



National Transportation Safety Board

Washington, D.C. 20594

Safety Recommendation

Log # R-665D

Date: NOV 14 1996

In reply refer to: R-96-49

To all jurisdictions providing
primary or secondary response to
Metrorail accidents or incidents:
(Distribution list attached)

About 10:40 p.m. on January 6, 1996, Washington Metropolitan Area Transit Authority (WMATA) Metrorail subway train No. T-111, operating on the "Red Line" segment of the Metrorail system, failed to stop as it entered the above-ground Shady Grove passenger station near Gaithersburg, Maryland, the final station on the Red Line. The four-car train ran by the station platform and continued about 470 feet into the Metrorail yard north of the station, where it struck a standing, unoccupied subway train that was awaiting assignment. The T-111 train operator was fatally injured; the train's two passengers were not injured. Total property damages were estimated to be between \$2.1 and \$2.6 million.¹

When Montgomery County rescue personnel arrived on the scene, they were equipped with only one warning strobe and alarm device (WSAD). Although two more WSADs arrived sometime later, because this accident occurred near an interlocking, a minimum of four WSADs would have been required, one on each independently controlled section of third rail, to ensure that rescue personnel would have been warned of third-rail reenergization in the accident area. The Safety Board therefore concluded that the number of WSADs that was delivered to the accident site was insufficient to fully protect emergency rescue personnel working in the vicinity of the interlocking. Because of the large number of interlockings throughout the Metrorail system, the Safety Board believes that all emergency response stations with primary responsibility for responding to Metrorail accidents should be equipped with an adequate number of WSADs or similar devices to monitor third-rail power in an accident location that encompasses one or more interlockings. The Safety Board recommended that WMATA work with these agencies to procure an adequate number of these protective devices and ensure that they are properly distributed among emergency rescue stations that may be called upon to respond to a Metrorail accident.

¹For more detailed information, read Railroad Accident Report—*Collision of Washington Metropolitan Area Transit Authority Train T-111 with Standing Train at Shady Grove Passenger Station near Gaithersburg, Maryland, January 6, 1996* (NTSB/RAR-96/04).

Firefighters and their commanders at the scene did not attempt to establish a direct communications link with the Metrorail Operations Control Center (OCC) to determine the status of the third rail, even though their own standard operating procedure states that this is to be done. Instead, firefighters communicated with Metrorail personnel at the scene, who relayed these communications to the yard tower or to the OCC by radio. This created confusion; for example, Metrorail personnel at the scene called the tower on several occasions and asked that the third rail in the accident area be deenergized. They were apparently not aware that third-rail power in the area where the accident occurred is controlled by the OCC and not by the yard tower.

The Safety Board concluded that the failure of the rescue commander at the accident scene to immediately establish a direct command link with the OCC caused miscommunications and delays in deenergizing the third rail that unnecessarily put firefighters at risk. The Safety Board recommended that WMATA and the emergency rescue services of all the jurisdictions served by Metrorail undertake more frequent joint command and control exercises with the explicit goal of ensuring that a proper command and communication structure is established quickly between the OCC and responsible rescue commanders. The Safety Board further recommended that the Montgomery County Fire and Rescue Commission review its standard operating procedures and revise the procedures or the training program as necessary to address the failure of rescue commanders on the scene of this accident to establish an immediate and direct communications link with the Metrorail OCC.

As a result of its investigation of this accident, the National Transportation Safety Board issues the following safety recommendation to all jurisdictions providing primary or secondary response to Metrorail accidents or incidents:

Review the circumstances of this accident, with particular attention to deficiencies in emergency response procedures. Review and amend, as necessary, your risk assessment procedures and emergency response plans and procedures for responding to Metrorail accidents or incidents. (R-96-49)

The Safety Board also issued Safety Recommendations R-96-26 through -45 to the Washington Metropolitan Area Transit Authority; R-96-46 to the Federal Transit Administration; R-96-47 to the American Public Transit Association; and R-96-48 to the Montgomery County Fire and Rescue Commission.

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 recommendation in this letter. Please refer to Safety Recommendation R-96-49 in your reply. If you need additional information, you may call (202) 314-6439.

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

By: 
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Chairman

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