

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C.

ISSUED: August 9, 1979

 Forwarded to:

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

SAFETY RECOMMENDATION(S)

M-79-76 through -79

About 0842 e.s.t. on March 4, 1979, the outbound Greek cargo ship M/V STAR LIGHT and the inbound U.S. Navy amphibious assault ship USS FRANCIS MARION (LPA-249) collided at the entrance of the Chesapeake Bay about 15 nmi east of Norfolk, Virginia. The bow of the STAR LIGHT struck amidship on the starboard side of the FRANCIS MARION. There were no deaths; however, three naval personnel were injured in the accident. Damage to the vessels was estimated at about \$3.5 million. ^{1/}

The National Transportation Safety Board determined that the probable cause of this accident was the failure of the master of the STAR LIGHT to comply with the starboard-to-starboard passing agreement that was made with the FRANCIS MARION. Contributing to the accident were the failure of the STAR LIGHT's navigation watch to plot the radar data, and the relatively high closing speeds of both vessels.

Vessels may communicate using VHF radiotelephone within the 156-162 MHz band. In the vicinity of the Chesapeake Bay, vessels operating within designated boundary lines which encompass nearly all of the "Precautionary Area" must maintain a listening watch on channel 13 (156.650 MHz) and exchange navigational information when necessary. Seagoing vessels such as the STAR LIGHT and the FRANCIS MARION, when operating beyond these boundary lines, communicate via channel 16 (156.800 MHz). The U.S. Coast Guard records radiotelephone transmissions on channel 16 for the Chesapeake Bay entrance, but does not record channel 13 transmissions. Testimony obtained from the STAR LIGHT, the FRANCIS MARION, and other nearby vessels shows a difference of opinion as to which channel was used for the communications between the two ships. The Coast Guard

^{1/} For more detailed information read "Marine Accident Report: Collision of the M/V STAR LIGHT and the USS FRANCIS MARION (LPA-249) at the Entrance of the Chesapeake Bay near Norfolk, Virginia, March 4, 1979" (NTSB-MAR-79-12).

recordings of channel 16 did not contain any such transmissions. However, the Coast Guard Cutter VIGOROUS (WMEC-627), which was nearby, overheard and logged transmissions between 0834 and 0840 by the STAR LIGHT and the FRANCIS MARION on channel 16. The log book entries obtained from the VIGOROUS indicate that a starboard-to-starboard passing agreement was made between the STAR LIGHT and the FRANCIS MARION. The recording and retention of vessel radio communications concerning accidents would significantly assist in the investigation of such casualties.

Although the differences between the inland and international rules of the road were not a causal factor in this accident, the location of the demarcation line so close to the convergence of traffic poses a significant problem as to which rules are being observed. The present location came into effect on July 15, 1977, implementing a provision in the International Regulations for Preventing Collisions at Sea, 1972. Prior to that change, the demarcation line was located several miles seaward of the intersecting traffic lanes. Various segments of the marine industry opposed establishing a demarcation line so that it crosses a main ship channel.

The area where the Atlantic Ocean and the Chesapeake Bay meet is often subjected to adverse weather, particularly during the winter months. Pilots board and disembark vessels from small boats, exposing themselves to grave danger in bad weather. Consequently, the Cape Henry pilotage area has been established as close to the bay as possible, and the pilots may board or disembark anywhere within this area. For example, the Maryland pilot disembarked from the STAR LIGHT near buoy "2CH"; therefore, the vessel had to transit the entire precautionary area without the expertise of a local pilot. Considering that the precautionary area is where all traffic converges, this creates a dangerous situation. During favorable weather conditions, such as were encountered on March 4, 1979, pilots could safely board or disembark vessels farther out from the entrance to the Chesapeake Bay.

There is no active, manned Vessel Traffic Service (VTS) in the Chesapeake Bay, and current Coast Guard plans do not call for such a system to be implemented there. A "passive" VTS consisting of improved aids to navigation, waterway improvements, traffic separation, and expanded regulations is currently contemplated by the Coast Guard. The Safety Board has previously investigated the usefulness of VTS in preventing collisions in the Chesapeake Bay, 2/ and concluded that an effective, manned VTS with adequate surveillance capability may prevent collisions. If there had been such a VTS in operation on March 4, 1979, this accident could have been prevented. The VTS would have advised each vessel of the position, speed, course, and intended action of the other. Although this advice, or the lack of it, would have in no way relieved the master of the STAR LIGHT from complying with the starboard-to-starboard passing agreement, this additional information may have prompted him to take corrective action to avoid the collision.

2/ "Marine Accident Report: Collision of Argentine Freighter M/V SANTA CRUZ II and U.S. Coast Guard Cutter CUYAHOGA in Chesapeake Bay at Mouth of Potomac River, Maryland, October 20, 1978" (NTSB-MAR-79-3).

"Marine Accident Report: Collision of the M/V WORLD NOBILITY and the S/S PENNSYLVANIA GETTY at the Mouth of Chesapeake Bay near Norfolk, Virginia, December 29, 1978" (NTSB-MAR-79-7).

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

Record VHF radiotelephone transmissions on all channels used for transmitting navigational information in the vicinity of the entrance of the Chesapeake Bay and keep recordings concerning marine casualties for at least 1 year. (Class II, Priority Action) (M-79-76)

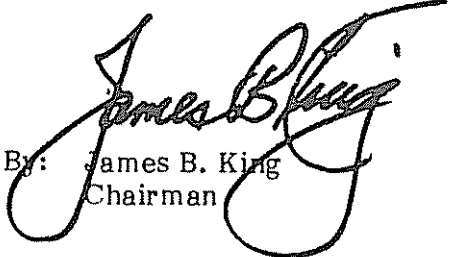
Relocate the demarcation line separating the inland and international rules of the road to some point away from the precautionary area at the entrance of the Chesapeake Bay. (Class II, Priority Action) (M-79-77)

Establish an additional designated pilotage area at some point east of the precautionary area at the entrance of the Chesapeake Bay, where pilots would embark and disembark vessels during favorable weather conditions. (Class II, Priority Action) M-79-78)

Establish an active, manned Vessel Traffic Service (VTS) at the entrance of the Chesapeake Bay. This VTS should not only advise vessels of traffic conditions but also exercise control over their movements. Participation in the VTS should be mandatory. (Class II, Priority Action) (M-79-79)

This accident reinforces the Safety Board's concern for the safety of vessels transiting the Chesapeake Bay entrance. Therefore, recommendations M-79-78 and M-79-79 supercede our recommendations M-79-57 and M-79-58 made to the Coast Guard on June 8, 1979.

KING, Chairman, McADAMS and GOLDMAN, Members, concurred with the above recommendations. BURSLEY, Member, concurred in all of the recommendations except M-79-79. DRIVER, Vice Chairman, did not participate.

By:  James B. King
Chairman