

Log M-413D National Transportation Safety Board

> Washington, D.C. 20594 Safety Recommendation

Date: February 6, 1998

In reply refer to: M-98-13 through -15

Mr. Lester E. Kabacoff General Partner International RiverCenter c/o Mr. Robert Carpenter 2 Poydras Street, Third Floor New Orleans, Louisiana 70140

Shortly after 1400 on December 14, 1996, the fully loaded Liberian bulk carrier Bright Field temporarily lost propulsion power as the vessel was navigating outbound in the Lower Mississippi River at New Orleans, Louisiana. The vessel struck a wharf adjacent to a populated commercial area that included a shopping mall, a condominium parking garage, and a hotel. No fatalities resulted from the accident, and no one aboard the Bright Field was injured; however, 4 serious injuries and 58 minor injuries were sustained during evacuations of shore facilities, a gaming vessel, and an excursion vessel located near the impact area. Total property damages to the Bright Field and to shoreside facilities were estimated at about \$20 million.¹

The National Transportation Safety Board determined that the probable cause of this accident was the failure of Clearsky Shipping Company to adequately manage and oversee the maintenance of the engineering plant aboard the *Bright Field*, with the result that the vessel temporarily lost power while navigating a high-risk area of the Mississippi River. Contributing to the amount of property damage and the number and types of injuries sustained during the accident was the failure of the U.S. Coast Guard, the Board of Commissioners of the Port of New Orleans, and International RiverCenter, Inc., to adequately assess, manage, or mitigate the risks associated with locating unprotected commercial enterprises in areas vulnerable to vessel strikes.

This accident demonstrates that the many and diverse stakeholders in the area of the Port of New Orleans, including the Coast Guard, the State of Louisiana, the Dock Board, the pilot organizations, and the owners and operators of riverfront properties and nearby moored passenger ships, did not adequately prepare for or mitigate the risk of a marine casualty affecting people and property within the Port of New Orleans. Some of the stakeholders, most notably the

¹For more detailed information, read Marine Accident Report—Allision of the Liberian Freighter Bright Field with the Poydras Street Wharf, Riverwalk Marketplace. and New Orleans Hilton Hotel in New Orleans. Louisiana, December 14, 1996. (NTSB/MAR-98/01).

Dock Board, had commissioned partial risk assessment studies at various times for the assets in the harbor area. Despite their limitations (in either geography or scope), these studies did provide adequate information for the stakeholders to recognize the possibility of an accident similar to the one involving the *Bright Field*.

For example, risk assessment projects predicted an increase in accidents involving collisions, rammings, and groundings due to increased river traffic. The Louisiana State University risk assessment project, in 1994, concluded that no sections of the Port of New Orleans waterfront were free of ship allisions, including the area where the high-capacity passenger vessels, gaming vessels, and riverfront properties were located. Analysis of accident data for the Port of New Orleans from 1983 through 1993 (a total of 166 rammings along the left descending bank between miles 91 and 101 AHP) identified a mooring area for gaming vessels that had seen the fewest "historical allisions on the left bank." The study acknowledged, however, that no area of the left descending bank of the river had been completely free of vessel strikes during the 11-year period studied.

Despite this history of sensitivity to risk within the port area, the Riverwalk complex, including the condominium garage and the Hilton Hotel Riverside, were constructed on old warehouse piers on the river side of the levee. This location offered no "crush zone" that could absorb the impact of a marine ramming, and despite the fact that the piers themselves were not built to withstand being struck by a heavy vessel, no physical barriers were constructed outboard of the new buildings to offer them protection.

In contrast, the 1987 Audubon Institute-sponsored risk assessment similarly determined that there had been few allisions at the Bienville Street wharf and that because it is high up in the bend, it faced low risk of being struck by an outbound vessel. Nonetheless, recognizing low incidence, but a potential for high consequences, the Audubon Institute placed the Aquarium of the Americas behind the levee with a 100-foot buffer zone to protect the shoreside structure. No similar safety feature was considered or constructed for the Hilton Hotel or the Riverwalk Marketplace, which was placed about 20 feet of an unprotected wharf. Currently, the damaged portions of the Riverwalk Marketplace mall, the parking deck, and the Hilton Hotel are being rebuilt in the same location. No physical barriers have been included in the rebuilding of these facilities.

