



National Transportation Safety Board

Washington, D.C. 20594

Safety Recommendation

Date: July 11, 2007

In reply refer to: M-07-4 and -5

Mr. Edwin G. Foulke, Jr.
Assistant Secretary of Labor for
Occupational Safety and Health
Occupational Safety and Health Administration
200 Constitution Avenue, NW
Washington, D.C. 20210

The National Transportation Safety Board is an independent Federal agency charged by Congress with investigating transportation accidents, determining their probable cause, and making recommendations to prevent similar accidents from occurring. We are providing the following information to urge the Occupational Safety and Health Administration (OSHA) to take action on the safety recommendations in this letter. The Safety Board is vitally interested in these recommendations because they are intended to prevent accidents and save lives.

The recommendations address two safety issues: the limited oversight of vessels not subject to inspection by the U.S. Coast Guard, and the need for workers on deck barges to secure gear before the barges are moved. The recommendations derive from the Safety Board's investigation of the fire on board the construction barge *Athena 106* on October 12, 2006, and are consistent with the evidence we found and the analysis we performed.¹

About 1155 central daylight time on the day of the accident, the uninspected towing vessel *Miss Megan* was pushing two deck 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 deck 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.

¹ 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>.

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 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. 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.

No regulatory agency inspects operations—general working conditions, safety gear, equipment, and operating practices—on barges that are not subject to Coast Guard inspection. The maritime safety role of OSHA involves primarily the regulation of shipyards, longshoring, and marine terminals. The agency acts when there is an accident, a complaint, or as part of a nationwide “special emphasis program” focused on particular workplace safety hazards. 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, Athena Construction notified OSHA that it had been involved in an accident resulting in fatalities. The local OSHA office in Baton Rouge was first told that it was a marine accident and deferred to the Coast Guard to investigate. OSHA later joined the Safety Board investigation as a party. OSHA also conducted its own enforcement investigation and on March 29, 2007, issued a citation to Athena Construction for a serious violation of section 5(a)(1) of the Occupational Safety and Health Act of 1970. According to information received from Athena Construction, OSHA and Athena reached a settlement agreement on April 20, 2007.

New rules promulgated to support the Coast Guard and Maritime Transportation Act of 2004 are expected to require towboats such as the *Miss Megan* to be inspected and should add a layer of oversight for vessels under tow by restating the master's responsibility for his vessel and for the safety of vessels in tow. Nevertheless, monitoring of workplace safety aboard uninspected 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 Occupational Safety and Health Administration take the following action:

Review and update your memorandum of understanding with the U.S. Coast Guard to specifically address your respective oversight roles on vessels that are not subject to Coast Guard inspection. (M-07-4)

Direct the Maritime Advisory Committee for Occupational Safety and Health to issue the following documents to the maritime industry: (1) a fact sheet regarding the accident, and (2) a guidance document regarding the need to secure the gear on barges, including spud pins, before the barges are moved, and detailing any changes to its memorandum of understanding with the Coast Guard. (M-07-5)

The Safety Board also issued recommendations to the U.S. Coast Guard, 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-07-4 and -5. 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