke out, the smoke went to the steering gear room. The Master decided to abandon ship as the crew could not access the steering gear room to release the foam to the engine room.

4. The other contributory factors to the accident identified in the investigation were:
- poor leadership displayed by the Master during abandon ship and crew members on board were not adequately trained through regular and systematic drills, and exercises in handling emergency situations; and
  - implementation of the safety management system on board was ineffective in the areas of crew training, emergency preparedness and maintenance of ship's equipment and machinery.

### **Lessons Learnt**

5. The lessons learnt from these accidents are:
- maintenance must be carried out by proper tools and strictly follow the maker's instruction;
  - fire doors for the engine room must be closed at all times;
  - management ashore and masters of vessels should ensure shipboard staff are properly trained to handle emergency situations of all scenarios, including the dealing with fire inside the engine room; and
  - regular safety audits should be carried out so that any deficiencies in the implementation of safety management system could be identified and rectified at an early stage.
6. The attention of ship owners, ship managers, ship operators, masters and officers is drawn to the lessons learnt above.

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