SAFETY ALERT

Multiple Crane Incidents during Heavy Lifting Operations

Since October 2018, BSEE is aware of six occurrences involving platform cranes pulling and/or striking handrails or other objects during heavy lifting operations on the Pacific Outer Continental Shelf (POCS). The increase in crane activity on the POCS has been largely associated with decommissioning activities and ongoing well abandonment operations. All of the crane-related incidents involved routine lifts during which the workers failed to recognize and mitigate job-specific hazards.

Below are summaries of three of these crane incidents on the POCS:

On March 31, 2019, during a crane lifting operation, a crane rigger used a handrail as an anchor point for fall protection, thereby placing himself in a potentially hazardous situation. As a 15,500 lb. fluid pump was being positioned for lifting, the load swung and hit the handrail causing the handrail to break off and fall toward the ocean with rigger still anchored to it. The rigger quickly prevented himself from being dragged into the water by sitting down and placing his feet on the kick plate.

BSEE’s investigation revealed that the crane rigger and his supervisor should have used better judgement when the rigger opted to use a handrail as an anchor point for fall protection. The crane crew also failed to re-evaluate the job scope when the lifting operation changed to a blind lift. It was discovered that the operator had different qualified contractors certified to conduct various crane operations; however, there was no designated contractor for crane operations. The various contractors on the platform were also found to not be working collaboratively, possibly due to their differing safety backgrounds.
On April 7, 2019, a crane operator on a POCS platform was back-loading a boat with a lubricator box. As the crane operator placed the load (the lubrication box) on the deck, a large wave caused the boat to drop vertically under the load; the boat then came back up and struck the load, causing damage to one of the retaining rods on the lubricator box. A 10-foot damaged section of the lubricator fell off the rack and hit the deck with the load (box) about one foot off the deck.

On April 8, 2019, a crane on a POCS platform was attempting to re-position a job box when the load snagged the handrail and a 100 lb. "gin pole," which was not secured to the load, thereby causing the load to fall approximately 45 feet to the cellar deck. At the time of the incident, there were no personnel in the impacted area of the cellar deck, thus there were no injuries. There was also no damage to the crane or equipment. As a result of the incident, Stop Work Authority was initiated and a “Safety Stand-down” meeting was conducted with all the crane operators and riggers to discuss the incident. At the meeting, personnel were reminded of the importance of inspecting loads prior to lifting operations. BSEE Inspectors investigated the incident and issued an Incident of Non-Compliance (INC) to the lessee for failing to ensure that the “gin pole” was properly secured by a bracket prior to lifting.

Therefore, BSEE recommends that operators consider the following:

- Incorporate in your Job Safety Analysis (JSA) a “staging plan.” The plan should review, identify and eliminate any rigging hazards, such as removable handrails, within the lifting area;

- Ensure that crane operation personnel review the JSA prior to rigging operations and include any changes that are capable of changing the work classification from a routine operation to non-routine operation, such as a blind or heavy lift;

- Ensure that all personnel involved in crane operations and/or rigging review the JSA and understand/acknowledge their role in ensuring the safety of the upcoming job prior to work commencing. Further the JSA should be specific to the job at hand;

- Ensure that crane operators and riggers (platform and boat) are certified in accordance with API RD 2D, Section 2;

- Review your Fall Protection Plan and ensure that personnel are prohibited from anchoring fall protection lanyards to handrails;

- Ensure that crane operators have a good understanding of ocean conditions to properly judge wave swell and sea conditions during the lift; and

- Be sure that personnel are aware of their surroundings and plan crane operations in full consideration of those surroundings.

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A Safety Alert is a tool used by BSEE to inform the offshore oil and gas industry of the circumstances surrounding a potential safety issue. It also contains recommendations that could assist avoiding potential incidents on the Outer Continental Shelf.