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NATIONAL TRANSPORTATION SAFETY BOARD  
WASHINGTON, D.C.

ISSUED: July 6, 1983

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Forwarded to:

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President  
Le Beouf Brothers Towing Company, Inc.  
P.O. Box 9036  
Houma, Louisiana 70361

SAFETY RECOMMENDATION(S)

M-83-47 and -48

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On March 31, 1982, the Liberian tank vessel M/V ARKAS was upbound in the Mississippi River carrying a cargo of crude oil, and passing the upbound towboat M/V CREOLE GENII, which was pushing three barges carrying No. 6 oil, when the vessels collided near Thirty-five Mile Point, at mile 130, Above Head of Passes, Mississippi, at 2118. The collision ruptured the ARKAS' hull, and escaping crude oil was ignited. Because the ARKAS' crew feared an explosion, they anchored the vessel along the east riverbank and then abandoned it. Damage was estimated to be \$50,000 to the CREOLE GENII tow, \$15 million to the ARKAS, and more than \$71,000 to the environment. No one was seriously injured. <sup>1/</sup>

The CREOLE GENII was pushing three tank barges in a line ahead. The raked bow barge BOBBIE was in the lead followed by the TIM and the GIRL. The tow, including the towboat, was 815 feet long and 50 feet wide. Each of the barges was loaded to about a 9-foot draft carrying a total of 50,000 barrels of No. 6 oil, and the towboat's draft was about 9 feet 6 inches, according to the operator. The operator alone piloted the tow and controlled the towboat's dual engines from the pilothouse. Although there was a patchy, low fog on the river, the operator did not sound fog signals or post a lookout.

The towboat was equipped with radar with the scope located to the left side of the pilothouse and close to the maneuvering controls. The radar was turned on and set on the 1 1/2-mile range scale. Two radiotelephone sets were turned on, monitoring VHF-FM channels 16 and 67. There was no evidence of any malfunctioning of the towboat's engines, steering system, or navigation equipment. The towboat's pilothouse arrangement provided good all-around visibility.

The CREOLE GENII's operator had 24 years' experience on towboats, crewboats, and fishing vessels. He was first licensed in 1973 by the U.S. Coast Guard as a pilot of uninspected tugboats on inland and western rivers. He had difficulty taking the Coast Guard Rules of the Road license examination and orally repeated that portion five times before passing. He said that he was not aware of the Inland Navigation Rules Act of 1980, and he did not know that these new Inland Rules were effective on December 24, 1981.

<sup>1/</sup> For more detailed information, read Marine Accident Report--"Collision of U.S. Towboat CREOLE GENII and Liberian Tank Vessel ARKAS, near mile 130, Mississippi River, March 31, 1982" (NTSB/MAR-83/83).

His license did not have a radar observer endorsement, nor was it required in order for him to operate the CREOLE GENII because of the vessel's low gross tonnage; he had no radar training. He said that he normally "parked" his tows during fog. He had piloted towboats on the Mississippi River and on the intracoastal waterways regularly on the route from Good Hope to Baton Rouge, Louisiana, and frequently past Thirty-five Mile Point. He had operated the CREOLE GENII for 7 years. He said that the CREOLE GENII was bigger than most of the towboats he had operated in the past.

In its analysis of the accident, the Safety Board determined that the CREOLE GENII had crossed the river at Thirty-five Mile Point and was north of the Freetown Light Pier as it was being overtaken by the ARKAS. The CREOLE GENII's operator earlier had agreed to the ARKAS' overtaking on the tow's starboard side, and he expected that his tow would be near the west bank when the ARKAS overtook him. While the CREOLE GENII was crossing the river from the east to the west bank, its upriver speed over the ground was reduced from about 4 mph to about 1 mph as it encountered the full force of the 5- to 6-knot (6- to 7-mph) current, and its operator experienced difficulty keeping the tow aligned against the current.

