



National Transportation Safety Board

Washington, D. C. 20594

Safety Recommendation

Date: March 14, 1991

In reply refer to: M-91-4 and -5

Mr. John A Knauss
Administrator
National Oceanic and Atmospheric Administration
Washington, D.C. 20230

At 1639 eastern daylight time on June 23, 1989, the Greek tankship WORLD PRODIGY, en route from Burgas, Bulgaria, to Providence, Rhode Island, carrying more than 195,000 barrels of gas oil (diesel), grounded on Brenton Reef in Rhode Island Sound off the coast of Rhode Island. At the time of the grounding, the vessel was under the navigational control of the master. As a result of the grounding, the hull of the WORLD PRODIGY sustained extensive damage, which allowed about 7,000 barrels of diesel oil to spill into the waters of Rhode Island Sound and Narragansett Bay. Because of the nature of the oil and because of the warm temperatures during the days immediately following the accident, much of the spilled oil quickly evaporated, minimizing the damage done to the nearby coastline. There were no deaths or injuries. Damage to the vessel was estimated at more than 1 million dollars¹

According to the regulations contained in 46 CFR 154, all self-propelled vessels of 1,600 or more gross tons are required to have marine charts that are current and have sufficient detail (a large enough scale) to make safe navigation possible. The master of the WORLD PRODIGY stated that he was plotting fixes using British Admiralty (BA) chart 2890 and referring to NOAA chart 13223 before the accident. Unlike NOAA chart 13223, BA chart 2890 does not portray several aids to navigation in the vicinity of Brenton Reef, for example, Seal Ledge buoy and Gong Buoy No. 4.

The Safety Board is concerned that because NOAA chart 13223 does not provide coverage of that part of the northern precautionary area that is south of Brenton Reef Light, use of this chart makes navigating through this area unnecessarily difficult. The Board is also concerned that incorrect or outdated

¹For more detailed information, read Marine Accident Report--"Grounding of the Greek Tankship WORLD PRODIGY off the Coast of Rhode Island, June 23, 1989," (NTSB/MAR-91/01).

information in the *U.S. Coast Pilot (Volume 2)* regarding State pilot communication procedures could create an unsafe situation.

NOAA publishes two harbor charts (NOAA charts 13221 and 13223) that provide coverage of the lower half of Narragansett Bay. Both charts provide detailed information about the hazards to navigation north of Brenton Reef Light. Neither of the two charts, however, provides coverage of the portion of the northern precautionary area that is south of Brenton Reef Light. As a result, watch officers aboard vessels approaching the northern precautionary area from the south or from the east² and intending to board or disembark a pilot near Brenton Reef Light or otherwise navigate through the northern precautionary area are forced to plot their positions on smaller scale charts (i.e. BA chart 2890 or NOAA chart 13218) when navigating south of the light.

The Safety Board believes that NOAA charts 13221 or 13223 should be expanded to include the entire northern precautionary area. The Board also believes that expanding NOAA charts 13221 or 13223 to include all of the northern precautionary area would have the following benefits: mariners approaching the pilot boarding and disembarking area from the north, south, or east could plot fixes with greater accuracy; watchstanders would no longer have to switch charts while maneuvering within the precautionary area; and mariners maneuvering within the northern precautionary area would be more aware of the location of aids, as well as hazards, to navigation in the vicinity of Brenton Reef Light.

The *U.S. Coast Pilot (Volume 2)*, which many foreign-flag and U.S.-flag deck watch officers regularly consult in order to obtain pilotage information, does not list VHF-FM channel 10 as the Rhode Island State pilot's working frequency. Instead, VHF-FM channel 18A is listed as being the pilot's working frequency. The chairman of the State pilotage commission stated that use of VHF-FM channel 18A as the pilot frequency had been discontinued before the accident. He also stated that he was not aware of any attempt before the accident to have the information in the *Coast Pilot* updated.

It is believed that the master of the WORLD PRODIGY first learned that the pilot's working frequency was VHF-FM channel 10 after the master established radio contact (using VHF-FM channel 16) with the pilot boat (about 1500). The pilot and operator both stated that the remaining VHF-FM transmissions were conducted using VHF-FM channel 10. The Safety Board believes that the lack of information in the *U.S. Coast Pilot* about communication procedures increases the risk of a breakdown in communication between inbound vessels and State pilots. The Safety Board also believes that the existence of incorrect or otherwise outdated pilotage information contained in the *U.S. Coast Pilot* could create an unsafe situation and that the Rhode Island State Pilotage Commission should take immediate action to ensure that all pilotage information and procedures in future editions of the *U.S. Coast Pilot (Volume 2)* are updated as needed.

Therefore, the National Transportation Safety Board recommends that the National Oceanic and Atmospheric Administration:

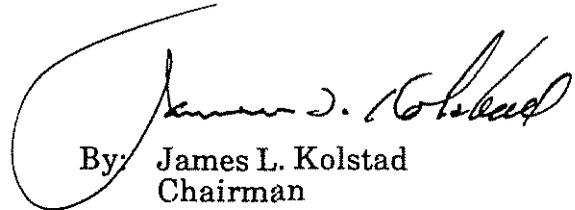
²Vessels that have just completed a transit of the Cape Cod Canal frequently drop their pilots off near Brenton Reef before continuing their voyage.

Extend the area covered by NOAA chart No. 13223 or 13221 to include the entire northern precautionary area at the northern end of the Narragansett Bay Traffic Separation Scheme. (Class II, Priority Action) (M-91-4)

In conjunction with the Rhode Island State Pilotage Commission, amend the *U.S. Coast Pilot (Volume 2)* to reflect the location of the pilot boarding area, as well as up-to-date information concerning the radiotelephone frequencies to be used by vessels seeking to communicate with Rhode Island State pilots; and inaugurate procedures to ensure that all future changes in pilotage information are reflected in future editions. (Class II, Priority Action) (M-91-5)

Also, as a result of its investigation, the Safety Board issued Safety Recommendations M-91-1 through -3 to the Rhode Island State Pilotage Commission; and Safety Recommendations M-91-6 and -7 to the U.S. Coast Guard.

KOLSTAD, Chairman, COUGHLIN, Vice Chairman, and BURNETT, LAUBER, and HART, Members, concurred in these recommendations.



By: James L. Kolstad
Chairman