## NATIONAL TRANSPORTATION SAFETY BOARD

Washington, D.C. 20594



## Safety Recommendation

Date: March 14, 1994

In Reply Refer To: M-94-4

Captain John Sparks
President
American Pilots' Association
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On Wednesday, March 24, 1993, about 0245, the U.S. offshore supply vessel (OSV) GALVESTON and the Panamanian bulk carrier ATTICOS collided in the Lower Mississippi River at mile 9.5, near Venice, Louisiana. The GALVESTON quickly sank, resulting in the loss of three lives. The estimated value of the GALVESTON was \$2 million, and it was declared a constructive total loss; the ATTICOS sustained only minimal damage to its bulbous bow.<sup>1</sup>

The National Transportation Safety Board determines that the probable cause of the collision was that the master of the GALVESTON become distracted from his watchkeeping and failed to keep a lookout visually and by radar. Contributing to the accident were inadequate radiotelephone communications.

The engineer of the GALVESTON said that he first sighted the ATTICOS at a distance of about 300 feet ahead. He stated that the ship "looked dead ahead, like a head-on collision was going to happen." He immediately alerted the master, who responded, "I didn't see it."

The master was inattentive in maintaining a visual lookout. His failure to detect the ATTICOS was due principally to his being distracted by problems with the navigation lights, and his inadequate adaptation to the dark contributed to his failure to see the ship. The Safety Board therefore concludes that the master of the GALVESTON did not maintain a proper lookout either

<sup>&</sup>lt;sup>1</sup>For more detailed information, read Marine Accident Report-- Collision Between the U.S. Offshore Supply Vessel GALVESTON and the Panamanian Bulk Carrier ATTICOS in the Lower Mississippi River at Mile 9 5 Near Venice, Louisiana, March 24, 1993 (NTSB/MAR-94/01).

visually or by radar and that he did not detect the ATTICOS until a close-quarters situation had developed.

When the pilot of the ATTICOS, proposed a meeting agreement to the master of the GALVESTON, the master should have named the pilot's vessel, named his own vessel, and restated the proposal. According to the pilot, the master of the GALVESTON did none of this. He simply said, "one." Because the GALVESTON initially did not respond and then responded too briefly to confirm that it had entered into a meeting agreement, it would have been prudent for the pilot to have verified that he and the master had reached an agreement.

The Safety Board recognizes that the pilot may have believed he had justifiable reason to conclude that he had a meeting agreement and that the GALVESTON was keeping a proper lookout and was prepared to maneuver as necessary to effect a port-to-port meeting. The pilot stated that in addition to hearing the word "one," he saw the GALVESTON show its port sidelight, which he interpreted as an indication that the GALVESTON was changing course to its right to effect a one-whistle meeting.

The GALVESTON, however, did not change course to its right, but continued approximately straight down the river. The GALVESTON's port sidelight probably became visible to the pilot as a result of being turned on by the GALVESTON's engineer after the vessel headed downriver. It was not unreasonable for the pilot to have concluded that the GALVESTON was changing course because he had sighted the GALVESTON's starboard sidelight as that vessel exited The Jump<sup>2</sup> and would have expected the port sidelight to be on as well. Also, the failure of the GALVESTON's master to have both masthead lights on denied the pilot a reliable means of estimating the GALVESTON's heading. The range formed by the two masthead lights would have enabled the pilot to recognize exactly when the GALVESTON was on a heading downriver that should have made its port sidelight visible, thus probably enabling the pilot to determine that the GALVESTON's port sidelight was not on initially. Although the pilot of the ATTICOS thought he had arranged a meeting agreement, the Safety Board believes that the master of the GALVESTON never become aware of the presence of the ATTICOS.

When the pilot changed his course to 315° and was finally able to estimate that the closest point of approach (CPA) was going to be as little as 100 to 150 feet on his vessel's port side, he probably should have reevaluated how well the meeting was progressing. The distance at CPA would have left little margin for error had either vessel had a steering error or mechanical failure. Further, the pilot had to pass within about 100 to 200 feet of The Lower Jump Shoal buoy to obtain even this small CPA. Thus, the vessels were faced with a close-quarters situation. Because there was abundant room for the GALVESTON to maneuver and because OSVs normally travel much closer to the west bank, it would have been prudent for the pilot to have considered speaking further with the GALVESTON to arrange for it to move to its right, increasing the distance between the vessels. Based upon the foregoing, the Safety

<sup>&</sup>lt;sup>2</sup>The GALVESTON had begun its trip in The Jump, a small waterway leading from the west bank of the Mississippi River to the Gulf of Mexico.

Board concludes that the pilot of the ATTICOS relied upon incomplete radiotelephone information to conclude that he had arranged a meeting agreement with the operator of the GALVESTON.

The Safety Board has long been concerned about improving communications between vessels. After the 1973 adoption of regulations to implement the 1971 Vessel Bridge-to-Bridge Radiotelephone Act, the number of VHF-FM users proliferated; and more users resulted in significant abuse of the bridge-to-bridge radio channel. In two collisions on the Mississippi River, one between the steamer NATCHEZ and the U.S. tankship EXXON BALTIMORE,<sup>3</sup> and the other between the U.S. tankship PISCES and the Greek bulk carrier TRADE MASTER,<sup>4</sup> abuse, involving high power settings, transmitter keying, and excessive use of the bridge-to-bridge channel, interfered with essential communications. The safety recommendations issued as a result of these two investigations resulted in an enforcement and education program involving the Coast Guard, the Federal Communications Commission (FCC), pilots, and representatives of the marine industry and ultimately resulted in reducing abuses and greatly improving radio communications.