Given the hazardous operating environment in the Port of New Orleans and the number of instances of loss of propulsion and steering, any number of which could have resulted in similar accidents or far more serious ones, the Safety Board does not understand the property owners' reluctance to provide adequate barriers to protect their assets in the port area. Although the River Front Alert Network is a commendable effort to alert the harbor police and security officers in the event of a need to evacuate the area, such efforts are unlikely to result in a complete evacuation under even slightly different circumstances. For example, the *Bright Field* rammed the Hilton Hotel during daylight hours when, fortunately, few guests were occupying rooms and no cleaning personnel were in the immediate area. Had this accident occurred during the evening, at night, or in the morning hours, most of the rooms would probably have been occupied. It is unlikely that even the River Front Alert Network would have been able to awaken the sleeping guests, alert them to the danger, and evacuate them in time to prevent serious injury or possible death. The Safety Board concluded that the IRC and the Dock Board did not conduct adequate risk assessment nor perform adequate safety management oversight to protect their properties and the people that use them from an allision such as that involving the *Bright Field*.

While the construction of a shopping mall and a hotel in such a high-risk area was illadvised, the Safety Board recognizes that economy and practicality argue against attempting to correct the error by relocating those facilities. Nonetheless, the *Bright Field* accident highlights the risk to shoreside structures within the Port of New Orleans and the need to consider that risk in the approval process for future construction there. The Safety Board believes that the Dock Board, as part of the permit-approval process for new commercial and residential development along the wharves within its jurisdiction, should require that any new construction of occupied space be sited behind a buffer zone sufficient to protect persons and property by safely absorbing the impact should a vessel strike a wharf.

After this accident, the Dock Board, in effect, identified a buffer zone for the Riverwalk Marketplace. The Dock Board "encouraged" the IRC to widen the Upper Poydras Street wharf by 50 feet. The company had already widened the wharf by that amount in one area to accommodate a gaming vessel, and the Dock Board suggested that the remainder of the wharf be extended as well. The Safety Board concurs in this suggestion and believes that the IRC should enhance the safety of the patrons and employees of the Riverwalk complex by immediately undertaking to widen that length of the Poydras Street wharf that has not previously been extended. Such an extension prior to this accident would have added a "crush zone" that would probably have prevented the structural damage and threat to persons that resulted from the *Bright Field* accident.

The property owners and other stakeholders within the Port of New Orleans, including International RiverCenter, clearly had the responsibility to establish and maintain a reasonable level of safety in the port area. The Safety Board concluded, however, that the stakeholders within the Port of New Orleans, including Federal, State, and local agencies; private commercial entities; shipowners, and pilot associations have not determined the overall level of risk associated with the full range of activities within the port area and have not provided adequate protection for persons and property in that area. As noted above, many of the risk factors associated with river commerce within the port area have already been identified in previous risk-assessment studies. The Safety Board believes that these factors may be amenable to known risk-reduction or risk-mitigation initiatives.

As a result of its investigation of the *Bright Field* accident, the National Transportation Safety Board makes the following safety recommendations to International RiverCenter:

As previously suggested by the Board of Commissioners of the Port of New Orleans, immediately enhance the safety of the patrons and employees of the Riverwalk complex by widening, by a minimum of 50 feet, that length of the Poydras Street wharf that has not previously been extended. (M-98-13)

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Participate with the U.S. Coast Guard and other stakeholders in a comprehensive risk assessment that considers all activities, marine and shoreside, within the Port of New Orleans. (M-98-14)

In cooperation with the U.S. Coast Guard and other stakeholders, including Federal, State, and local agencies; private commercial entities; shipowners; and pilot associations, implement risk-management and risk-mitigation initiatives that will ensure the safety of people and property within the Port of New Orleans. (M-98-15)

Also, the Safety Board issued Safety Recommendations M-98-1 through -4 to the U.S. Coast Guard; M-98-5 and -6 to the U.S. Army Corps of Engineers; M-98-7 and -8 to the State of Louisiana; M-98-9 through -12 to the Board of Commissioners of the Port of New Orleans; M-98-16 through -18 to Clearsky Shipping Company: M-98-19 through -23 to New Orleans Paddlewheels, Inc.; M-98-24 through -26 to the New Orleans Baton Rouge Steamship Pilots Association; M-98-27 and -28 to the Crescent River Port Pilots Association; and M-98-29 and -30 to the Associated Federal Pilots and Docking Masters of Louisiana, Inc.

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, it would appreciate a response from you regarding action taken or contemplated with respect to the recommendations in this letter. Please refer to Safety Recommendations M-98-13 through -15 in your reply. If you need additional information, you may call (202) 314-6450

Chairman HALL, Vice Chairman FRANCIS, and Members HAMMERSCHMIDT, GOGLIA, and BLACK concurred in these recommendations.

By: