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

ISSUED: November 18, 1980

Forwarded to:

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Director
Federal Emergency Management Agency
1725 I Street, N.W.
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SAFETY RECOMMENDATION(S)

M-80-117

On the afternoon of March 30, 1979, a fire erupted in the crew galley onboard the Italian passenger ship ANGELINA LAURO while it was berthed starboard side to the West India Company dock in Charlotte Amalie Harbor, St. Thomas, U.S. Virgin Islands. The fire was initially fought by the ship's crew, but shoreside assistance was requested and the local fire department responded. The fire spread from the crew galley to an adjacent dining room. Heavy smoke severely impeded firefighting efforts aboard the ship and eventually forced the crew to leave the ship. Firefighting efforts continued to be directed against the external surfaces of the vessel, but the fire raged out of control throughout the interior spaces until the fire burned itself out 2 days later. The ANGELINA LAURO was almost destroyed. Two persons received minor injuries. 1/

Sometime between 1515 and 1530, crewmembers noticed smoke coming from the ventilation openings in closed cabins and in corridors on four decks. The second officer on watch received his first notification that there was smoke coming from the crew galley on B-deck about 1545. He immediately alerted the ship's fire station, the ship's safety officer, the ship's first officer, and the engineer on watch in the ship's control room. At 1600, the Virgin Islands fire department received a report from a telephone operator that there was a fire on the ANGELINA LAURO at the West India Company dock. The firefighter in charge of the fire station, located about 1 mile from the dock, issued an all points bulletin advising other fire stations of the fire and asking them to respond. He then responded with six of the seven firefighters from his station, one tank truck, and one pumper. They arrived onscene at 1608. Upon boarding at the A-deck foyer, the Virgin Islands firefighter-in-charge tried, unsuccessfully, to make contact with an English-speaking crewmember. Subsequent efforts to find someone knowledgeable about the layout of the ship were also unsuccessful.

The Virgin Islands firechief arrived about 1625 and was advised by his next-incommand that there was smoke near the crew galley. The firechief concluded that the

<sup>1/</sup> For more detailed information read "Marine Accident Report—Fire Onboard the Italian Passenger Ship ANGELINA LAURO, Charlotte Amalie Harbor, St. Thomas, U.S. Virgin Islands, March 30, 1979" (NTSB-MAR-80-16).

smoke in this area was not coming from the crew galley and that the fire must have spread to other parts of the ship. He decided that the ship's water pressure was too low for effective firefighting because a hoseline he stepped on in the foyer was soft and little water was coming out. While returning to the A-deck fover, the firechief ordered his firefighters to go door-to-door about the ship to make sure all passengers were sent ashore. He found the A-deck foyer "completely involved with smoke" and heard the crackling noise of a fire coming up the stairwell leading from the forward dining room. Smoke and heat thwarted attempts to close the door at the top of this stairwell. From his position on the port side of the A-deck foyer, he could no longer see the gangway on the starboard side because of the dense smoke. Fearing that the fire was spreading quickly and that exits were being blocked by the smoke, he instructed his firefighters to tell the remaining ship's crewmembers to leave the ship. However, at the time of ship abandonment, the fire probably was still limited to the forward dining room and the crew mess just forward of the crew galley, and could have been brought under control by an effective firefighting effort.

The Virgin Islands fire department was aided in the firefighting activities by the Port Authority, the National Guard, and the Civil Defense of the Virgin Islands, and by the local police, the U.S. Coast Guard, and the U.S. Navy. No person was recognized as being in overall charge of the onscene shoreside and marine firefighting units. Language differences made it difficult to obtain information about the ship's fire protection features and stability from the ship's officers. The Coast Guard Captain of the Port (COTP) from San Juan, Puerto Rico, arrived onscene about 1945. He stated that his primary concern was the prevention of marine pollution, not the firefighting. The COTP stated that he was not able to locate the Virgin Islands firechief or police chief during the first 12 hours of the firefighting activity.

It is fortunate that the ANGELINA LAURO was in port and alongside a dock when the fire started, because most of its passengers were ashore. However, when the local firefighters arrived onscene, they were not able to either assist the ship's crew or to organize an effective firefighting effort because they were unfamiliar with the ship, its crew, and its fire protection method, and had difficulty communicating with crewmembers due to language differences. Consequently, they were not able to analyze the fire and plan a firefighting strategy.

As additional Federal and local officials arrived onscene, confusion, rather than effective coordination, developed. Various parties expressed concerns about the danger of explosion, fire spreading to the port, pollution of the harbor, and spread of fire to port buildings. However, they lacked the information and expertise to properly evaluate the situation. Plans and information regarding the ship's general arrangement, fire protection features, and stability were not available. As a result of this lack of coordination and information, an effective firefighting strategy involving local assistance never developed. Rather, all efforts were directed toward applying more water on the ship; this water had virtually no effect on the fire and nearly caused the ship to capsize.

The Virgin Islands fire department has about 100 paid firefighters on the islands of St. Thomas and St. John. Its equipment on St. Thomas consists of six pump trucks and three tank trucks with a total capacity of 7,000 gallons. It does not provide the intensive training usually associated with major city fire departments. Its capability is oriented toward fighting fires in shoreside buildings. It does not have the dockside hydrants and training to effectively fight shipboard fires or the means to transport firefighters and equipment to a fire on a ship at anchor.

Port facilities are somewhat limited for large oceangoing ships. The primary deepwater commercial terminal at Charlotte Amalie is the West India Company dock, which provides a well-protected, 2,234-foot wharf with a water depth of 30 feet reported alongside. Because of limited dock space, it is a common occurrence for cruise ships to anchor in the harbor and ferry passengers to shore in motor lifeboats.

An Emergency Operations and Disaster Control Plan for the Virgin Islands was developed with Federal grant assistance under the guidelines of the Federal Disaster Assistance Administration (FDAA), which is now an agency within the Federal Emergency Management Agency (FEMA), and the plan was implemented by executive order of the Governor on March 13, 1978. Appendix C to the Public Safety Emergency Operations part of the plan establishes procedures for firefighting operations and for coordinating efforts of police and fire divisions with other government agencies in case of a large fire. It designates that the superior fire officer shall be in charge of fire emergencies and assume full control and responsibility. Section V of this appendix describes procedures and responsibilities when there is a fire on a ship docked at the West India Company facility. It requires notification of the Coast Guard, the Port Authority, Civil Defense, Wharf Master, and the fire brigade of the West India Company, but does not further detail how firefighting activities will be coordinated, except with the fire brigade. The plan does not mention rendering firefighting assistance to ships anchored in the harbor of Charlotte Amalie.

The section of the Virgin Islands Emergency Operations and Disaster Control Plan describing procedures to be followed in the event of a ship fire at the West India Company facility was not comprehensive enough to be an effective prefire planning document, and supervisory firefighters of the Virgin Islands fire department lacked training in marine firefighting. Firefighter training and a more comprehensive prefire contingency plan are needed. The emergency plan should include firefighting assistance to passenger ships which frequently anchor in the harbor of Charlotte Amalie.

Therefore, the National Transportation Safety Board recommends that the Federal Emergency Management Agency:

In conjunction with the U.S. Coast Guard, assist the Virgin Islands Government in revising its contingency plan to include more comprehensive provisions for rendering firefighting services to vessels calling at its ports, including vessels at anchor in the harbor of Charlotte Amalie. (Class II, Priority Action) (M-80-117)

James B. King Chairman

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