



FINDINGS OF CONCERN

Office of Investigations and Casualty Analysis

June 26, 2023
Washington, DC

Findings of Concern 014-23

**SEACOR POWER CASUALTY: FINDINGS OF CONCERN
REGARDING LIFTBOATS**

Purpose. The U.S. Coast Guard issues Findings of Concern to disseminate information related to unsafe conditions that were identified as causal factors in a casualty and could contribute to future incidents. Findings of concern are intended to educate the public, state, or local agencies about the conditions discovered, so they may address the findings with appropriate voluntary action, or so they can highlight existing applicable company policies or state/local regulations.

The Incident. In April 2021, a commercial liftboat carrying 19 individuals departed Port Fourchon and headed offshore in the Gulf of Mexico. Approximately seven nautical miles offshore, the vessel encountered unpredicted weather conditions that exceeded the vessel's operating limits. The winds were over 80 knots, and gusted up to 99 knots, which capsized the vessel and caused the tragic loss of 13 lives.



Contributing Factors and Analysis. While the investigation revealed that the biggest factor leading to the capsizing was the unpredicted weather conditions, there were also a number of additional factors that either contributed to the casualty or were identified as unsafe conditions. These issues should be addressed to prevent future incidents, and include the following:

- Many items on the liftboat were not properly secured, and this was due to the fact that the vessel did not typically roll very much while underway, and the vessel normally operated in seas less than five feet. During the incident, though, the crew's actions to survive were hampered by the widespread movement of furniture and equipment.
- On the day of the accident, the crew did not secure the cargo on the deck of the liftboat. There was no evidence that this unsafe condition contributed to the capsizing on this particular vessel, however unsecured cargo, cranes and deck equipment could lead to dangerous situations for other liftboats, especially during unexpected heavy weather.



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- The company, the charter's representative, and the liftboat crew all received weather forecasts on the morning of the casualty, but there was no evidence that anyone re-checked the weather forecast that day, which created an unsafe condition. In this case, the weather that capsized the vessel was unpredicted, so additional weather checks likely would not have made a difference, but frequent weather checks are vital to ensuring a crew is aware of unexpected changes to the weather conditions. These precautions are particularly important for liftboats that are required to take action to avoid heavy weather.
- The lifesaving arrangements on the liftboat appeared to be designed for situations when the vessel was jacked up (with the legs down, the pads on the bottom, and the hull up and out of the water). There were lifejackets that were tied up in a box on deck. The liferafts were positioned on the main deck, which sometimes took on water while they were underway. The liferafts were also positioned under the cranes, so they may not have been fully float free. While the lifesaving arrangements were not ideal for underway conditions, they did not appear to contribute to this casualty because the vessel capsized so quickly. However, these types of unsafe lifesaving conditions could lead to dangerous situations for other liftboats.
- The liftboat's crew was not allowed to use the cranes or to shift cargo while the vessel was afloat, so all of the cargo and equipment loading occurred while the vessel was jacked up. This caused some issues with stability calculations, because the crew could not accurately assess the vessel's draft while the boat was jacked up. Once the vessel was jacked down, then they could use the draft readings to calculate the vessel's displacement and allowable vertical center of gravity, but if there was an issue the crew would have to jack the vessel back up in order to move things around. This created a disincentive to correct any stability problems, which was not identified as a casual factor for this incident, but it is an unsafe condition and could lead to future liftboat accidents.

Findings of Concern. Coast Guard investigators have identified a number of measures that may mitigate the risks posed by the issues discussed above. All liftboat owners and operators should consider the following voluntary actions:

- Properly secure all furniture, equipment, stores, and other items on liftboats that could shift in the event of heavy rolls or capsizing.
- Ensure liftboat masters and crew members recognize the critical importance of lashing cargo, cranes, and deck equipment prior to getting underway.
- Establish procedures for the company, the master and/or the crew to conduct frequent weather checks while a liftboat is underway in order to monitor for unexpected changes.



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- Ensure lifesaving equipment is reasonably spaced throughout the vessel.
- Conduct liftboat audits during cargo loading and/or while the vessels are afloat in order to evaluate the crew's actions while preparing to get underway, and in order to validate that the pre-departure condition is aligned with the operating manual and stability book.

Closing. These findings of concern are provided for informational purpose only and do not relieve any domestic or international safety, operational, or material requirements. For any questions or comments please contact the Office of Investigations and Casualty Analysis by email at HQS-SMB-CG-INV@uscg.mil.