

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C.

ISSUED: March 2, 1979

 Forwarded to:

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

} SAFETY RECOMMENDATION(S)

} M-79-17 through -30

At 2107 e.d.t. on October 20, 1978, the Argentine freighter M/V SANTA CRUZ II and the U.S. Coast Guard Cutter CUYAHOGA collided in the Chesapeake Bay at the mouth of the Potomac River, Maryland. As a result of the collision, the CUYAHOGA sank. Eleven Coast Guardsmen were killed; 18 Coast Guardsmen were rescued by the SANTA CRUZ II which experienced minor damage. 1/

Although the Commanding Officer (CO) of the CUYAHOGA knew that the two vessels would pass close to each other for at least 20 minutes prior to the collision, the CO did not call the SANTA CRUZ II on the bridge-to-bridge radiotelephone to relate the navigational intentions of his vessel or to determine the intentions of the SANTA CRUZ II. A call on the bridge-to-bridge radiotelephone would have alerted the CO to the course of the SANTA CRUZ II and may have averted the collision.

The regulations concerning the use of bridge-to-bridge radiotelephone are not clear as to when vessels should exchange bridge-to-bridge navigational information in passing, meeting or crossing situations. There is a need for the Coast Guard to determine the minimum distance at which navigational information should be transmitted and promulgate regulations.

The VHF radiotelephone installed on the CUYAHOGA was not capable of constantly monitoring channel 13 as required by the Vessel Bridge-to-Bridge Radiotelephone Act. If the CUYAHOGA had been broadcasting on some other channel, the CUYAHOGA's radio could not receive navigational information from other vessels on channel 13.

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

The enlisted crew of the CUYAHOGA, who were assigned to bridge watches, were suitably qualified for assignment to a vessel of this size. However, the experience and training level was less than adequate to provide safe operations of a training vessel operating in the congested waters of the Chesapeake Bay. The CO and 12 crewmen, including 3 reservists assigned to active duty for training, of the CUYAHOGA were overtaxed with the requirement to provide training to 16 officer candidates in addition to conducting normal vessel operations. There were no personnel assigned to the CUYAHOGA for the sole purpose of conducting officer candidate training. The personnel assigned to the CUYAHOGA were not adequate to allow a three-watch system. Furthermore, the Coast Guard does not have any uniform servicewide standards to guide CO's in determining personnel qualifications for assignment to such duties as officer-of-the-deck, helmsman, and lookout.

The radar on the CUYAHOGA was located in a space other than the wheelhouse where there was a possibility of the loss of night vision. Because of its position and the possibility of losing night vision, the CO of the CUYAHOGA made minimal use of this important navigational instrument. The CO failed to determine the relative motion, course, speed, or closest point of approach of the SANTA CRUZ II prior to collision. There is a need to establish a policy concerning the use of radar equipment on Coast Guard cutters for plotting navigational data.

The Coast Guard does not provide the CO's of Coast Guard cutters with sufficient guidance on what effect medications may have on the ability of watchstanders to perform their duties. The CO cannot be expected to know the effects medication can have on himself or his crew. Standards should be set for the taking of medication by watchstanding officers. In addition, the Coast Guard should require that watchstanding officers who have visual impairments wear corrective lenses when on duty.

The International Rules for Preventing Collisions at Sea, 1972 permits the stand-on vessel in a crossing situation to take action to avoid collision as soon as it becomes apparent that the vessel required to keep out of the way is not taking appropriate action. The Pilot Rules for Inland Waters require the stand-on vessel to hold course and speed in a crossing situation until immediate danger of collision exists. The Inland Rules and the Pilot Rules for Inland Waters should be amended to conform with the International Rules. This would avoid confusion between the Inland and International Rules and permit the stand-on vessel to take corrective action before immediate danger of collision exists.

The stowage of all lifejackets on the 0-1 deck level of the CUYAHOGA prevented their use in time of emergency. Lifejackets should be distributed throughout the berthing and working areas on Coast Guard cutters convenient for each person on board. Additional lifejackets should be stowed where the crew normally musters for abandon-ship drill.

The only automatic emergency lighting provided on the CUYAHOGA was in the cutter's engine room. When the collision occurred, the CUYAHOGA's mess and berthing areas were in complete darkness, making escape from these areas difficult. Coast Guard standards for new cutters require automatic emergency lighting in all manned spaces. Existing Coast Guard cutters should be examined and emergency lighting provided on all cutters.

Although it is not known when the drawers in the inclined ladders broke loose, enough drawers had opened to make climbing both ladders hazardous, when the CUYAHOGA was raised. The drawers probably broke loose at time of collision and impeded escape from the berthing areas. All Coast Guard vessels should be examined and drawers removed from any inclined ladders.

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

Install VHF radiotelephones on Coast Guard cutters which will constantly monitor channel 13. (Class II, Priority Action) (M-79-17)

Determine in quantitative terms at what minimum distance navigational information should be transmitted by bridge-to-bridge radiotelephone in passing, crossing, or meeting situations, and promulgate regulations accordingly. (Class II, Priority Action) (M-79-18)

Review the personnel assignment policy of the Coast Guard to insure that the experience and training level of critical personnel is high, and that their time on board is adequate for familiarization with the vessel. (Class II, Priority Action) (M-79-19)

Review the manning level of Coast Guard vessels, particularly training vessels, to insure that an adequate number of experienced persons are assigned to stand watches, and that trainees are not required to stand critical watches. (Class II, Priority Action) (M-79-20)

Establish requirements to insure that all training vessels have enough instructors aboard so that the safe navigation of the vessel is not adversely affected by the training program. (Class II, Priority Action) (M-79-21)

Establish a servicewide policy to provide guidance to Commanding Officers of vessels concerning the necessary qualifications for personnel who are assigned the duties of OOD, lookout, helmsman, quartermaster, and other important positions. (Class II, Priority Action) (M-79-22)

Evaluate the installation of radar equipment on Coast Guard vessels and insure that indicators are so located that the equipment can be easily and properly used by personnel on watch in the wheelhouse. (Class II, Priority Action) (M-79-23)

Establish a policy concerning the use of radar equipment and the plotting of radar data. (Class II, Priority Action) (M-79-24)

Establish standards for the taking of medication by watchstanders on Coast Guard vessels to insure that the medication does not impede the individual's ability to perform his duties. (Class II, Priority Action) (M-79-25)

Require that watchstanders who have visual impairment wear their corrective lenses while on duty aboard Coast Guard vessels. (Class II, Priority Action) (M-79-26)

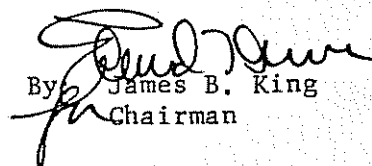
Take the action necessary to amend the Inland Rules and the Pilot Rules for Inland Waters to provide mariners the flexibility to initiate early action in crossing situations to prevent dangerously close situations as has been done in the International Rules for Preventing Collisions at Sea, 1972. (Class II, Priority Action) (M-79-27)

Locate lifejackets on Coast Guard cutters so that they are readily accessible to all crewmen. (Class II, Priority Action) (M-79-28)

Provide automatic emergency lighting for egress from all manned spaces on all Coast Guard cutters. (Class II, Priority Action) (M-79-29)

Examine all Coast Guard cutters and remove drawers from any inclined ladders. (Class II, Priority Action) (M-79-30)

KING, Chairman, DRIVER, Vice Chairman, McADAMS and HOGUE, Members, concurred in the above recommendations.


By James B. King
Chairman