

**NATIONAL TRANSPORTATION SAFETY BOARD  
WASHINGTON, D.C.**

ISSUED: September 10, 1980

-----  
Forwarded to:

Mr. Norman Kilgore  
Manager  
Sunoco Terminals, Inc.  
Sun Oil Terminal  
P.O. Box 758  
Nederland, Texas 77627

SAFETY RECOMMENDATION(S)

M-80-63

-----

About 2140 c.s.t. on April 19, 1979, the Liberian tankship M/V SEATIGER, which had suspended pumping seawater ballast into its cargo tanks because of electrical storms in the area, exploded, burned, and sank at a berth at the Sun Oil Terminal, at Nederland, Texas. The SEATIGER was severely damaged in the area of its cargo tanks. Two crewmembers were killed. The total losses resulting from the explosion were estimated to be \$35 million. The terminal berth was out of service for 180 days. <sup>1/</sup>

About 1135 on April 18, a Sunoco representative came aboard to gauge the cargo tanks. The cargo hoses were being connected at this time. Discharging preparations were completed at 1330. The vessel's "Declaration of Inspection Prior to Bulk Cargo Transfer" was properly executed as required by 33 CFR 156.150 and 46 CFR 35.35-30. To comply with Federal regulations, the terminal furnished the vessel with a portable radio for communications between the terminal operating personnel on the pier and the person in charge of the discharging operation on the vessel. At 1500, discharging commenced through two 12-inch hoses. Discharging was temporarily suspended from 1717 to 1815 and from 1935 to 2100 because of electrical storms.

At 1630 on April 19, discharging of the cargo was completed. At 1840, the vessel was given permission to ballast the cargo tanks. About 2000, the terminal supervisor halted the discharging of all vessels because of electrical storms. This information was passed via VHF radio to the dockman at each berth. The dockman in charge of Berth No. 3 heard the orders to shut down on his portable radio, but he did not pass this information to the SEATIGER because it had already finished discharging. Also, the SEATIGER had returned its portable radio to the terminal, and communications with the dockman were possible only by someone walking ashore to the pier guardhouse. The lack of communication between the SEATIGER and the terminal left the ship's personnel without a source of weather information developed by the terminal for the local area.

<sup>1/</sup> For more detailed information, read "Marine Accident Report--Liberian Tankship M/V SEATIGER Explosion and Fire, Sun Oil Terminal, Nederland, Texas, April 19, 1979" (NTSB-MAR-80-12).

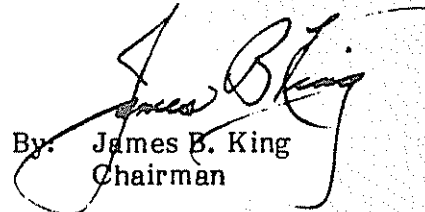
At 2050, ballasting commenced into Nos. 1 port and starboard wing tanks, No. 4 center tank, and Nos. 5 port and starboard wing tanks with three cargo pumps. The chief officer estimated it would require about 6 to 7 hours to ballast the vessel to a draft of 34 ft forward and 37 ft aft to permit it to pass outbound under the Pleasure Island Bridge at Port Arthur, Texas.

The SEATIGER suspended ballasting operations at 2105 because of the electrical storms. The chief officer notified the chief engineer who in turn called the engineroom to shut down the pumps. About 2145 lightning struck the top of the SEATIGER's vent mast and ignited flammable vapors on the vent exterior. The flame traveled through an improperly installed flame screen, down the vent mast through the vent pipes on deck, and ignited the vapors in the tanks, which resulted in the explosion.

Therefore, the National Transportation Safety Board recommends that the Sunoco Terminals, Inc.:

Provide a rapid means of emergency communication between vessels berthed at the terminal and the terminal office during the period between the completion of discharging and the sailing of the vessel.  
(Class II, Priority Action) (M-80-63)

KING, Chairman, McADAMS and BURSLEY, Members, concurred in this recommendation. DRIVER, Vice Chairman, and GOLDMAN, Member, did not participate.

  
By: James B. King  
Chairman