Preliminary Report
Railroad
DCA15FR004

The information in this report is preliminary and will be supplemented or corrected during the course of the investigation.

On January 12, 2015, about 3:15 p.m. eastern standard time, Washington Metropolitan Area Transit Authority (WMATA) Metrorail train 302 stopped after encountering an accumulation of heavy smoke while traveling southbound in a tunnel between the L'Enfant Plaza Station and the Potomac River Bridge. After stopping, the rear car of the train was about 386 feet from the south end of the L'Enfant Plaza Station platform.

A following train, stopped at the L'Enfant Plaza Station at about 3:25 p.m., and was also affected by the heavy smoke. This train stopped about 100 feet short of the south end of the platform. Passengers of both trains, as well as passengers on the station platforms, were exposed to the heavy smoke.

Both Metrorail trains involved in this incident consisted of six passenger cars and were about 450 feet in length. As a result of the smoke, 86 passengers were transported to local medical facilities for treatment. There was one passenger fatality and two passengers were hospitalized in critical condition.

Figure 1. Damage from the arcing incident in the tunnel near L'Enfant Plaza Station.

NTSB investigators have inspected the area of the incident, where they observed severe electrical arcing damage to the third rail and electrical cables about 1,100 feet ahead of train 302. Recorded data shows that at about 3:06 p.m., an electrical breaker at one end of a section of third rail tripped (opened). At about 3:16 p.m. the WMATA Operations Control Center (OCC) began activating ventilation fans in an effort to exhaust smoke from the area. The electrical breaker at the other end of the third rail section remained closed; supplying power until the WMATA OCC remotely sent a command to open the breaker at about 3:50 p.m.

Figure 2. Damage from the arcing incident in the tunnel near L'Enfant Plaza Station.

NTSB investigators are reviewing maintenance records of track, signal and power inspections, and railcar vehicles; documentation on previous events with smoke generation; maintenance and repair records of the tunnel exhaust fan/ventilation operations; WMATA emergency response and evacuation plans; and employee training records. Investigators have also collected material samples from the incident site and are examining the samples at the NTSB Materials Lab. In addition, NTSB investigators are currently conducting interviews with personnel involved, and have begun the collection and review of all available surveillance video.

The NTSB has formed the following technical investigative working groups:

- Operations
- Survival Factors
- Fire Science
- Signal and Power
- Track
- Civil Engineering/Infrastructure
- Mechanical/Equipment
- Recorders

The NTSB Transportation Disaster Assistance Division is providing support to the WMATA victim assistance team.

Parties to the investigation include: the Federal Transit Administration, Tri-State Oversight Committee, Washington Metropolitan Area Transit Authority, Amalgamated Transit Union Local 689, and the Bureau of Alcohol, Tobacco, Firearms and Explosives.