SAFETY ALERT



Safety Alert No. 358 July 9, 2019 Contact: Jason Mathews Phone: (504) 731-1496

Dislodged Boom Pawl Pin Unnoticed by Crane Operator during Pre-use Inspection



Location of the dislodged boom pawl pin is indicated by yellow circles.

On March 20, 2019, BSEE inspectors observed an offshore crane pre-use inspection. During the inspection, the crane operator did not exhibit sufficient competency to ensure safe functionality of a boom pawl pin and its associated safety pin keeper.

Earlier on that same day, the crew met about upcoming crane operations and reviewed a pre-filled Job Safety Analysis (JSA) that had not been altered to reflect the details of the current job. BSEE inspectors noted that some of the crew members appeared inattentive during the JSA discussion. Later, when BSEE inspectors asked the crew about the first step in the JSA, no one could tell the inspectors what it was.

After the meeting, BSEE inspectors observed the crane operator's pre-use inspection of the crane. Though the functionality of the boom pawl pin was on the inspection checklist, the crane operator failed to observe that the corroded pin was dislodged and that the safety pin keeper was in a pan nearby. Once the keeper had been removed, the pin likely shifted

out as the boom pawl moved back and forth during normal operations. The rust on the pin indicated that it had been out for an extended amount of time and was exposed to the elements. When the BSEE inspectors saw that the crane operator attempted to move forward with the checklist, they stopped work. They asked the crane operator what the pin was and what it did, but he could not answer; yet, he checked the item off as having been inspected on the checklist.

The boom pawl pin and keeper were reinstalled while BSEE inspectors were still on location, and the operator later installed a newly designed pin with a shoulder and cotter pin.

On February 20, 2018, BSEE issued <u>Safety Alert No. 329</u>, which addressed a potentially catastrophic crane incident that occurred in November 2017. The incident described in Safety Alert No. 329 involved a boom pawl pin that dislodged and thereby allowed the crane boom to fall freely, hitting the side of a jackup rig and puncturing a hole in a diesel tank.

Therefore, BSEE recommends that operators consider the following:

- Distribute this Safety Alert and redistribute BSEE Safety Alert No. 329;
- Inspect and reassess the functionality and design of all boom pawl pins and safety pin keepers;
- Ensure that all "bolts, pins, keepers, or cotter pins" are on the crane pre-use inspection checklist per API RP 2D;
- Review policies for verifying crane operator competency, which include knowledge of critical crane components;
- Review the JSA process (including, but not limited to: applicability, communication, and crew participation);
- Have HSE/compliance field personnel randomly accompany crane operators during pre-use inspections and have the crane operator describe what they are looking for as they check off the pre-use inspection form; and
- Consider developing an informational card depicting critical items, and their locations, that need to be checked during required inspections.

-- BSEE--

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.