SAFETY ALERT



Safety Alert No. 393 September 23, 2020 Contact: Jason Mathews Phone: (504) 731-1496

Adverse Weather and Sea Conditions Complicate Dynamic Lifts

An uptick of incidents in the Gulf of Mexico have occurred involving offloading/backloading cargo to and from offshore facilities, work boats, marine vessels (M/Vs), and offshore supply vessels. For many operators, these dynamic lifts are classified within the category of critical lifts, which require additional hazards, such as deck height, wind speed, wave height, and worker positioning, to be considered when conducting a task. Several incidents in April 2020, as detailed below, emphasize the importance of considering all potential hazards when preparing for a dynamic lift:



A nitrogen bottle rack on a marine vessel, as referenced in incident 1.

- 1. While backloading a nitrogen bottle rack to a M/V, the crane operator set the bottle rack on the boat's deck. When a worker on the M/V deck began to remove the stinger from the bottle rack, a sudden ocean swell shifted the load, causing the stinger to inadvertently lift the bottle rack slightly above the M/V deck. When the swell subsided, the rack landed on the worker's left foot, causing injury.
- 2. While backloading a supply box onto a M/V, the load struck the boat's gangway, breaking one of the pipe supports. The crane operator was able to land the load safely following the impact. After the event, the crane operator said he miscalculated how high the load was off the deck when he was attempting to set it down.

3. A platform crane operator lowered a stinger to hook up to a work basket to continue offloading supplies from a M/V when a wave caused the vessel to shift downward. As a result, the hook of the stinger caught the inside of the basket and slid it, pinning a M/V worker against the rail of the boat. The crane operator was able to move the basket enough for the worker to get out from behind the load, but the worker sustained a bruise to his left leg.

Therefore, BSEE recommends that operators and contractors consider the following:

- Consider adding a specific dynamic lift checklist to the Job Safety Analysis prior to making lifts to and from a M/V. Factors to include in the checklist should include, but not be limited to, wind speed, wind direction, sea state, visibility, and load characteristics;
- Re-evaluate the current environmental conditions immediately before starting a lift and adjust operations accordingly;
- Emphasize the use, right, and responsibility of Stop Work Authority to all crew members, especially those involved with dynamic lifts, regardless of rank or level of participation during the lifting operation;
- Consider inspecting the load and slings for adequate working condition;
- Verify up-to-date certifications (i.e. weights, dimensions, etc.) prior to a lift and ensure the information is accurately captured on the manifest before commencing transportation;
- Ensure supervision of a lift focuses on worker positioning and deck spacing as it pertains to the motion and final destination of the load;
- Thoroughly review this Safety Alert in conjunction with <u>Safety Alert No. 383</u>, which addresses recent tote tank lifting incidents; and,
- Verify a crane's minimum hook speed is sufficient to avoid a load hitting a M/V when a wave crests, as summarized in <u>Table B.4.3.3</u> in API Specification 2C.

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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.