A fatal electrical work accident in an engine room

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

Summary

The Third Engineer was electrocuted on the top of the engine room overhead crane beside the travelling motor when he was repairing the fault with the crane developed during its operation. This Note draws the attention of shipowners, ship managers, ship operators, masters, officers and crew to the lessons learnt from this accident.

The Incident

1. When a Hong Kong registered bulk carrier was in the Indian Ocean en route to Brazil, the crew made use of the engine room overhead crane to lift spare parts and found the crane stuck at mid-way during lifting. The Third Engineer was assigned to repair the crane. Later, he was found lying unconsciously on the crane top beside the crane’s travelling motor. Although the Third Engineer was provided with first aid treatment, he was declared dead on board on the event day according to the medical advice offered to the crew through radio.

2. The investigation revealed that the main contributory factor of the accident was the poor safety awareness of the Third Engineer. He did not equip himself with sufficient personal protective equipment to ensure personal safety in handling electrical work and working aloft.

3. The investigation also identified other safety issues as follows:
   (a) the “Code of Safe Working Practices for Merchant Seafarers” (the Code) and the Safety Management System of the vessel were not followed strictly by the crew;
   (b) the Chief Engineer and the Second Engineer failed to provide supervision and safety instructions or guidance to the Third Engineer; and
(c) no risk assessment and tool box meeting were carried out before conducting the repair work.

Lessons Learnt

4. In order to avoid recurrence of similar accidents in the future, masters, officers and crew of vessels should:
   (a) strictly follow the Safety Management System and the Code for electrical work, working aloft, and work permit system; and
   (b) isolate the power source and wear sufficient personal protective equipment, such as insulated gloves, before carrying out the electrical work.

5. The attention of shipowners, ship managers, ship operators, masters, officers and crew is drawn to the lessons learnt above.

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