



Noble International Ltd.



***NOBLE KENNETH DELANEY
WORK RELATED INCIDENT***

**Drilling Operations Incident Review
Committee (DOIRC)**

26-Nov-2007

DOI RC WR Incident Review NKD



What Happened

SUMMARY:

Type of Incident: First Aid – Work Related

- Date: 23 July 2007
- Rig: Noble Kenneth Delaney
- Operator: Qatar Gas 3/4
- Time: 0330 Hours
- Location of Incident on Rig: Upper Pipe Deck

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What Happened Cont

- The operation at the time of the incident was moving conductor pipe from the main deck to the upper cantilever deck and put it in the rack bay. A pre-job safety meeting was held and the Job Safety Analysis and Critical Lift Permit for the task were discussed.
- A Critical Lift Permit was required because a joint of conductor pipe can weigh 10,000 lbs and the conductor pipe came to the rig pre-slung with nylon slings. Noble's PTW system requires a Critical Lift Permit to use these slings.
- There was a designated Banksman and two Roustabouts were assigned to handle the tag lines.

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What Happened Cont

- The Sampson posts on the rig's starboard side were in place in the deck mounts. However the Sampson posts for the port side were in place in mounts that are connected on the catwalk (Giving a false sense of security – As they look the same as the Sampson posts secured to the deck). The catwalk is movable to allow for proper alignment with the v-door as the drill floor transverses into position for each well to be drilled. The catwalk was not in use at this time due to the amount of skidding going on.
- The upper cantilever deck had two basket containers and a gas bottle rack stored on the catwalk, and approximately 2 1/2' of open deck space, a 5" DP pup joint was along side a BJ hydraulic power unit that was flush against the permanent stanchion post on the port side of cantilever.

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What Happened Cont

- In the bay there was enough space for 4 joints of 26" conductor pipe to fit. So 4 joints were fitted in the bottom layer. 3 joints of 26" conductor were placed on top of these 4 joints to form a second layer. And another 3 joints were on top of these to form a third layer. The Crane Operator placed one more joint in the gap of the second layer, as this joint of conductor pipe was put into position the catwalk slid due to the weight of the conductor pipe against the catwalk Sampson posts.

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What Happened Cont

- The injured person was holding a tag line and walking between the catwalk and the hydraulic unit, getting into position to remove the sling and the tag line from the conductor pipe. At this time the catwalk slid toward the port approximately 2 1/2 feet . It trapped the injured person's foot between the drill pipe pup joint and the catwalk.
- The Banksman noticed the movement of the catwalk and immediately had the Crane Operator lift the load back up.

