Safety Alert

From the International Association of Drilling Contractors

ALERT 99-29

CRANE OPERATIONS INCIDENT

WHAT HAPPENED:

The crane main load line was landing the second of a series of loads onto a moored supply vessel when the fast line failed. The 14" (36cm) fast line ball, weighing approximately 400 lbs (181.4kg), fell 140 ft. (42.6m) onto the deck of the supply vessel. At failure, the cargo basket was 15 ft. (4.5m) above the deck, and two rig roustabouts on the vessel were positioning the load using tag lines. They were approximately 8 ft. (2.4m) from the point where the ball impacted. Fortunately, neither roustabout was injured. Approximately 100' (30.5m) of fast line whipped back down the boom and came to rest on the rig main deck.

SCENARIO:

After picking up the first basket on the rig, using a boom angle of 65°, the load was swung out to the supply vessel. The crane boomed out to 37° and landed the 7,000 lb. (3175kg) basket. Returning for the second basket of 11,000 lbs. (4990kg), again at a 65° angle, the load was swung and lowered to a point approximately 15 ft. (4.5m) feet over the deck of the vessel while continuing to boom down to the 37° angle. At this time, the fast line ball contacted the boom tip. Booming down resulted in about 6 ft. (1.8m) of fast line creep, causing fast line failure.

WHAT CAUSED IT:

1. The limit switches on this crane were set up differently from the crane previously used by the operator. Limit switches were functioning only on the line that was in use (*e.g.,* while using the main line, the fast line limit switch was inoperable).
2. The crane operator had been operating a different type of crane for the prior three years. This incident occurred on the second hitch after he was transferred.

CORRECTIVE ACTIONS:

1. For all cranes having more than one hook and with hoists mounted outside of the boom, set limit switches to not allow the boom to be lowered or the load to be lifted when any of the switches are activated. The limit switches should only allow lowering the load and raising the boom.
2. Limit switch settings should be standardized to minimize the variations between different types of cranes in the fleet.

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.

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