Jg R-6656



## **National Transportation Safety Board**

Washington, D.C. 20594

## **Safety Recommendation**

Date:

NOV 1 4 1996

In reply refer to: R-96-47

Mr. William W. Millar President American Public Transit Association 1201 New York Avenue, N.W. Washington, D.C. 20005

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

WMATA Metrorail cars are not equipped with event recorders. In fact, no highly automated rapid transit system in the United States equips its trains with devices that monitor and record all vital train systems and system events; this despite the fact that the data provided by such devices could help those agencies enhance the efficiency and cost-effectiveness of their operations by providing their engineering, signal, maintenance, operations, and training departments with vital information about the way their systems and their operators are performing. Such data can also be invaluable in the event of an accident. Because the trains involved in this accident were not equipped with event monitors/recorders, Safety Board investigators had to gather, interpret, and interpolate information from a number of sources before they could reconstruct the accident sequence and evaluate the electronic, mechanical, and human performance factors that led to the collision. The Safety Board believes that the absence of event monitors/recorders on rapid transit trains represents a potentially serious obstacle to investigators attempting to determine the cause of accidents on rail systems responsible for moving millions of passengers daily.

<sup>&</sup>lt;sup>1</sup>For 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).

Therefore, the National Transportation Safety Board recommends that the American Public Transit Association:

Develop, with the assistance of the Federal Transit Administration, guidelines for monitoring/recording devices that capture critical performance and event data for rapid rail transit cars and urge transit agencies to install these devices on new and rehabilitated cars. (R-96-47)

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-96-48 to the Montgomery County Fire and Rescue Commission; and R-96-49 to all jurisdictions providing primary or secondary response to Metrorail accidents or incidents.

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: