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HONG KONG MERCHANT SHIPPING INFORMATION NOTE

Deck crane collapsed due to improper operation

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

Summary

While the crane operator was slewing a jib crane for cargo handling work. The jib fell down to the deck. A stevedore working on deck was hit by the falling crane wire rope and was later certified dead in the hospital. This Information Note draws the attention of the shipowners, ship managers, ship operators, masters, officers and crew on the lessons learnt in the accident.

The Incident

1. The general dry cargo ship was loading at port by her own deck cranes. When the accident happened, the duty seaman was operating one of the cranes according to the signal from the Bosun on deck.
2. The jib of the crane carelessly touched the other crane when it was slewing counter-clockwise to reach the desired position. The crane operator did not stop for inspection but further lowering the jib which caused the relaxing of the luffing wire. The crane then slewed backward in clockwise direction to move away. Shortly after the jib was off from the contact with the other crane, the jib and its associated wire rope suddenly fell down. The support of the luffing wire rope sheave at the top of the crane housing yielded. The sheave detached from the mounting and fell into the sea. The stevedore underneath was hit by the falling crane wire rope and was later certified dead in the hospital.
3. Followings are the contributory factors of the accident:
 - i. The luffing wire rope might have been slackened after the jib of the crane was leaned against the other crane due to human error. As the jib was turned away from the other crane, it lost its support and fell under gravity. This generated an enormous force on the luffing wire rope, which broke the support of the sheave and caused the jib to fall down. After the fall, the hoisting wire rope of the jib hit the stevedore underneath;

- ii. The crane operator did not follow the instruction of the signaler to operate the crane as per the requirements stipulated in the Code of Safe Working Practices for Merchant Seamen;
- iii. The ship's crew did not follow the Ship Safety Operation Guidelines of the Shipping Company to ensure that nobody worked or stayed in the vicinity of the crane jib while the cranes were in operation; and
- iv. Only one inspection checklist had been recorded for all the cranes, such practice of recording was not recommended.

Lessons learnt

4. Followings are lessons learnt from the incident:
 - i. The effectiveness of the safety management system regarding the safe operation of cranes is needed to be reviewed;
 - ii. Only crewmembers who are competent, experienced and well-trained are allowed to be assigned for the crane operations;
 - iii. Crewmembers should strictly follow company procedures for the safe operation of all equipment and machinery onboard the ship;
 - iv. Crewmembers should strictly follow Code of Safe Working Practices for Merchant Seamen in all lifting operation and maintenance of all lifting machinery on board; and
 - v. Proper culture of communication is needed to be established between crewmembers.

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