



# National Transportation Safety Board

Washington, D.C. 20594

## Safety Recommendation

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**Date:** July 11, 2007

**In reply refer to:** M-07-6 (Supersedes M-00-10)  
and M-07-7

Admiral Thad W. Allen  
Commandant  
U.S. Coast Guard  
Washington, D.C. 20593-0001

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About 1155 central daylight time on October 12, 2006, the uninspected towing vessel *Miss Megan* was pushing two work barges in Louisiana's West Cote Blanche Bay oil field, en route to a pile-driving location. Construction barge *Athena 106* was tied along the port side of barge *IBR 234*, and the *Miss Megan* was secured astern of *IBR 234*. While the vessels were under way, the aft spud (a 5-ton steel shaft used as a mooring device) on the *Athena 106* released from its fully raised position. The spud dropped into the water and struck a submerged, buried high-pressure natural gas pipeline. The resulting gas release ignited and created a fireball that engulfed the towing vessel and both barges. The master of the towing vessel was killed, along with four barge workers. The *Miss Megan* deckhand and one barge worker survived. One barge worker is officially listed as missing.<sup>1</sup>

The National Transportation Safety Board determined that the probable cause of the accident was Athena Construction's failure to require its crews to pin the spuds securely in place on its barges, which allowed the sudden, unintentional release of the *Athena 106*'s aft spud, rupturing a buried pipeline and causing natural gas to surface and ignite. Contributing to the accident was the failure of Central Boat Rentals to require, and of the *Miss Megan* master to ensure, that the barge spuds were securely pinned before getting under way.

According to American Waterway Operators, more than 4,000 deck barges similar to the *Athena 106* and *IBR 234* operate across the country, using different types of winches and other equipment in a variety of operations. U.S. Coast Guard data show that 305 people were fatally injured on barge/tow combinations between 1997 and 2006 and that 379 explosions or fires occurred on barges or towboats during the same period, killing 14 people.

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<sup>1</sup> For further information, see *Fire Aboard Construction Barge Athena 106, West Cote Blanche Bay, Louisiana, October 12, 2006*, Marine Accident Report NTSB/MAR-07/01 (Washington, DC: National Transportation Safety Board, 2007). The report will be available on the Safety Board's website <[www.nts.gov](http://www.nts.gov)>.

No regulatory agency inspects operations—general working conditions, safety gear, equipment, and operating practices—on barges that are not subject to inspection. The maritime safety role of OSHA involves primarily the regulation of shipyards, longshoring, and marine terminals. The Maritime Advisory Committee for Occupational Safety and Health advises OSHA on matters relevant to the safety and health of workers in the maritime industry, including enforcement, training, and outreach. After the accident, OSHA found Athena Construction to be in violation of a general workplace safety provision of the Occupational Safety and Health Act of 1970. OSHA and Athena Construction reached a settlement agreement on April 20, 2007.

The Coast Guard and Maritime Transportation Act of 2004 gives the Coast Guard the authority to require towing vessels such as the *Miss Megan* to have a towing safety management system. A safety management system would assist both the Coast Guard and the towing industry in providing for safe practices in vessel operation and a safe working environment on board towing vessels, establish and implement safeguards against identified risks, establish and implement actions to continuously improve the safety management skills of personnel on shore and on board towing vessels, and enhance compliance with rules and regulations. The Safety Board has previously addressed the need for safety management systems in the U.S. towing industry and believes that the lack of a safety management system requirement for all U.S. towing industry companies poses a threat to waterway safety.

When the new regulations supporting the Coast Guard and Maritime Transportation Act of 2004 are promulgated, they should restate the master's responsibility for his vessel and for the safety of vessels in tow. The new regulations will add a layer of oversight for vessels under tow that are not subject to inspection. Although towboats will be inspected under the new rules, monitoring of workplace safety aboard barges such as the *Athena 106* needs to be improved. The memorandum of understanding that the Coast Guard and OSHA signed in 1983 was "intended to eliminate confusion among members of the public with regard to the relative authorities of the two agencies." The memorandum does not address uninspected vessels. The Safety Board believes that workplace safety on uninspected vessels should be more closely observed before accidents occur, and that the agreement between the Coast Guard and OSHA should reflect the new regulatory scheme, address all aspects of workplace and navigational safety, and encourage communication between the two agencies and industry.

The National Transportation Safety Board therefore recommends that the Coast Guard take the following actions:

Finalize and implement the new towing vessel inspection regulations and require the establishment of safety management systems appropriate for the characteristics, methods of operation, and nature of service of towing vessels. (M-07-6) (Supersedes Safety Recommendation M-00-10)

Review and update your memorandum of understanding with the Occupational Safety and Health Administration to specifically address your respective oversight roles on vessels that are not subject to Coast Guard inspection. (M-07-7)

The Safety Board also issued recommendations to the Occupational Safety and Health Administration, Athena Construction, and Central Boat Rentals, Inc. The Board would

appreciate a response from you within 90 days, addressing actions you have taken or intend to take to implement its recommendations. In your response, please refer to Safety Recommendations M-07-6 and -7. For additional information, you may call (202) 314-6174.

Chairman ROSENKER, Vice Chairman SUMWALT, and Members HERSMAN, HIGGINS, and CHEALANDER concurred in these recommendations.

*[Original Signed]*

By: Mark V. Rosenker  
Chairman