NATIONAL TRANSPORTATION SAFETY BOARD WASHINGTON, D.C.

ISSUED: August 8, 1979

Forwarded to: Admiral John B. Hayes Commandant U.S. Coast Guard Washington, D.C. 20590

SAFETY RECOMMENDATION(S)

M-79-72 through -75

At 1107 G.m.t. on June 12, 1978, the SS YELLOWSTONE, a loaded grain carrier, collided with the Algerian freighter M/V IBN BATOUTA in a dense fog in the Mediterranean Sea about 14 miles southeast of Gibraltar. As a result of the collision, the YELLOWSTONE sank the following day. Five crewmen on the YELLOWSTONE died and two were injured. 1/

Although the officers on watch on each of the vessels knew well in advance that they were in a head-on situation and a possible close passage, neither vessel reduced its speed below 15 kns. Further, the watch officers failed to make a relative motion plot with the radar to determine the other vessel's course, speed, and closest point of approach.

Each ship had an installed VHF bridge-to-bridge radiotelephone. When the vessels were within 2 miles of each other, the master of the YELLOWSTONE tried to contact the IBN BATOUTA via radiotelephone to inform the IBN BATOUTA of his intentions, but he got no response. Had each vessel been required to use its radiotelephone equipment, which is now required to be used only on all navigable waters in the United States, the accident may never have occurred. Each vessel could have alerted the other, and a passing agreement could have been prearranged.

In many major harbors of the United States, Vessel Traffic Services (VTS) with manned equipment for surveillance of these heavily trafficked areas have been installed. Had such an effective system been installed at the east end of the Strait of Gibraltar, timely information from the manned station could have alerted both approaching vessels well in advance and provided them time to make an agreement for a safe passing maneuver.

^{1/} For more detailed information read "Marine Accident Report--Collision of Bulk Carrier SS YELLOWSTONE and Freighter M/V IBN BATOUTA, Mediterranean Sea, June 12, 1978" (NTSB-MAR-79-11).

The master of the YELLOWSTONE said he heard a loud report just as he was leaving his ship, and thought it was the rupture of the forward bulkhead of the engineroom. Afterwards, the vessel sank stern first in less than 40 minutes. Although the ship had been gauged for a special survey in 1978, only the shell plates, tank tops, frames, seachests, and some exposed decks were selected. No gauges were taken of the bulkhead thicknesses for wastage. A principal ABS surveyor testified that in vessels which are bulk carriers, corrosion often occurs in the lower portions of bulkheads in cargo holds, in bilge wells of cargo holds, and in the internal surfaces--particularly in unprotected saltwater ballast tanks. Based on this testimony and knowing the importance of major watertight bulkheads on ships, the Safety Board concludes that gauges of these areas should also be included in the periodic surveys of bulk carriers that are more than 15 years old.

Therefore, the National Transportation Safety Board recommends that the U.S. Coast Guard:

Require more frequent examinations for renewal of a radar observer's endorsements by deck officers of the U.S. Merchant Marine to maintain their proficiency in using the maneuvering board for solving radar target problems. (Class II, Priority Action) (M-79-72)

Propose to the Intergovernmental Maritime Consultative Organization that a study be initiated to determine the need for establishing an effective vessel traffic service at the east end of the Strait of Gibraltar to improve the safety in this heavily trafficked area. (Class II, Priority Action) (M-79-73)

Establish a timetable for expediting Coast Guard action to promote the adoption by the Intergovernmental Maritime Consultative Organization of a requirement for the use of bridge-to-bridge radiotelephone in collision avoidance. (Class II, Priority Action) (M-79-74)

Require periodic gauging of bulkheads on bulk carriers that are more than 15 years old. In particular, the lower portions of bulkheads in cargo holds, bilge wells, saltwater ballast tanks, and machinery spaces should be gauged for timely renewal due to corrosion and wastage. (Class II, Priority Action) (M-79-75)

KING, Chairman, DRIVER, Vice Chairman, McADAMS and GOLDMAN, Members, concurred in these recommendations.

James B. King Chairman