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Photos

Fixed Samson posts

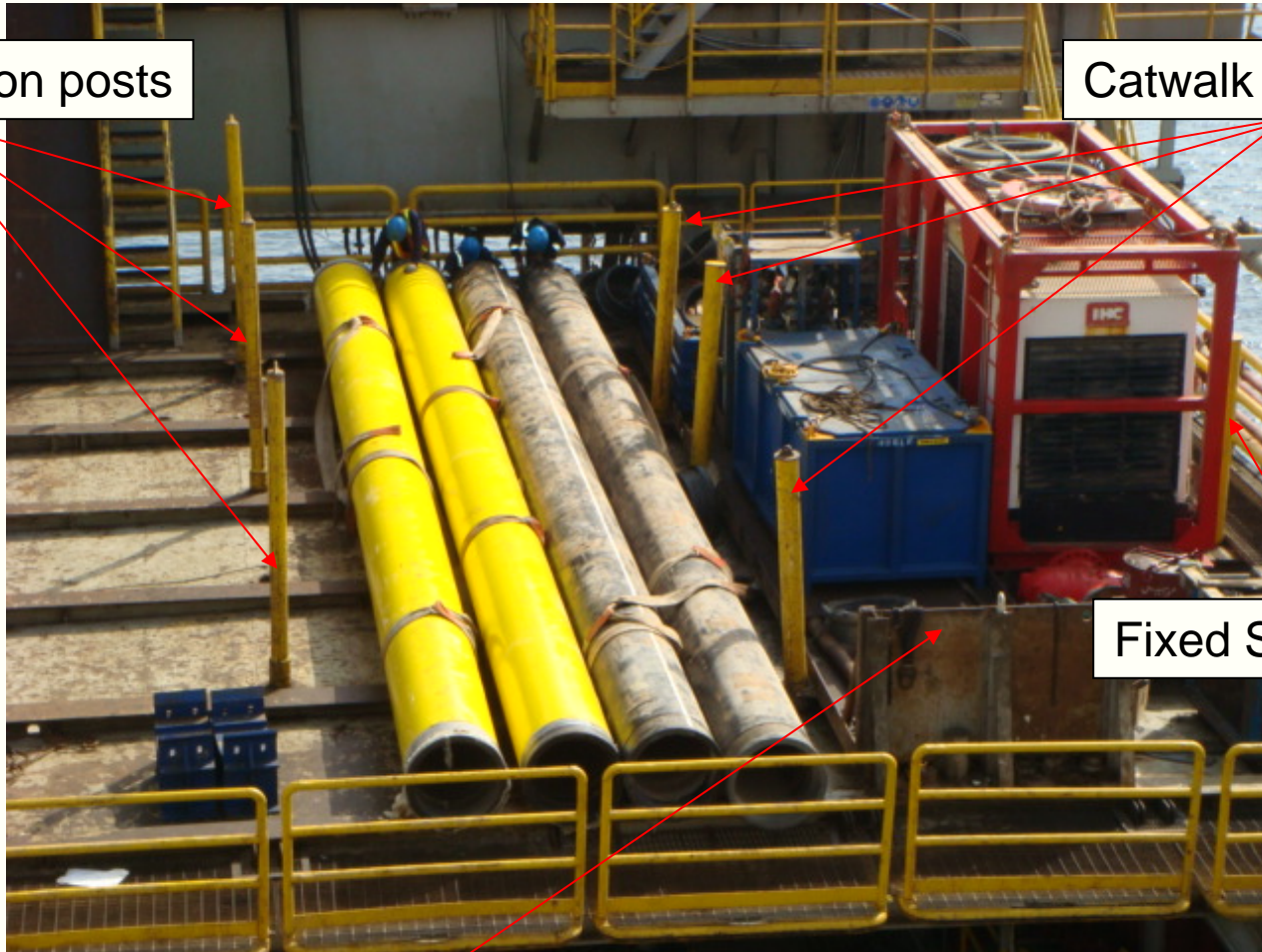
