

Log R-401B

NATIONAL TRANSPORTATION SAFETY BOARD  
WASHINGTON, D.C.

ISSUED: October 15, 1982

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Forwarded to:

Honorable Marion S. Barry  
Mayor, District of Columbia  
Suite 520, District Building  
1350 E Street, N.W.  
Washington, D.C. 20004

SAFETY RECOMMENDATION(S)

R-82-78 through -81

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About 1630, e.s.t., on January 13, 1982, Washington Metropolitan Area Transit Authority (WMATA) northbound Blue/Orange Line train No. 410 derailed while moving through a crossover track at the Smithsonian Interlocking on the downtown subway (Metrorail) line in Washington, D.C. After derailling, the rear car of the train struck and was penetrated by a concrete barrier wall separating the two main tracks of the subway. Of the approximately 220 passengers on the car, 3 were killed and 25 were injured. <sup>1/</sup> This accident occurred about 29 minutes after the crash of an Air Florida Boeing 737 airplane at the 14th Street Bridge.

Following the accident, the superintendent in the Operations Control Center (OCC) contacted the District of Columbia Fire Department's Communications Center on the direct "hot line" telephone. Nearly 4 minutes passed, however, before the OCC superintendent was able to convince the Fire Department of the seriousness of the situation and unnecessarily pinpoint the exact accident location. The first District fire company headed for the accident site 6 minutes after the accident, but the only available rescue squad did not start out for 13 minutes, and the first ambulances were dispatched 23 minutes after the Fire Department's Communications Center was notified of the accident.

Some of the additional delay in dispatching the Fire Department units resulted from the need to manually determine which units had responded to the Air Florida crash and which units were still available to go to the Metrorail accident. According to the Fire Department, this was necessary because of inadequate computer storage capability at the Communications Center.

The OCC had instructed the Fire Department to use the Federal Triangle Station as the entry point for rescue operations. The Fire Department's forces were hampered in reaching the Federal Triangle Station, located between busy Pennsylvania and Constitution Avenues, because the early release of thousands of downtown workers and accumulated snow had clogged the streets with traffic. The Federal Triangle Station has only one entrance, and when the rescue forces did arrive, they had to enter against the

<sup>1/</sup> For more detailed information, read Railroad Accident Report—"Derailment of Washington Metropolitan Transit Authority Train No. 410 at Smithsonian Interlocking on January 13, 1982" (NTSB-RAR-82-~~6~~).

flow of passengers being evacuated from train No. 410. The Safety Board believes that rescue forces should have used the Smithsonian Station's Mall entrance as their entry point to the subway. Rescue vehicles could have reached this location quicker by simply driving down the Mall to the entrance. As it was, the first fire and ambulance units to reach the Federal Triangle Station had driven by the Mall entrance of the Smithsonian Station en route. Since this station has two entrances, kiosk attendants could have been told to keep the Mall entrance clear and directed rescue forces to the accident location.

Once the rescue forces arrived at the accident, extrication work proceeded effectively; however, it required 2 hours 20 minutes to get the most seriously injured passenger to a hospital. In addition, no emergency routes were opened to the hospitals and two of the hospitals were not advised that injured would be arriving. The Safety Board believes that this accident demonstrated the need for an area-wide disaster plan involving ongoing liaison between the WMATA, elements of the Fire Department, Metropolitan Police, area hospitals, and suburban emergency response units.

The investigation developed that the disaster crash simulations conducted jointly by WMATA and the Fire Department were valuable, since they identified important areas where improvement was needed. Future simulations should be conducted more frequently and should include the participation of Metropolitan Police, the hospitals, and suburban emergency units to establish the best ways to communicate advance casualty information and to clear emergency routes to the hospitals.

The District's four rescue squads are manned by the personnel of four fire engine companies. If a company has responded to a fire alarm, there is no one available to man its rescue truck. Three of the District's four rescue squads were at the Air Florida crash site. Had the one remaining squad been out on a fire call, District rescue squads would have been unable to respond to the Metrorail accident.

Therefore, the National Transportation Safety Board recommends that the Mayor of the District of Columbia:

Require the District of Columbia Fire Department to review its planning for maintaining its rescue squad capability at all times. (Class II, Priority Action) (R-82-78)

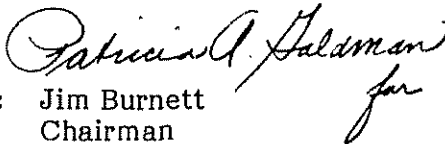
Improve the emergency procedures to be activated in the event of a Metrorail emergency which establishes effective and ongoing liaison between the District of Columbia Fire Department's onsite command post and its Communications Center, the Washington Metropolitan Area Transit Authority, the Metropolitan Police, and the hospitals, to (1) communicate the number of seriously injured persons together with the general nature and severity of their injuries; (2) ascertain each hospital's capacity to receive casualties; (3) direct ambulances to the appropriate hospitals; and (4) clear the most direct evacuation routes from the accident site to the hospitals. (Class II, Priority Action) (R-82-79)

Require that the District of Columbia Fire Department expand its computer storage capability to include all the information needed by the Fire Dispatcher for automatic assignment and response of units to multiple incidents. (Class II, Priority Action) (R-82-80)

Require the District of Columbia Fire Department in conjunction with the Washington Metropolitan Area Transit Authority to expand the scope and frequency of the Disaster Crash Simulations and include hospitals and fire/rescue units from surrounding jurisdictions. (Class II, Priority Action) (R-82-81)

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." (P.L. 93-633). The Safety Board is vitally interested in any actions taken as a result of its safety recommendations. Therefore, we would appreciate a response from you regarding action taken or contemplated with respect to the recommendations in this letter.

BURNETT, Chairman, GOLDMAN, Vice Chairman, and McADAMS, BURSLEY, and ENGEN, Members, concurred in these recommendations.

  
By: Jim Burnett  
Chairman