THIRD-PARTY CRANE AND CRANE OPERATOR SUPERVISION

WHAT HAPPENED:

A rig was being prepared for loading out and transporting from a third-party rig up and commissioning site. The task at hand was to lower the main sub base section (weight 12 ton) of a 750 hp carrier-mounted rig. A third-party crane and operator was being used to rig down the main components. The onsite Rig Manager was directing the loading process at the time of the incident. A 25-ton crane had been engaged to lower the main sub base and rig floor section to the ground level. The load needed to be lifted and moved to the right for storage of the sub base. The crane operator had jibbed out all stages of the boom prior to taking control of the load. During this operation, the crane operator was using his cell phone. One of the rig crewmen was on the rig floor section knocking out the pins from the stabilizer beams. It would appear that there was slack in the lifting sling and following the removal of the last pin the full weight of the sub base was suddenly taken up by the 25-ton crane. The last section of the extended boom failed and buckled under the weight. This caused the sub base / floor section to free-fall to the ground approximately 12-14 ft. The employee on the rig floor section who was knocking out the pins managed to “ride” the load to the ground and escaped any injury. Damage to the sub base structure consisted of bending and stress to the main six stabilizer beams. The crane was left in position following this incident and all personnel cleared of immediate area. The area was barricaded off while inspections and investigations into this incident took place.

WHAT CAUSED IT:

1. Incorrect positioning of crane by operator. The rigging crew failed to recognize potential lifting hazard.
2. Inadequate supervision and crane directives.
3. No JSA performed before the task.
4. Poor decision making by crane operator to use mobile phone during lifting/lowering operation. Very poor supervision by allowing this practice to occur.
5. Miscalculation of load weight and incorrect methods of load bearing positions.
6. Failure to conduct pre-job safety meeting. Step Back 5x5 Safety Tool not utilized as recommended.
7. Senior Site Manager was not on location at time to offer expertise in lift.
8. Incorrect position of the employee who was knocking out the pins.

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

- Personnel involved in the lift are to hold a JSA and identify the hazards before the task is done.
- Lift personnel are to utilize the company’s pre job 3rd party equipment check list.
- Site supervisors are to check crane operator certifications for competency on the operating of hire equipment.
- Because of potential injury or equipment damage site personnel are to correctly use the Permit to Work check off list for heavy lifts.
- Improve line of communications from Senior Rig Site Personnel on their responsibilities and duties when ever Senior Site Manager is off location.
- Use of competent and ticketed Dog man / Signal man for directing all loads as required on rig construction site.
- To avoid shock load the crane operator is to be sure that the package weight is taken up by the crane prior to the pins being moved.

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.