



Safety Alert

From the International Association of Drilling Contractors

ALERT 01 – 22

CRANE BOOM PULLED BACKWARDS OVER THE CAB

WHAT HAPPENED:

The boom of the port aft crane on a jack-up rig was pulled backwards over the crane cab. The boom stayed attached at the boom base by one leg with the rest draped down outboard of the port aft rig deck. There were no injuries, no pollution and no damage to other property associated with the incident. The crane boom and live mast were severely damaged. The crane cab also had significant damage. Operations at the time of the incident were laying down the work string from the drill floor and back loading it to a workboat. The crane operator was working between two cranes located close to each other on the port side of the rig. At the time of the incident, the Crane Operator left the port aft crane cab to assist roustabouts with rigging of the pipe that was to be back loaded onto the workboat. The crane was left unattended with the engine running and the boom positioned over the pipe deck at about a 65 degree angle.

WHAT CAUSED IT:

Rig personnel were not knowledgeable of Company's established written procedures of shutting down crane engine/power whenever the crane operator leaves cab and therefore did not enforce established written procedures. In addition, the crane operator was required to work between two cranes during the lay down and back load process and did not follow established written procedures of shutting down crane engine/power when he left the crane cab. There was a malfunction of the crane's hydraulic system. This malfunction allowed the boom to rise slowly until it fell backwards over the crane cab, in addition, the boom up limit switches failed to stop the upward movement of the boom.

CORRECTIVE ACTIONS:

- Safe Operating Procedures that include shutting down the engine (prime mover) whenever the crane operator leaves the crane cab, should be established and communicated to all supervisors and crane operators.
- A JSA(s) should be developed for Laying Down and Back Loading Drill Pipe
- Procedures should be established to assure that employees are aware of the written procedures that are relevant to their work assignments.
- Signs should be posted in crane cabs stating "Always Shut Down Engine When Leaving Crane Cab".
- Maintenance procedures should be established that include measures for preventing contamination to the hydraulic fluid in the crane operating system.
- Provide crane inspection training to all personnel who are required to perform inspections as per (API RP 2D)
- For further information refer to the IADC Accident Prevention Reference Guide Sections 1.4, 1.9 and Sections 8.0, 8.1 and 8.2.

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.

This material is presented for information purposes only. Managers & Supervisors should evaluate this information to determine if it can be applied to their own situations and practices. Copyright © 2001 International Association of Drilling Contractors. All Rights Reserved

Issued June 2001