ALERT 05 – 17
NEAR MISS – ELEVATOR FAILURE

WHAT HAPPENED:

A serious near miss occurred recently while laying down 3.5" tubing on an offshore rig. This incident could have been avoided if a simple safety device was installed in the elevator hinge pin. The rig employee operating the air hoist lifted a joint of 3.5" tubing from the mouse hole using a single joint elevator. After installing the thread protector and while laying down the tubing, the elevator struck the top of the V-door. The hinge pin was knocked out of the elevator hinge, the hinge opened and the tubing slid down the V-door along the catwalk and came to rest on the main deck.

WHAT CAUSED IT:

1. A safety device (lock ring) was not installed in the hinge pin.
2. The elevator failed because a safety device was not installed.
3. The elevator struck the V-door because the operator was inexperienced or inattentive or there was inadequate supervision.

A pre-job safety meeting should have included an inspection of the equipment and identified striking the V-door as a hazard.

CORRECTIVE ACTIONS: To address this incident, this company did the following:

1. Safety devices should be recognized in the pre-job deployment stage. The 3rd party contractor did have an inspection check for the hinge pin but there were no specifications for the inspection (NDT) and nothing about the lock-ring. Note: The single joint elevators have two hinges and therefore two hinge pins. Of the two sets on location (one backup) three of the four lock-rings were missing. This is an omission by the 3rd party contractor.
2. If additional supervision is needed on the rig floor when multi-tasking, then it should be clearly identified in the JSA and supervision should be provided.
3. Rig Supervisors are to inspect all elevators delivered to the rig to ensure safety devices are fitted.
4. Pressed hinge pins may be considered, however only the exposed sections of this type can be non-destructively tested.
5. Rig Site Management along with the Safety Officer must ensure that JSA's are carried out seriously and then executed according to the steps.

Conclusion:

This incident could have been avoided if a simple safety device was installed in the elevator. Pre-deployment and onsite checklists are designed to prevent such incidents. Although not the cause of the incident, the inexperienced or inattentive air hoist operator was a contributing factor. The JSA if done properly should have identified the V-door as a potential hazard. The investigation is ongoing with the third party contractor to determine root cause of the incident.

The Corrective Actions stated in this alert are one company’s attempts to address the incident, and do not necessarily reflect the position of IADC or the IADC HSE Committee.