Catwalk Samson posts

Starboard

Port

Fixed Samson posts

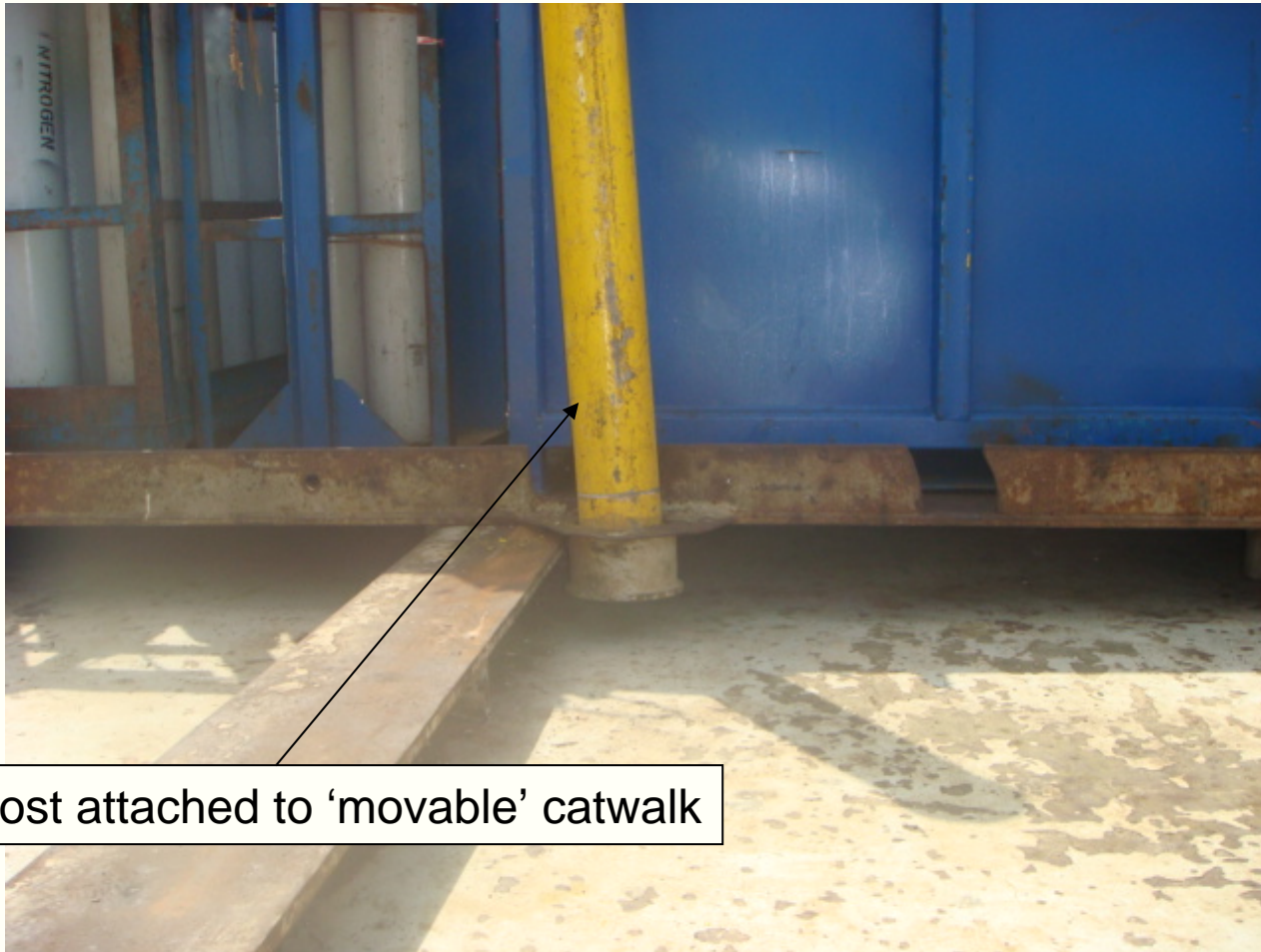
Movable Catwalk



