

NATIONAL TRANSPORTATION SAFETY BOARD

WASHINGTON, D.C.

Railroad Accident Brief Report

ATL 96 FR 012
LIGHT- RAIL-VEHICLE REAR-END COLLISION
SOUTHEASTERN PENNSYLVANIA TRANSPORTATION AUTHORITY
PHILADELPHIA, PENNSYLVANIA
MARCH 11, 1996

About 7:10 a.m., on Monday, March 11, 1996, Southeastern Pennsylvania Transportation Authority (SEPTA) Light-Rail-Vehicle (LRV) 9037 struck 2 standing LRVs (9081 & 9018) in the tunnel between 36th Street Station and 37th Street Station, in Philadelphia, Pennsylvania. LRV 9037 had a crew of one operator and the two standing trains each had one operator. Eighty-nine of the 126 passengers were transported to local hospitals. After being checked for injuries all but 1 of the passengers were released. The three operators were uninjured in the collision. Weather conditions were cloudy, daylight and 47⁰ F. Damages were estimated to be about \$82,800.

About 7:05 a.m. LRV 9010 had a propulsion problem and stopped between signals MS-360 and MS-362 and could not move from the 36th Street Station. The Elmwood Control Center was contacted and advised LRV 9010 to wait for LRV 9020 to couple behind him to make a multiple unit (MU) to move out of the station.

While the cars at 36th Street Station were coupling, LRV cars 9081 and 9018 had closed in from T Street Station and were stopped in the tunnel between signals MS-364 and MS-362, when they were struck. The cars were operating in an automatic block signal system where a red signal required a train to stop.

The operator on LRV 9037 was operating in a 10-mph curve when he entered the lighted tunnel. He stated that he did not see the stop signal located 297 feet south of the two stopped LRV cars. After the accident, the sight distance was measured to be about 100 feet in the 6-degree curve from where the cars were stopped. The operator stated that when he entered the block the

RAB/98-09

car was moving too fast to stop short of the two cars ahead. He placed his car into emergency braking when he saw the cars ahead. He estimated that his train was moving 3 to 5 mph when the collision occurred.

Stopping distance tests done after the accident revealed that a train moving 10 mph could stop in less than 100 feet. The operator was well rested when the accident occurred; however, he stated that he had a head cold and had taken some over-the-counter cold medication which made him sleepy. The operator stated that he did not see the stop signal. Toxicological tests revealed no evidence of drugs or alcohol.

An on-site inspection of the track and signals at the point of collision revealed no defects that would have contributed to the accident. The train was operating in a 6-degree curve restricted to 10 mph and the operator had failed to stop for a stop signal just before the collision.

PROBABLE CAUSE

The National Transportation Safety Board determines that the probable cause of this accident was failure of the operator of LRV 9037 to comply with the 10-mph speed restriction and his failure to stop at the stop signal located 297 feet from the point of the collision because he was inattentive.

Adopted: August 18, 1998

