



Log M-373

National Transportation Safety Board

Washington, D.C. 20594

Safety Recommendation

Date: June 24, 1991

In reply refer to: M-91-22

Mr. Richard D. Fain
Chairman and Chief Executive Officer
Royal Caribbean Cruises, Ltd.
1050 Caribbean Way
Miami, Florida 33132

On February 20, 1991, the Norwegian cruise ship SOVEREIGN OF THE SEAS was moored at pier 6, San Juan, Puerto Rico, with 3,122 persons on board, including 2,308 passengers and 814 crewmen. At approximately 0023, a fire alarm sounded on the fire detection computer terminal in the pilothouse, indicating a fire in a storeroom forward of the Follies Lounge on the fifth deck. The watch officer on duty in the pilothouse ordered the quartermaster to investigate the alarm. The quartermaster proceeded to the Follies Lounge, where he noticed smoke coming from the carpet and from underneath the door to a service bar pantry forward of the lounge. The quartermaster immediately alerted the watch officer via portable radio of the need to send firefighters to the area. The watch officer called the master and the staff captain and reported the fire. The master immediately went to the pilothouse to assume control of the situation, and the staff captain proceeded to the fire scene to direct the fire suppression activities. The master and the staff captain maintained communications with each other via portable radios.

At 0037, the staff captain ordered all mobile (firefighting) groups to report to the fire scene. He directed some groups to apply water to the deck above the fire and other groups to enter the pantry to combat the fire. The ship's crew fought the fire until it was extinguished at 0428. A brief reflash of the fire occurred about 0540, but shipboard firefighters extinguished the reflash in short order. The staff captain established a fire watch and no further ignition occurred. Although the crew isolated the fire to the compartment of origin, the blaze destroyed the contents of two storerooms and seriously damaged electrical wiring serving the Follies Lounge. Smoke and water damage extended to the Follies Lounge and to the service bar area aft of the lounge. Estimated damage exceeded \$500,000. This accident resulted in no loss of life, but one crewman required treatment at a local hospital for smoke inhalation.

None of the mobile group (firefighting) personnel who entered the pantry to fight the fire wore the thermal protective clothing readily available to them on board the vessel. As a result, the heat from the fire repeatedly drove them from the pantry, during which time the fire rekindled. The Safety Board believes that if the mobile group personnel had donned thermal protective clothing, they could have withstood the intense heat and

extinguished the fire much sooner. The failure to act properly in an emergency can have catastrophic consequences, and their failure to don such clothing indicates a need for better training. During the 1984 fire¹ on board the Bahamian passenger ship SCANDINAVIAN SEA, the shipboard firefighters failed to wear available thermal protective clothing. In that case, a fire that was discovered while it was still relatively minor and which should have been extinguished in its early stages, ultimately resulted in the vessel being declared a constructive total loss. In its report concerning that fire, the Safety Board concluded that the failure of the ship's firefighting groups to equip themselves with available protective clothing hampered their ability to fight the fire properly.

The Safety Board believes that the best way to ensure that crewmembers will act properly in an emergency is to provide them with frequent, rigorous emergency training. During the investigation of this accident, the Vice President of Human Resources for Royal Caribbean Cruise Lines testified concerning the firefighting training program for ships' crewmen. He stated that this program combined shipboard training under the direction of the ship's staff captain (routine shipboard drills) with a short course of instruction, approved by the U.S. Coast Guard, that was offered by the Southeast Florida Academy of Fire Science. He said that this training was supposed to be given to all deck, engine, and hotel department personnel. Such training constitutes a good introductory fire safety course. However, the course outline did not indicate that the curriculum emphasized the importance of donning thermal protective clothing.

The Safety Board believes that training for shipboard mobile group personnel, who are the primary firefighting personnel on board the vessel, should be more rigorous and frequent than that given to the rest of the crew. This training should include a thorough indoctrination concerning the importance of the use of thermal protective clothing. Moreover, the training of supervisory personnel who are responsible for organizing and directing mobile group personnel in fire emergencies should emphasize that firefighters need to don thermal protective clothing. When supervisory personnel fully recognize this need, they will be more effective in indoctrinating the firefighters under their direction.

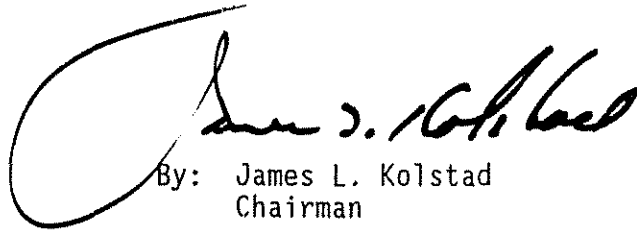
Therefore, the National Transportation Safety Board recommends that Royal Caribbean Cruises, Ltd.:

Provide rigorous and frequent emergency training, which stresses the importance of donning thermal protective clothing during all fire emergencies, to shipboard supervisory personnel who direct shipboard firefighters and to shipboard firefighters themselves. (Class II, Priority Action) (M-91-22)

¹For more information read, "Fire Aboard the Bahamian Passenger Vessel M/V SCANDINAVIAN SEA, Cape Canaveral, Florida, March 9, 1984" (NTSB/MAR-85/03).

The National Transportation Safety Board is an independent Federal agency with the statutory responsibility "to promote transportation safety by conducting independent accident investigations and by formulating safety improvement recommendations" (Public Law 93-633). The Safety Board is vitally interested in any action taken as a result of its safety recommendations. Therefore, the Safety Board would appreciate a response from you regarding action taken or contemplated with respect to the recommendation in this letter. Please refer to Safety Recommendation M-91-22.

Chairman KOLSTAD, Vice Chairman COUGHLIN, and Members LAUBER, BURNETT, and HART concurred in this recommendation.

A large, stylized handwritten signature in black ink, which appears to read "James L. Kolstad". The signature is written in a cursive style with a large initial 'J'.

By: James L. Kolstad
Chairman