11-97

NATIONAL TRANSPORTATION SAFETY BOARD WASHINGTON, D.C.

ISSUED: November 9, 1979

Forwarded to:

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

SAFETY RECOMMENDATION(S)

M-79-112 and 113

On August 27, 1978, the American containership SS SEA-LAND VENTURE collided with the Danish tanker M/T NELLY MAERSK while overtaking at the bend into Inner Bar Channel, Galveston, Texas. The NELLY MAERSK, fully loaded with medium crude oil and making about 7 kns, had made the turn and was steadying on the upbound channel heading as the SEA-LAND VENTURE was closing to port. The bow of the SEA-LAND VENTURE was crushed as it raked the portside and after deckhouse of the NELLY MAERSK. The NELLY MAERSK was pivoted into the left bank and grounded, and the SEA-LAND VENTURE veered to starboard into an anchorage to the right of the channel. There were no deaths or injuries resulting from the accident. Damage to the vessels was estimated to be \$1.4 million. 1/

The pilots had agreed that when the SEA-LAND VENTURE caught up with the NELLY MAERSK in the 800-ft-wide part of the Galveston Bay Entrance Channel or in the Inner Bay Channel it would maneuver to overtake. The NELLY MAERSK was to slow and provide passing room. The overtaking was begun as the NELLY . MAERSK turned left into the Inner Bar Channel. The pilots had exchanged proper whistle signals for the SEA-LAND VENTURE to overtake on the portside of the NELLY MAERSK.

Without slowing the SEA-LAND VENTURE, the pilot gave an order for left 20° rudder to the helmsman to begin the overtaking and turning maneuver. The helmsman answered the order and turned the steering wheel slowly to port. The helmsman had previously been steering by gyrocompass headings conforming

^{1/} For more detailed information, read "Marine Accident Report—Collision of American Containership SS SEA-LAND VENTURE and Danish Tanker M/T NELLY MAERSK, Inner Bar Channel, Galveston, Texas, August 27, 1978." (NTSB-MAR-79-16).

to the channel and had been using slightly more than 10° right and left rudder to maintain course. The rudder angle indicator had been about 10° right rudder and moving right and lagged in catching up to the left turn on the steering wheel. The pilot saw 10° right rudder indicated seconds after he gave the 20° left rudder order and immediately concluded that the helmsman had turned the wheel the wrong way. Despite the pilot's avoidance maneuvers, using helm and engine, the two vessels collided. The relative speed and proximity of the two vessels, particularly at the channel bend, left little margin for error or avoidance maneuvers.

The SEA-LAND VENTURE had a course recorder in operation at the time of the accident. Examination of a graphic representation of the gyro headings recorded on the course recorder indicated that the vessel did not turn to the right just before the collision. In fact, the graph indicated that for 1.5 minutes before the collision the vessel was turning left steadily from an average heading of 280°T, which had been maintained for 2.2 minutes. No right turns were indicated in this total 3.7-minute interval. This evidence corroborated the helmsman's testimony that he carried out the rudder order correctly.

Before carrying out the pilot's rudder orders, the quartermaster at the helm on the SEA-LAND VENTURE repeated each order just as he heard it which is the present accepted practice. However, he was not required to, nor did he, inform the pilot when the order was executed. Had the quartermaster reported the execution of each order to the pilot, it would have provided the pilot a confirmation when the rudder reached its proper position, and it would have given him some indication of the rapidity of rudder response. In other circumstances it could lead to an early awareness of an incorrect rudder application. The Safety Board believes such a practice would be beneficial to officers in charge of navigation.

The pilot of the SEA-LAND VENTURE was voluntarily participating in the Coast Guard Vessel Traffic Service (VTS), but he requested no information on whether or not he could safely overtake the NELLY MAERSK, then ahead of him, nor did he receive any. Presently, overtaking or meeting at turns is an accepted practice in the Galveston-Houston Ship Channel; however, this accident emphasizes the need for some control over deep-draft vessels using the channels. The Safety Board believes that these maneuvers by deep-draft vessels should not be permitted at the bends. A similar recommendation for the Coast Guard to regulate the traffic on the Houston Ship Channel was made in a previous report. 2/

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

Issue a regulation to prohibit deep-draft vessels overtaking or meeting each other at the bends in the channels when traversing the Galveston-Houston Ship Channel. (Class II, Priority Action) (M-79-112)

^{2/ &}quot;Marine Accident Report: M/V ANCO SCEPTRE (British) Collision with Crown Central Petroleum Corporation Pier on the Houston Ship Channel on February 9, 1978." (NTSB-MAR-79-8).

Require helmsmen in the U.S. Merchant Marine to inform the officer in charge of navigation of the vessel when rudder orders have been executed, in addition to the present practice of repeating them as they are given. (Class II, Priority Action) (M-79-113)

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

By James B. King Chairman