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SP-20

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C.

ISSUED: May 24, 1985

Forwarded to:

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Canaveral Port Authority
P.O. Box 267
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SAFETY RECOMMENDATION(S)

M-85-36 through -38

A few minutes before 1920, on March 9, 1984, a fire was discovered in a room occupied by two crewmen aboard the Bahamian registered cruise ship SCANDINAVIAN SEA. The vessel, which was on a daily 11-hour cruise out of Port Canaveral, Florida, with 744 passengers and 202 crewmembers aboard, had been anchored about 7 miles off the coast of Florida, near Cape Canaveral and had just gotten underway. It proceeded to its berth at the Port Canaveral Cruise Terminal while the vessel's firefighting team proceeded to fight the fire. After the vessel berthed at 2057, the passengers were disembarked, and Coast Guard and local firefighters boarded the vessel to fight the fire. Meanwhile the fire, although it was contained within the forward vertical fire zone, spread through the upper decks. The fire was extinguished on March 11, 1984. There were no injuries or loss of life. The vessel was declared a constructive total loss. It was valued at \$16 million. 1/

The first response to the fire by the Cape Canaveral and Merritt Island fire departments included 4 pumper trucks and about 25 firemen. Through mutual assistance agreements, additional men and equipment from both local and Federal government agencies also were ordered to the scene. The ability to organize men and equipment when needed, especially in the port area when tugs with fire monitors and USCG vessels may be involved, requires good communications between units so that their combined efforts can be utilized efficiently. When the various units on scene were unable to communicate quickly and messengers had to be used, valuable time was wasted, especially when firemen were working with equipment from departments other than their own. This inability to coordinate the various fire departments by means of radio because of the lack of common radio frequencies resulted in delays and needless exposure of firefighters to danger. Various fire departments and other emergency response units who respond to port emergencies should have compatible communication equipment to coordinate with the port authority and to be able to operate as a unified group. Port contingency plans should include this provision.

The Port Canaveral Cruise Terminal No. 2 where the SCANDINAVIAN SEA regularly berthed provided access to the vessel for the emergency equipment. Although fire

1/ For more detailed information, read Marine Accident Report--"Fire Aboard the Bahamian Passenger Ship M/V SCANDINAVIAN SEA, Atlantic Ocean, Off the Florida Coast, March 9, 1984" (NTSB/MAR-85/03).

hydrants, lighting, and fresh water connections were available, the facility could not provide electrical power for the portable electric pumps that could have been used early in the operation to dewater the vessel. In the event of a generator failure on the SCANDINAVIAN SEA, there was no pierside source of electricity to provide shore power to the vessel. Vessels calling at the cruise terminal normally do not require any services other than gangways and fresh water; however, a shore power connection supplying the type of electricity generally used aboard modern vessels would be a safety factor. The Safety Board believes that the Canaveral Port Authority should consider installing an electrical power source for use by vessels berthing at the cruise terminals to power emergency equipment if needed.

When the overhauling efforts by local firemen extended beyond the area affected by the fire and smoke, the vessel was damaged considerably. The repair estimate so exceeded the insured value, the underwriters declared the vessel a constructive total loss. A fire that originally was confined to a small area eventually damaged virtually the entire vessel. This leaves serious doubt as to the effectiveness of the firefighting efforts. The method of overhauling by shoreside firemen reflected their lack of knowledge of the vessel's designed fire protection barriers. Apparently, there was no consideration given to protecting the vessel beyond the forward main vertical zone by either the crew, the owners, or the local firemen. Although the principal objective of shipboard firefighting is to extinguish the fire without injury to personnel, it also should be accomplished with the least possible amount of damage to the vessel.

No direction was given to local firemen by the ship's officers as to the amount of water that safely could be introduced into the vessel before a critical list developed. The decision of the Captain of the Port (COTP) to suspend the firefighting efforts on March 10 until the list was under control was a necessary action under the circumstances. Although the stability study indicated that the vessel could safely have taken a greater list without capsizing, the projected amount of water, at the rate it was being applied, would have reduced the safety margin unacceptably.

The increased passenger ship traffic calling at Port Canaveral and the addition of new cruise ship berths and associated terminal facilities, together with the lessons learned from the SCANDINAVIAN SEA fire, necessitates that the Canaveral Port Authority formulate a contingency plan for the port. The Port Director agreed that there is a need for written contingency plans.