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Photos



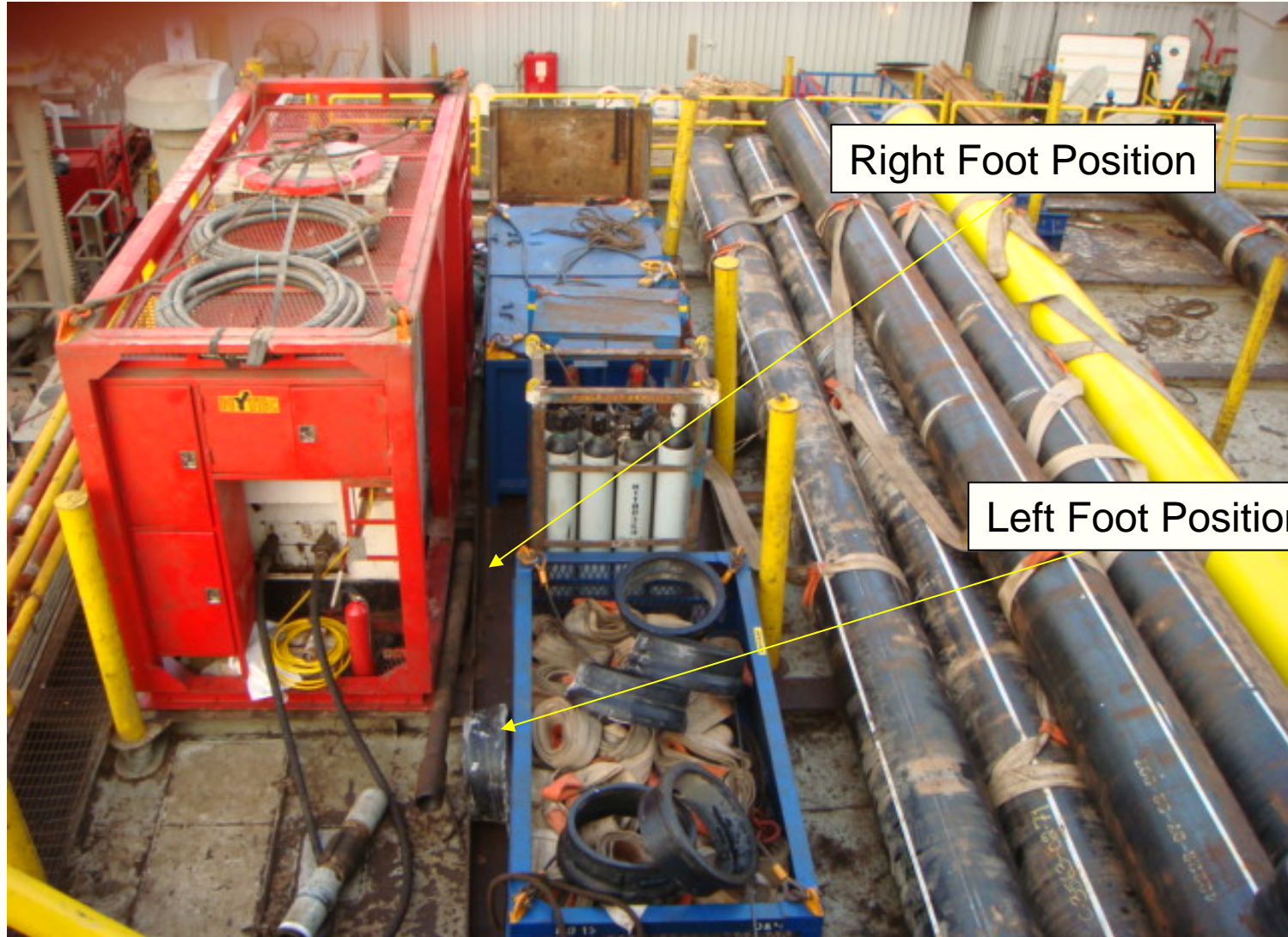
Samson post attached to 'movable' catwalk

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Photos

Port



Right Foot Position

Left Foot Position

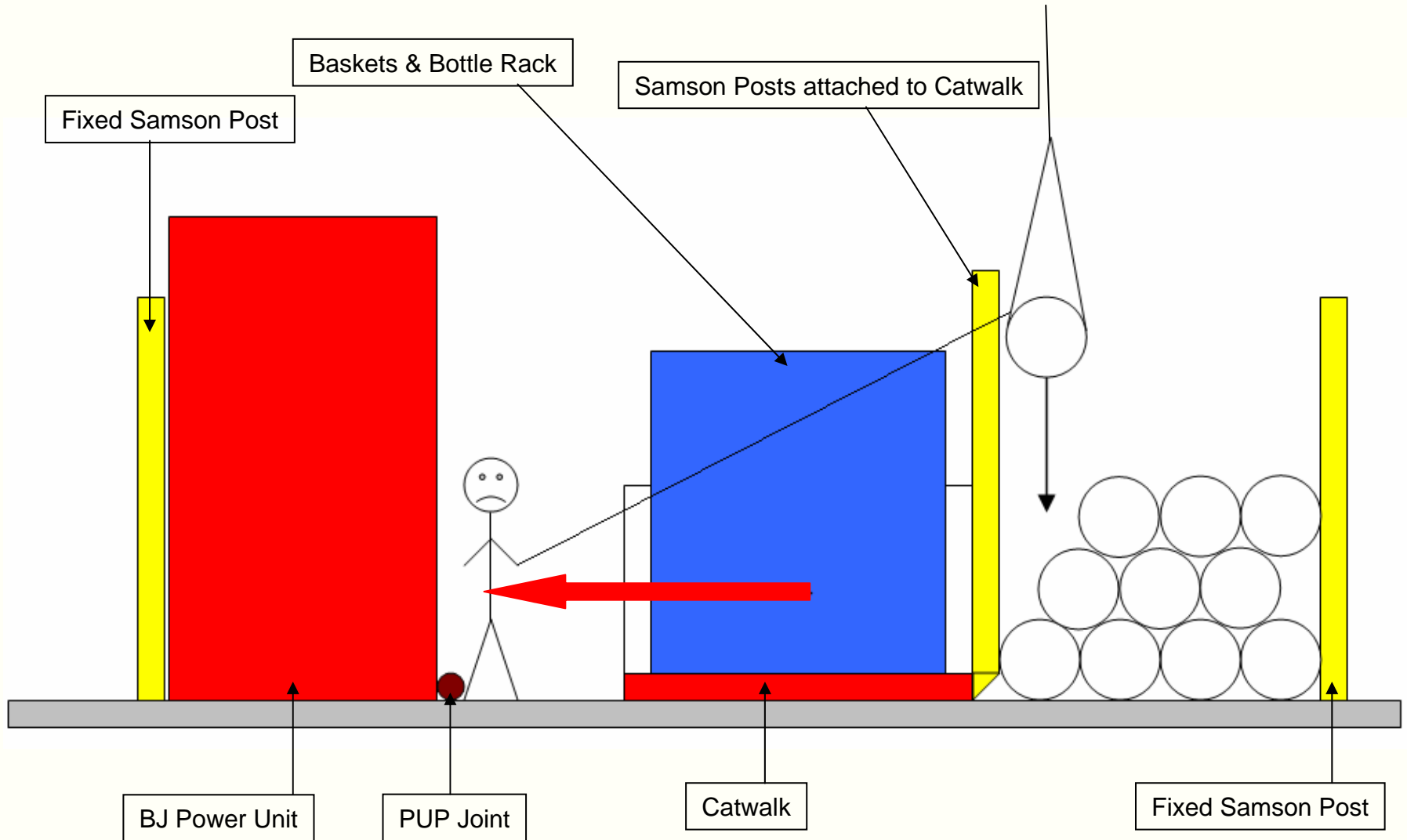
Starboard

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Diagram

LOOKING FROM DIRECTION OF RIG FLOOR TOWARDS ACCOMMODATION



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Immediate Corrective Actions

- Personnel quickly responded to assist the injured person. The Welder was called to cut the pup joint and crews moved the BJ hydraulic unit 2" with a come-a-long allowing his leg to be freed.
- Once freed he was then taken to the treatment room and the Medic noted that he had a slight abrasion, but no swelling, to the inside of his right leg just above the ankle. He was administered First Aid and monitored by the Medic, returning to full duty for his next tour.

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Basic Causes

- 1-The catwalk was used as a stop for the conductor pipe, and personnel involved in the task failed to realize that it was not designed to serve as a stop for tubulars racked in the way they were. (Inadequate Engineering, Inadequate Risk Assessment)
- 2- The Sampson post on the catwalk gave personnel a false sense of security.
- 3-The Job Safety Analysis did not identify the hazard of the catwalk moving when weight from the conductors was applied against it. (Inadequate Risk Assessment)

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Basic Causes

- 4- Supervisors did not conduct a pre-job inspection to analyze the potential hazards before doing a JSA. Supervisors did not recognize the potential danger. (Lack of Supervision)
- 5- The Assistant Rig Manager was holding one of the tag lines when the incident happened. (Supervisors are to supervise, not get hands-on with the work. He was in the picture instead of seeing the picture.)
- 6- The injured person did not recognize the potential hazard and put himself in a pinch-point situation. (Failure to Realize the Hazard) (Improper Placement).
- 7- The conductor pipe when layered was not properly chocked. No chocks were used to keep the pipe from rolling. (Improper Procedure)

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Lessons Learned

- Supervisors must lead, they must Supervise
- Step back 5x5 to be taught to and used by all personnel
- More thorough pre job planning must be conducted by Supervisors with input strongly encouraged from crew members
- When layering pipe, proper safety controls (chocking) are to be in place
- Additional risk assessment and hazard awareness training is required for the crews

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Preventive Actions

- Review and document the review of Noble Rigging & Lifting Manual Section 5 (Safe Approach to Lifting) and Section 23 (Handling Rig Floor Equipment) with all personnel.
- Remove Samson post slots from catwalk to ensure this will not occur again, nor give a false impression of safety for personnel working on the upper pipe rack
- Supervisors who have not already attended will be scheduled to attend formal Supervisor training
- Risk assessment and hazard awareness training held for all personnel
- Revise the Job Safety Analysis to include proper chocking of conductor pipe as it is being layered



Question and Answer Session