

UNITED STATES COAST GUARD

U.S. Department of Homeland Security

MARINE SAFETY ALERT

Inspections and Compliance Directorate

October 28, 2024 Washington D.C.

Safety Alert 06-24

UNINSPECTED COMMERCIAL VESSEL STABILITY AWARENESS

A 30-foot uninspected work boat capsized while transporting cargo on Bayou Chene, Louisiana. The vessel was carrying three portable tanks with a combined weight of 7,776 pounds. During the transit, the vessel soft grounded on a mud flat and subsequently capsized, resulting in the tragic drowning of one crew member.

The investigation revealed that the vessel was severely overloaded, carrying cargo that exceeded the vessel's safe stability limits, which included stacked cargo. The vessel did not require Coast Guard inspection or official stability tests, and the crew was unaware of the vessel's maximum safe loading capacity. A post-casualty stability analysis determined that the vessel's maximum safe deck capacity was 7,000 pounds on a protected route. The cargo exceeded this limit, significantly reducing the vessel's stability, leading to the capsizing.

Additionally, there was no formal loading plan or stability guidance provided to the crew, who had received no formal training on safe loading practices. The vessel's owner had advertised a cargo capacity of 8,000 pounds, a figure that was not based on any documented stability tests or calculations.

This incident underscores the critical need for vessel owners to accurately determine and communicate the maximum cargo capacities and safe loading plans to prevent similar tragedies.

The Coast Guard **strongly recommends** that owners, managers, and operators of uninspected vessels:

- **Determine Maximum Cargo Capacity**: Conduct formal stability tests or calculations to determine the maximum safe cargo capacity for each vessel. Use marine engineers or qualified professionals to ensure accuracy.
- **Display Cargo Capacity and Loading Plans**: Clearly display the maximum cargo capacity and a recommended loading plan on the vessel in a location easily visible to the crew. Include instructions for cargo placement to maintain optimal stability.
- **Develop and Implement Training Programs**: Establish mandatory training programs for crew members on vessel stability and safe loading practices. Ensure all crew are familiar with the vessel's specific stability characteristics and loading limits.

- Review and Update Safety Policies: Regularly review and update safety policies to incorporate best practices for vessel loading and stability. Ensure that all crew members are aware of and adhere to these policies.
- Verify and Document Compliance: Maintain records of stability tests, loading plans, and crew training. Periodically verify that all vessels in your fleet are operating within their safe loading limits and that crew members are following the established loading plans.

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