

NATIONAL TRANSPORTATION SAFETY BOARD

Washington, D.C. 20594



Safety Recommendation

Date: March 14, 1994

In Reply Refer To: M-94-3

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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.¹

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

¹For 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).

therefore concludes that the master of the GALVESTON did not maintain a proper lookout either 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 Jump² 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 became aware of the presence of the ATTICOS.

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,³ and

²The 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.

³Marine 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).

the other between the U.S. tankship PISCES and the Greek bulk carrier TRADE MASTER,⁴ 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.⁵ 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-to-bridge 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)

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

⁴Marine 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).

⁵Marine 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).

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.

In its investigation of this accident, the Safety Board also identified as a safety issue the lack of fire and boat drills. According to the *Trident Marine, Inc.*,⁶ *Policy Book*, the company manual, the master is required to conduct a safety meeting every 2 weeks to familiarize the crew with safety practices. The date and time of the meeting are to be logged in the vessel's log book, as are the dates and times of fire and boat drills. Among the topics to be discussed at safety meetings are weekly fire and boat drills, signals and assignments for fire, and abandonment and man-overboard procedures.

According to 46 CFR 97.15-35, Subparts (a) and (b):

- (a) The master shall be responsible for conducting a fire and boat drill at least once in every week. The scheduling of such drills shall be at the discretion of the master except that at least one fire and boat drill shall be held within 24 hours of leaving a port if more than 25 percent of the crew have been replaced at that port.

⁶At the time of the accident, Trident Marine, Inc., owned the GALVESTON.

- (b) The fire and boat drill shall be conducted as if an actual emergency existed. All hands should report to their respective stations and be prepared to perform the duties specified in the station bill.

- (b)(2) All rescue and safety equipment shall be brought from the emergency equipment lockers and the persons designated shall demonstrate their ability to use the equipment...

The GALVESTON's crew consisted of a master, an engineer, a mate, an ordinary seaman, and an able seaman. Because three members, or 60 percent, of the crew had recently joined the vessel, there should have been a fire and boat drill to ensure that everyone was properly indoctrinated. The engineer testified that no drill had been held since he joined the vessel on March 21, 1993.

The engineer was employed by Trident Marine, Inc., on November 23, 1990, and did a 2-week tour of duty on the GALVESTON every 6 weeks. The mate was employed by Trident Marine, Inc., on September 9, 1989, and worked on the GALVESTON as both a captain and a mate. Both were obviously familiar with the layout and emergency equipment on the vessel. Trident Marine, Inc., had only recently employed the ordinary seaman, on March 14, and the able seaman, on March 22, 1993, so they were not as familiar with the layout and emergency equipment on the vessel. Therefore, a fire and boat drill would have been beneficial. The mate heard the able seaman ask where his life preserver was; such information is provided during fire and boat drills because crewmembers are required to don their life preservers. The Safety Board, therefore, concludes that if a fire and boat drill had been held, the able seaman probably would have been able to locate a life preserver quickly.

OSVs are required to maintain a record of weekly fire and boat drills. Because the GALVESTON's log sank with the vessel, the Safety Board could not confirm the engineer's statement that fire and boat drills were held weekly. The Safety Board reviewed the vessel's log for June 7, 1992, through January 30, 1993. Fire and boat drills had not been held as often as required, and there were only 11 entries about wearing and using emergency equipment on deck, man-overboard drills, the location of life rings, and firefighting and emergency equipment. If weekly drills had been held, at least 32 entries would have been entered over the 8-month period.

This accident shows that drills on OSVs such as the GALVESTON are necessary. OSVs should hold weekly boat drills in which the general alarm is used to assemble the crewmembers at muster stations. Because of the ever present danger of fire and the fact that the crew normally must control a fire without outside assistance, a weekly fire drill is also essential. There should be additional fire and boat drills whenever more than 25 percent of the crewmembers are replaced.

Therefore, the National Transportation Safety Board recommends that the Offshore Marine Services Association (Offshore Vessel Owner/Operators):

Publish the circumstances of this accident among your membership to stress the importance of maintaining a proper lookout, of using proper radio communication procedures when formulating vessel passing agreements, and of conducting fire and boat drills. (Class II, Priority Action) (M-94-3)

Also, the Safety Board issued Safety Recommendations M-94-1 and -2 to the U.S. Coast Guard and M-94-4 to the American Pilots' 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-94-3 in your reply.

Chairman VOGT, Vice Chairman COUGHLIN, and Members LAUBER, HAMMERSCHMIDT, and HALL concurred in this recommendation.

By: 
Carl W. Vogt
Chairman