The low patchy fog tended to obliterate forward landmarks and navigation aids which the CREOLE GENII's operator normally would have used to detect tow-heading changes while maneuvering. The operator did not use the CREOLE GENII's swing indicator or the magnetic compass, which could have indicated heading changes, and he did not use the radar for navigation. Additionally, radiotelephone communications regularly diverted his attention while he was maneuvering. Although some shore lights were occasionally visible abeam, these lights would not have been as useful to the operator as lights forward for detecting tow swing. Because the west bank above the Freetown Light Pier consists of marshy vegetation, and the levee diverts up to 1 mile from the river channel, the availability of landmarks was limited and particularly poor in fog. Consequently, since the CREOLE GENII's operator did not or could not use effectively the navigation equipment available to him, he was maneuvering his tow against the river current almost blindly because of the fog. Although the operator intended to keep his tow close to the west bank, the evidence establishes that the tow was near midstream just before the accident.

The investigation of the accident revealed that there sometimes is a river eddy current at Thirty-five Mile Point above the Freetown Light Pier. Such an eddy might have set the CREOLE GENII toward midstream, and if so would have moved it toward the path of the ARKAS. The CREOLE GENII's operator may not have detected the set because of the fog. The Safety Board believes that had the CREOLE GENII's operator effectively used the radar equipment available to him, he should have been able to navigate close to the west bank as he originally planned despite the fog and any encounter with an eddy.

The CREOLE GENII's operator and the ARKAS' pilot both were required to comply with the Inland Navigation Rules Act of 1980. Proper compliance with Rules 8, 13, 16, and 17 should have prevented this collision, and there was adequate searoom for the vessels to maneuver and conform to the rules. Rule 13(a) requires that any vessel overtaking any other shall keep out of the way of the vessel being overtaken. Rule 13(d) additionally specifies that the overtaking vessel is not relieved of its duty of keeping clear of the overtaken vessel until it is finally past and clear. While overtaking, the ARKAS was the "give-way vessel," under Rule 16, and was required to keep out of the way of the "stand-on vessel," the CREOLE GENII, which was obligated to comply with Rule 17. Under Rule 17, the stand-on vessel is required to hold its course and speed; however, it may take maneuvering action to avoid collision as soon as it is apparent that the give-way vessel is not taking appropriate action to keep clear. Although the CREOLE GENII did

not maintain its course just before the collision, as required by Rule 17(a)(i), the proximity and the movements of the ARKAS may have contributed to the CREOLE GENII's inability to do so by deflecting the CREOLE GENII tow from its course. Further, Rule 17(d) stipulates that the give-way vessel is not relieved of its obligation to keep out of the way.

Rule 8 describes maneuvering action which must be taken when there is risk of collision. The ARKAS' pilot became aware that a collision was imminent when he observed the CREOLE GENII tow swinging toward the ARKAS. Therefore, he requested right rudder in an effort to maneuver clear of the tow. Then, realizing that the collision could not be avoided by the maneuvering of the ARKAS alone, he advised the CREOLE GENII's operator to back his tow. The tow's swing to the right was an indication that it was already out of control. Had the CREOLE GENII's operator been observing the movements of the ARKAS, either visually or on radar, he might have recognized an impending loss of control earlier and initiated a left turn which might have averted the collision. Earlier backing of the CREOLE GENII also might have averted the collision.

Although the CREOLE GENII's operator had difficulty passing his Coast Guard examination on the Rules of the Road, Western Rivers, and he was unaware that the Inland Rules Act of 1980, which superseded the Western Rivers Rules, was in effect at the time of the accident, it is doubtful that this affected the outcome of this accident since the rules are similar in import. Rules 22(a), 22(b), 23, and 25, of the former Rules of the Road, Western Rivers, would have been applicable under the circumstances.

Therefore, the National Transportation Safety Board recommends that the Le Beouf Brothers Towing Company:

Provide all company-operated towboats with copies of current Inland Navigation Rules of the Road for use in the pilothouse. (Class II, Priority Action) (M-83-47)

Review operating practices to insure that adequate towboat horsepower is being matched to barge tows relative to tow deadweight and length and expected current conditions on the routes being served. (Class II, Priority Action) (M-83-48)

The National Transportation Safety Board is an independent Federal agency with the statutory responsibility "... to promote transportation safety by conducting independent accident investigations and by formulating safety improvement recommendations" (P.L. 93-633). The Safety Board is vitally interested in any actions taken as a result of its safety recommendations and would appreciate a response from you regarding action taken or contemplated with respect to the recommendations in this letter.

BURNETT, Chairman, GOLDMAN, Vice Chairman, McADAMS, BURSLEY, and ENGEN, Members, concurred in these recommendations.

  
By: Jim Burnett  
Chairman