



National Transportation Safety Board

Washington, D.C. 20594
Safety Recommendation

Date: June 18, 1990

In reply refer to: M-90-25

Mr. Barry Fuller
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Woods Hole, Martha's Vineyard and
Nantucket Steamship Authority
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At 1045, on July 29, 1988, the steel-hulled, double-ended passenger/car ferry ISLANDER commenced the return trip to complete its second round trip of the day when it left Woods Hole, for Martha's Vineyard Island, Massachusetts with 509 passengers and 50 automobiles aboard.¹ The 7-mile trip normally took 45 minutes. On the crossing before the accident, the ISLANDER required 88 minutes to complete the trip, due to fog and traffic avoidance. The crew stated that the number of pleasure boats was increasing each year and that this was as high a number as they had experienced. The master/pilot (master) assigned two able seamen (AB) as lookouts in the wheelhouse. One AB was positioned at the forward windows while the other AB alternated his watch position between the open port and starboard wheelhouse doors. The master was at the port radar located near the engine controls in the wheelhouse and another crewmember, who was a pilot, was at the helm. There was a light southerly wind with dense fog². The current in the harbor was flooding in an easterly direction at a velocity of 1 to 2 knots. The lookouts described the visibility as "zero," "dense fog....I could just see over the bow, no more than 2 feet over the bow of the vessel...."

Before departing, the master broadcast a security message on VHF/FM radio channels 13³ and 16⁴ stating that the ISLANDER was preparing to depart

¹For more detailed information, read Marine Accident/Incident Summary Report: "Woods Hole, Massachusetts, July 29, 1988 (NTS8/MAR-90/01/SUM).

²Reduced visibility of 1/4 mile or less is experienced on the average of 98 days of the year at Nantucket Island with 65 of those days occurring between April and September.

³Channel 13 (156.65 MHz) is the bridge-to-bridge VHF/FM radio channel used by vessels for the exchange of navigation information.

⁴Channel 16 (156.8 MHz) is the international distress, safety, and calling frequency. It is used to transmit distress and safety information as well as to call vessels or shore stations.

from the ferry dock at Woods Hole for Martha's Vineyard Island via the main channel of Great Harbor; the master received no replies to his broadcasts. At 1047, after the ISLANDER departed from the Woods Hole ferry dock, the master ordered a left turn to course 160⁰T to begin the normal transit from Great Harbor to Vineyard Sound. According to the master there were many recreational small boats in the vicinity and because of the reduced visibility, he sounded fog signals. He stated that he was depending on the radar for both navigation and traffic avoidance information.

While approaching Woods Hole Great Harbor Channel Lighted Buoy 5 (buoy "5"), the master noticed five radar contacts in the channel near buoy "5" and slowed the ISLANDER to bare steerageway, about 3 knots. When the ferry was within 1/8 mile of the radar contacts, the master determined that there was a risk of collision with nearby vessels. He sounded the danger signal and then he stopped and backed the engines to reduce the ISLANDER's forward movement. When the radar contacts near buoy "5" appeared to move, which left more space for the ISLANDER to pass, the master increased speed to 3 knots. When the ISLANDER was abeam of buoy "5", the master identified Woods Hole Great Harbor Channel Buoy 4 (buoy "4") on the radar, and ordered the course changed to 170⁰T.

Shortly thereafter, the master noticed two radar contacts crossing Great Ledge [shoal] approximately 20⁰ on the ISLANDER's port bow on a constant bearing which indicated that the vessels were approaching the ISLANDER on a collision course. Before the vessel was steadied on course 170⁰T, the master stopped the engines, sounded the danger signal, and backed the engines. One radar contact appeared to slow down while the other appeared to change course. At an undetermined short time later, the master ordered full right rudder and as he "...kicked engines ahead...", the lookout at the forward window reported sighting buoy "4" on the starboard bow. The master immediately backed the engines; however, the maneuver was not made in time to prevent the vessel from grounding on the southwest corner of Great Ledge at 1057, on a heading between 160⁰T and 170⁰T. Immediately after the grounding, the master sighted two recreational boats, a 26- to 30-foot sailboat and a 36-foot power boat, about 50 to 60 feet off the port side of the ISLANDER.

In order to have navigated safely out of Great Harbor, the ISLANDER would have had to navigate between Woods Hole Great Harbor Entrance Buoys "1" and "2" (buoys "1" and "2"), leaving buoy "4", which marks the shoal waters of Great Ledge, to port. The master was familiar with these waters and knew the set of the current toward Great Ledge.

The master was fully qualified to act as a radar observer and was recertified by the Coast Guard in February 1988. Even though the ISLANDER's pilot was also fully qualified to act as a radar observer and to navigate the ferry, a company policy required that the pilot serve as a helmsman until the ferry left Great Harbor. Accordingly, the pilot (helmsman) was steering courses ordered by the master, and was unable to utilize his radar and navigation skills to assist the master despite the fact that the two ABs who were in the wheelhouse were qualified helmsmen. If the company policy had not discouraged the assignment of an AB to be the helmsman, the pilot could have been utilized by the master to monitor the vessel's position on one

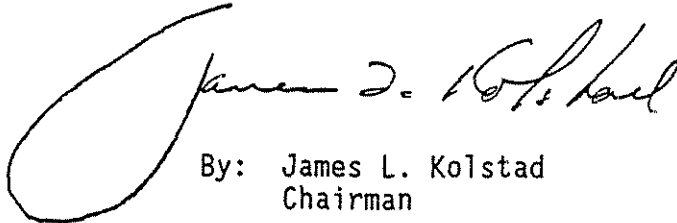
radar, while the master was monitoring vessel traffic on the other radar. The master, while avoiding traffic, could have depended on the pilot to keep him advised as to the movement of the ISLANDER in the channel. The master was apparently so preoccupied by two vessel radar contacts and the maneuvers to avoid collision with them, that he did not remember to compensate for the current when he stopped or slowed the ISLANDER at position 2 and further did not recognize the vessel's movement towards Great Ledge, on the radar, until it was too late to avoid the grounding.

Therefore, the National Transportation Safety Board recommends that the Woods Hole, Martha's Vineyard and Nantucket Steamship Authority:

Revise your operating procedures to encourage your masters to make greater use of the pilot's radar and navigation skills while operating in low visibility and other adverse situations. (Class II, Priority Action)
(M-90-25)

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-90-25.

KOLSTAD, Chairman, COUGHLIN, Acting Vice Chairman, and LAUBER, and BURNETT, Members, concurred in this recommendation.



By: James L. Kolstad
Chairman