Another collision that involved a communication failure occurred on the Mississippi River on June 11, 1984. It involved the U.S. towboat ANN BRENT and the Greek tankship MANTINIA.<sup>5</sup> In this accident, radio transmissions were clearly heard, but vital information about how the meeting was to be accomplished became confused. As a result of the investigation, the Safety Board recommended that the Coast Guard and industry develop a standard vocabulary and procedures to be used on the radiotelephone when arranging meeting and passing agreements. The recommended action was contained in two recommendations:

In conjunction with representatives of the marine industry who operate vessels on the inland waters of the United States, develop a standard vocabulary for use by vessel operators and pilots when formulating agreements on the vessel bridge-tobridge radiotelephone. (M-85-43)

In conjunction with representatives of the marine industry who operate vessels on the inland waters of the United States, develop a formal procedure to be followed by vessel operators and pilots to transmit their navigational intentions and to confirm agreements, when they use the vessel bridge-to-bridge radiotelephone. (M-85-44)

<sup>&</sup>lt;sup>3</sup>Marine Accident Report--Collision of U.S. Mississippi River Steamer NATCHEZ and the SS EXXON BALTIMORE, New Orleans, Louisiana, March 29, 1980 (NTSB/MAR-81/05).

<sup>&</sup>lt;sup>4</sup>Marine Accident Report--Collision of the U.S. Tankship PISCES and the Greek Bulk Carrier TRADE MASTER, Mile 124, Lower Mississippi River, December 27, 1980 (NTSB/MAR-82/02).

<sup>&</sup>lt;sup>5</sup>Marine Accident Report--Collision of the U.S. Towboat ANN BRENT and Tow with the Greek Tankship MANTINIA, Mile 150, Lower Mississippi River, June 11, 1984 (NTSB/MAR-85/04).

The Coast Guard ultimately did not concur, stating that standard guidance was already in the Inland Navigation Rules (33 CFR 84-90). Safety Recommendations M-85-43 and -44 were classified as "Closed--Unacceptable Action" on August 1, 1988.

The Safety Board believes that the Inland Navigation Rules do not specify or even provide guidance about the content of the radiotelephone messages that may or should be used in place of whistle signals to describe the type of meeting being proposed or the content of the message that indicates acceptance. The pertinent section of Rule 34, "Sound and Light Signals," simply states:

(h) A vessel that reaches agreement with another vessel in a meeting, crossing, or overtaking situation by using the radiotelephone as prescribed by the Bridge-to-Bridge Radiotelephone Act (85 Stat. 165; 33 U.S.C. 1207) is not obliged to sound the whistle signals by this Rule, but may do so.

Similarly, the FCC regulations contain no guidance on the content or format of the message.

The custom (as demonstrated in testimony and vessel traffic service recordings) has evolved for mariners to describe the meeting situation in various terms, such as one whistle (or two whistles) or meet you or see you on the one (or the two). In the GALVESTON/ATTICOS case, the pilot heard a single one-word reply, "one." In the MANTINIA/ANN BRENT collision, the operator of the ANN BRENT attempted to change a port-to-port meeting to a starboard-to-starboard meeting by suggesting that his vessel would "stay in the right side of the point." This message was confusing and was not understood by the pilot of the MANTINIA, who continued to maneuver for a port-to-port meeting. The GALVESTON/ATTICOS and the MANTINIA/ANN BRENT collisions demonstrate that meeting agreement messages can vary greatly in content and sometimes result in failure to establish a meeting agreement.

The Safety Board continues to believe that using a standard message format for radiotelephone messages to arrange meeting and passing agreements would eliminate confusion and thus contribute significantly to safety. Further, the Safety Board believes that the variations in the content of radiotelephone messages used by some mariners continue to cause serious confusion, as occurred in this accident, and that there is a need for a program involving the Coast Guard, the FCC, and waterway users that is designed to encourage mariners to use standard terms when arranging meeting and passing agreements.

Therefore, the National Transportation Safety Board recommends that the American Pilots' Association:

Publish the circumstances of this accident to your membership to stress the importance of using proper radio communication procedures when formulating vessel passing agreements. (Class II, Priority Action) (M-94-4)

Also, the Safety Board issued Safety Recommendations M-94-1 and -2 to the U.S. Coast Guard and M-94-3 to the Offshore Marine Services Association. If you need additional information, you may call (202) 382-6860.

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" (Public Law 93-633). The Safety Board is vitally interested in any action taken as a result of its safety recommendations. Therefore, it would appreciate a response from you regarding action taken or contemplated with respect to the recommendation in this letter. Please refer to Safety Recommendation M-94-4 in your reply.

Chairman VOGT, Vice Chairman COUGHLIN, Members LAUBER, HAMMERSCHMIDT, and HALL concurred in these recommendations.

By: Carl W. Vogt

Chairman