Log M-415C



## **National Transportation Safety Board**

Washington, D.C. 20594

## Safety Recommendation

Date: May 21, 1998 In reply refer to: M-98-68

Mr. Frank J. Iarossi Chairman and President American Bureau of Shipping Two World Trade Center 106th Floor New York, New York 10048

Early on July 27, 1996, while the Panamanian passenger ship *Universe Explorer* was en route from Juneau, Alaska, to Glacier Bay, Alaska, with 1,006 people aboard, a fire started in the main laundry. Dense smoke and heat spread upward to a deck on which crew accommodation quarters were located. Five crewmembers died from smoke inhalation and 55 crewmembers and 1 passenger sustained minor or serious injuries. One passenger required medical treatment as a result of a pre-existing condition. Sixty-nine people were transported to area hospitals, where 13 of the injured were admitted for further treatment. The estimated damage to the ship was \$1.5 million.

During its postaccident examination of the main laundry, the National Transportation Safety Board observed that a bulkhead indicated on the vessel fire control plan was missing. Given the unknown origin of the blaze, the presence of the bulkhead may not have prevented a fire from starting; however, had the bulkhead been in place, it would have mitigated the propagation of smoke and heat, thereby affording the crew a better chance for survival. The Safety Board therefore concluded that the removal of the corridor bulkhead in the main laundry was an alteration to the vessel that seriously degraded the fire safety condition of the *Universe Explorer*.

The ABS exercised the primary inspection responsibility over the *Universe Explorer*. Not only did it conduct annual and special surveys for the purpose of confirming that the vessel met classification rules for insurance purposes, it also acted in a regulatory capacity on behalf of the flag administration (Panama) to ensure that the ship complied with the *Safety of Life at Sea* (SOLAS) Convention requirements.

Before the fire occurred, the ABS reviewed and approved a number of operational plans for the *Universe Explorer*. A Damage Control Plan approved by the ABS in 1985 and a

For additional information, refer to Marine Accident Report—Fire On Board the Panamanian Passenger Ship Universe Explorer in the Lynn Canal Near Juneau, Alaska, July 27, 1996 (NTSB/MAR-98/02)

Lifesaving Plan approved by the ABS in 1990 each show the main laundry without the corridor bulkhead. In 1991, the ABS approved the fire control plan for the *Universe Explorer* that showed the corridor bulkhead in the main laundry. The Safety Board is concerned that the ABS approved a vessel plan, especially a plan as critical as the fire control plan, that did not accurately depict the ship's configuration. If the classification society's survey procedures were effective, its surveyors should have found this discrepancy and, at a minimum, required the fire control plan be corrected in 1991. In correspondence with the Safety Board after the fire, the ABS stated that it had no documents on file regarding the bulkhead and did not know when it had been removed.

In 1958, when the vessel was built, the original owner and the U.S. Coast Guard considered the main laundry corridor bulkhead not only practicable but necessary to achieve an adequate measure of fire safety on the vessel. The 46 Code of Federal Regulations stipulates that type 2 stairways<sup>2</sup> should not give direct access to enclosed spaces in which a fire may originate.

The ABS classed the newly constructed vessel. With the exception of the 8-year period during which the ship was classed by Lloyd's Registry of Shipping, the ABS surveyed and classed the vessel throughout its service life, reviewing and approving various fire control plans, all of which indicate that the main laundry had a corridor bulkhead. After the fire, when advised that the bulkhead had been removed, an ABS official stated that the laundry bulkhead did not have to be in place for the vessel to comply with ABS classification requirements or the statutory requirements of the flag administration, Panama, at the time of the casualty. He cited SOLAS 48 as the basis for his contention.

The Safety Board is disturbed by the ABS's postaccident interpretation of the international requirements. Removing the bulkhead reduced the level of fire safety, which is not permitted by SOLAS. For the ABS to interpret that the laundry bulkhead once required by SOLAS 48 can be removed indicates that the classification agency has effectively accepted the degradation of fire safety on this passenger vessel.

A review of ABS procedures indicates that its surveyors check an ABS-classed vessel's approved plans against its internal arrangements only when a new owner applies for certifying approval or after a structural modification authorized by the ABS has been made to the vessel; they do not review structural plans as part of routine surveys.

Therefore, the National Transportation Safety Board recommends that the American Bureau of Shipping:

Analyze your plan review procedures and institute improved safeguards to ensure that ship plans submitted for approval accurately depict the configuration of the vessel. (M-98-68)

<sup>&</sup>lt;sup>2</sup> Type 1 stairways are enclosed stair towers bordering main vertical zones. Type 2 stairways are enclosed stairways other than type 1.

Also, the Safety Board issued Safety Recommendations M-98-31 through -41 to the U.S. Coast Guard, M-98-42 through -57 to New Commodore Cruise Line, Inc., and to V. Ships Marine, Ltd., and M-98-58 through -67 to the International Council of Cruise Lines.

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 interested in any action taken as a result of its safety recommendations. Therefore, it 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-98-68 in your reply. If you have any questions, you may call (202) 314-6455.

Chairman HALL, Vice Chairman FRANCIS, and Members HAMMERSCHMIDT, GOGLIA, and BLACK concurred in this recommendation.

By: Jim Hall Chairman