The COTP from Jacksonville, Florida, when responding to questions about the USCG's role in contingency planning for Port Canaveral, stated "contingency planning and immediate responsibility would not be considered." The Safety Board questions whether the USCG representative's assertion that he would not consider contingency planning for Port Canaveral is a correct reflection of USCG policy. The USCG Safety Manual, Part 86-6, Paragraph 5 states in part:

District commanders, captains of the port and commanding officers of other units as directed by the district commander, are required to insure that ports within their jurisdiction have current and effective contingency plans, supported by the port community, to provide adequate response by the available Federal, state, municipal and commercial resources to fires and other accidents.

and enclosure (1) to COMDTNOTE 16000 dated 21 November 1983 Firefighting, USCG Policy states in part:

Under this policy, Coast Guard Captains of the Port work with port authorities and local governments within their areas of jurisdiction to maintain current and effective contingency plans, to ensure coordination of port community resources that will respond to fires and other incidents. Coast Guard units conduct regular unit drills adapted to the needs of local contingency plans and mutual agreements. Normally, the Coast Guard will not assume control of the overall firefighting efforts when appropriate local authorities are present.

No reference is made to geographical distances or locations with regard to the USCG's participation in local contingency plans. The Safety Board, therefore, urges the Canaveral Port Authority and the USCG to develop a contingency plan for Port Canaveral with special consideration given to emergencies aboard passenger ships and the effects of any future expansion of the port's cruise facilities. The Safety Board has learned that, based upon the SCANDINAVIAN SEA accident, the Canaveral Port Commissioners have formed a committee to look into the preparation of a contingency plan for Port Canaveral.

The Cape Canaveral Volunteer Fire Department which was under contract to the Canaveral Port Authority to provide fire protection to the port area, including the Cruise Terminal, responded to the fire aboard the SCANDINAVIAN SEA in a similar manner to any house or building fire, using techniques that are well established for fighting such fires. Shipboard firefighting, however, requires different techniques, such as limiting the use of water because it can adversely affect the stability of a vessel and the possible use of foreign designed fire protection systems. Design features that prevent the spread of fire with built in fire protection and firefighting systems that may be peculiar to vessels present a difficult challenge to the shoreside fireman. If the fire department is to have responsibility for waterfront fires and assisting in fighting shipboard fires, it should train several of its personnel in shipboard firefighting techniques so that the port could be able to cope with such disasters. This type of training and the enhancement of the local fire department's capabilities should be incorporated in port contingency planning. Port contingency plans also should provide for shipboard firefighting training for selected personnel among the local fire department's supervisory personnel so that catastrophies, such as the SCANDINAVIAN SEA fire, can be handled with the correct response and can be coordinated properly.

Retention of plans of the SCANDINAVIAN SEA by the officer-in-charge of the local USCG Station for information purposes in the event of an emergency involving the vessel was commendable and would have been highly useful had they been used to any extent when the vessel first arrived. Those passenger vessels regularly calling at Port Canaveral should provide the Canaveral Port Authority with plans of the vessel for use by local authorities in any emergency when assistance from ashore is needed. In addition, regular meetings between the ships personnel and local authorities, including the fire departments, port authority officials, USCG, and emergency medical officials, should be conducted so that each participant is fully aware of what services each can offer when needed.

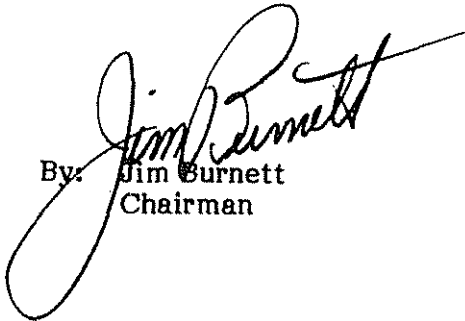
Therefore, as a result of its investigation, the National Transportation Safety Board recommends that the Canaveral Port Authority:

In cooperation with the U.S. Coast Guard, the local port community, and the operators of passenger vessels regularly calling at Port Canaveral, develop a port contingency plan and schedule periodic drills. (Class II, Priority Action) (M-85-36)

Require that passenger vessels regularly calling at Port Canaveral submit copies of ship's plans showing interior arrangements, the location of emergency equipment, emergency procedures, fuel oil tanks, and a list of emergency services which may be required to the port authority for immediate reference in the event of an emergency. (Class II, Priority Action) (M-85-37)

Provide a source of temporary electrical power at each berth in your cruise terminal suitable for operating onboard or responding emergency equipment. (Class II, Priority Action) (M-85-38)

BURNETT, Chairman, GOLDMAN, Vice Chairman, and BURSLEY, Member, concurred in these recommendations.


By: Jim Burnett
Chairman