

Engine room fire on board M.V. "Fleet Trader 1" on 24 March 2005 causing one fatality

1. The Incident

- 1.1. At 1150 local time on 24 March 2005, a fire broke out in the engine room of the Hong Kong registered bulk carrier "Fleet Trader 1", when en route from Tenerife to Lagos. The fire spread into the accommodation around the engine room areas resulting in the death of the Third Engineer. The incident caused substantial damage to the engine room and the accommodation space.
- 1.2. The fire was caused by overflowing of fuel oil from the boiler fuel oil tank which came into contact with the main engine hot exhaust gas manifold and ignited.

2. Findings

- 2.1. A boiler fuel oil tank was situated above the main engine exhaust trunk.
- 2.2. For some unknown reasons, the boiler fuel return pipe on the boiler fuel oil tank was removed and a small flange on top of the tank was left opened.
- 2.3. The overflow pipe of the boiler fuel oil tank was blocked by rusty debris.
- 2.4. The filling valve of the boiler fuel oil tank was not closed after maintenance work. The tank had been filled up inadvertently during fuel oil transfer operation. As a result, the boiler fuel oil tank was filled up and fuel oil was coming out from the flange opening and ran down onto the hot exhaust trunk which ignited the fuel.
- 2.5. Fire doors were not properly maintained and left opened. Fire and smoke were spread out of the engine room.
- 2.6. Valve spindle of fire fighting system was broken during operation. Sign of welding repaired was found at the broken sections of the valve spindle.

3. Lessons

- 3.1. No modification of the fuel oil system should be made without prior approval from Flag Administration or Classification Society.
- 3.2. Pipe works should be properly maintained for the intended services.
- 3.3. Proper oil transfer procedures should be followed on board.
- 3.4. No door should be kept open by preventing proper function of the self-closing devices.
- 3.5. Highly stressed components such as valve spindles of fire fighting system should not be normally repaired by welding.