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## HONG KONG MERCHANT SHIPPING INFORMATION NOTE

### Fatal accident caused by a swinging derrick boom

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

#### *Summary*

The Chief Officer on board a Hong Kong registered vessel was killed by a damaged derrick boom which swung when he was attempting to unlash the boom to prepare for its removal to shipyard for repair. This Information Note draws the attention of the shipowners, ship managers, ship operators, masters, officers and crew on the lessons learnt in the accident and supersedes Hong Kong Merchant Shipping Information Note No. 43/2011.

#### **The Incident**

The accident happened on board a Hong Kong registered general cargo ship when it berthed alongside a shipyard to carry out repair on one of its derrick booms.

2. This derrick boom was damaged in the last port due to improper stowage under severe weather condition during cargo operations. After the damage took place, the derrick boom was dismantled and stowed temporarily in the port-starboard direction across the forecastle deck for repair in shipyard. To prevent the boom from moving during the voyage, the following measures were taken:

- (i) the boom head was lashed and secured to the guy post at the ship's port side by a short piece of wire rope;
- (ii) the wire rope connecting to the cargo winch was lashed at the middle part of the boom for the stowage operation;
- (iii) the lower end of the boom was lashed by a wire which was tied to the forward bitts on the starboard side of the forecastle deck by a turnbuckle; and
- (iv) the deck near the lower end of the boom was made to rest on a fabricated metal frame to prevent it from moving during voyage.

3. At the time of the accident while the vessel was at a shipyard for repair, the Chief Officer attempted to slacken the cargo wires by himself to facilitate the workers to remove the

boom to the shipyard for repair later. Without following the relevant procedures and instructions to ensure the engagement of the safety latch to lock the local control of the cargo winch and the application of winch brake, the Chief Officer pressed the start button to start the hydraulic pump to release the tension of the securing wire. When the hydraulic pump started under this unsafe mode, the cargo winch rotated and pulled the boom up in the process. The lateral force acting to the lower end of the boom at the starboard side caused this end to swing forward towards him. The swinging boom knocked the Chief Officer's helmet off and pushed his head against the hinge of the switch box behind him. He sustained serious head injury and was certified dead on the same day after he was sent to the hospital.

4. The investigation revealed that the Chief Officer was weak in his safety awareness and he did not follow the company procedures and instructions for the operation of the hydraulic derrick. The Master of the vessel did not carry out risk assessments before making the arrangement to remove and secure the damaged boom properly for repair.

### **Lessons Learnt**

5. It is imperative that risk assessments must be carried out for all unscheduled operations to identify their potential risks. The necessary precautionary measures should also be devised first to prevent those risks to occur. A crew should avoid working alone as far as practicable. If it is unavoidable to do so, the operations should be planned careful beforehand to avoid risks. Above all, safety instructions for the operation of machinery systems should be followed at all times e.g. hydraulic systems.

6. The Hong Kong Merchant Shipping Information Note No. 43/2011 is superseded by this Note.

Marine Department  
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