

UNITED STATES COAST GUARD

U.S. Department of Homeland Security

FINDINGS OF CONCERN

Sector Lower Mississippi

July 9, 2020 Memphis, TN Findings of Concern 007-20

WATERTIGHT INTEGRITY – THE REAL DIFFERENCE BETWEEN FLOATING AND SINKING!

<u>Purpose</u>. 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 an appropriate voluntary action or highlight existing applicable company policies or state/local regulations.

The Incident. A towing vessel underwent a voluntary uninspected towing vessel examination which revealed the vessel's shaft alley was not watertight and various hatches and doors were also missing gaskets and latches. A year later, the same towing vessel was involved in a collision which caused an approximate 6 foot by 5 foot hole in the stern. The vessel took on water and sank in approximately 10 minutes. The investigation revealed that the vessel's shaft alley was still not watertight, and gaskets and latches were still missing, which contributed to the progressive down flooding from the stern, to the shaft alley, and ultimately the engine room.

Contributing Factors and Analysis. The vessel operator was made aware that there were many locations throughout the vessel which were not watertight. Hatches and water tight doors did not have gaskets and some were missing latches that are meant to close and hold the door or hatch shut. Without an appropriate gasket and latch, these doors and hatches were not used or were ineffective.

<u>Findings of Concern.</u> Coast Guard investigators have identified the following measures to mitigate the risks associated with the above identified contributing factors. The Coast Guard recommends that crewmembers, owners and operators:

- Ensure the vessel is in compliance with the watertight regulations found in 46 CFR 144.320 (a) and (b);
- Ensure watertight doors throughout the vessel are marked in accordance with 46 CFR 144.160 (e);
- Verify the condition of watertight doors, to include verifying that there are no gaps between the gasket ends, the knife edge is straight and in contact with the gasket all the way around, and the door closes properly when dogged down;
- Ensure all watertight decks and bulkheads are inspected periodically to ensure there are no unprotected openings or improper penetrations that would allow progressive flooding;
- Ensure closure devices (water tight doors, duct closures, cable ways, etc) are in place and in working order;
- Ensure all doors throughout the vessel are closed while underway, except when crewmembers are transiting from space to space.



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The Coast Guard also recommends reviewing the following safety alerts for additional information regarding watertight integrity. MSAs 04-10, 12-08, 01-08, and 03-07.

<u>Closing</u>. 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 Sector Lower Mississippi by phone at (901) 521-4846 or by email at seclmr2692@uscg.mil.