

MARINE DEPARTMENT NOTICE NO. 172 OF 2019

(Marine Industrial Safety)

Fatal accident when lifting platforms

The Incident

A marine industrial accident occurred on a locally licensed non-propulsive barge. At the time of the incident, a truck was on the barge and was ready to pick up scissor-lift-platforms (platforms) stowed on board. When two platforms were simultaneously lifted in an attempt to load onto the truck, one of the platforms overturned and overwhelmed a truck worker who was standing next to the truck. The worker was certified dead on the event day.

2. The investigation into the incident revealed that-
 - (i) when lifting platforms, ship's crew did not use the appropriate lifting tool in accordance with the technical manual of the platform. The platform maker was not consulted on the use of chain hook as the device at the anchor points to lift the platforms with a view to ensuring the method adopted was safe and feasible;
 - (ii) the crew simultaneously lifted two platforms in pair by chain hooks, resulting firstly in the platforms not able to be tied together horizontally, and secondly the platforms could not be secured laterally by any means. When landing onto the truck, one of the platforms was tilted and its battery drawer was slid out. As a result, another platform rested on the battery drawer and overturned due to unbalanced loading;
 - (iii) during lifting operation, the worker lacked safety awareness and stood at a dangerous position where the platform might be toppled; and
 - (iv) the length of the chain hook had been adjusted illicitly without compliance with section 47(1) of the Merchant Shipping (Local Vessels) (Works) Regulations (Cap 548I), which requires that chains used as lifting gear shall not be shortened by tying knots in them.

Lessons Learnt

3. In order to avoid recurrence of similar incidents, the attention of barge owners, shipboard personnel, persons in charge of works, crane operators, transport workers and persons in charge of subcontractors are drawn to the following important advice-

- (i) when lifting specific cargo, appropriate special lifting gears should be used. When using non-dedicated lifting gears, detailed consideration should be given to factors such as feasibility and safety;
- (ii) the length of lifting gears should not be arbitrarily altered, especially not to be shortened by tying knots. Stability must be ensured in lifting and placing heavy objects; and
- (iii) no one shall stand within area where heavy loads may drop or topple.

Agnes WONG
Director of Marine

Marine Department
Government of the HKSAR
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