



PRELIMINARY REPORT

RAILROAD

DCA15MR010

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

On May 12, 2015, at 9:21 pm eastern daylight time, northbound Amtrak passenger train no. 188 derailed at MP 81.62 near Philadelphia, Pennsylvania. The train had seven-cars and one locomotive. The train had just entered the Frankford Junction curve at a speed of 106 mph where the speed is restricted to 50 mph. As the train entered the curve, the engineer applied the emergency brakes. Seconds later, the locomotive and all seven passenger cars derailed. Of the 250 passengers and eight Amtrak employees that were on board, eight passengers were killed and more than 200 others were transported to area hospitals. Damage is estimated by Amtrak in excess of \$9.2 million. The weather at the time of the accident was reported to be 82°F with a westerly wind of 20 mph, with clear skies, and good visibility.

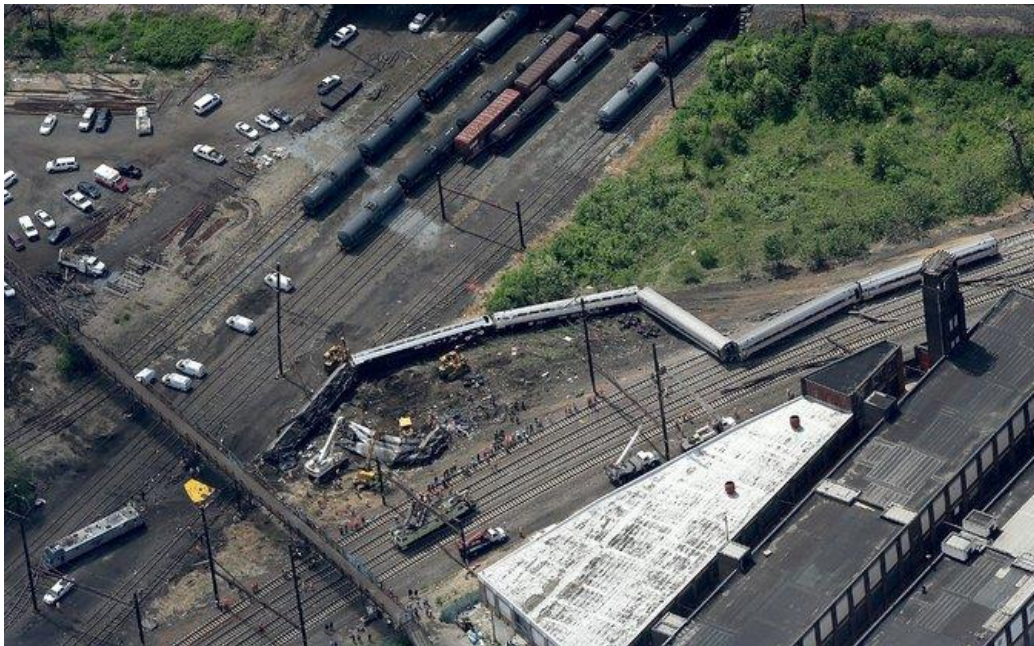


Figure 1. Train at point of rest following the derailment

The damaged cars and locomotive were transported to Amtrak facilities in Delaware for further examination.



Figure 2. Two passenger cars on their side and the remains of a damaged passenger car

Investigators have examined the train braking systems, signals, and track geometry. Thus far, no anomalies have been noted.

Based on the NTSB's preliminary review of the train's event recorder data, the train was travelling at 106 mph before the emergency brake system engaged. The data indicated that the engineer activated the emergency brakes seconds before the derailment.

The NTSB has possession of the Amtrak engineer's cell phone and has obtained the cell phone records. NTSB forensic experts are examining the phone and phone records. Although the records appear to indicate that calls were made, text messages sent, and data used on the day of the accident, investigators have not yet made a determination if there was any phone activity during the time the train was being operated. Investigators are in the process of correlating the time stamps in the engineer's cell phone records with multiple data sources including the locomotive event recorder, the locomotive outward facing video, recorded radio communications, and surveillance video.

The NTSB is investigating reports of vandals throwing rocks or other objects at passing trains around the time of the derailment. Damage to locomotive windshields and to at least one passenger car has been reported. The Amtrak 188 locomotive windshield has impact damage, however, it has not been determined if the damage was from a thrown object or as a result of the derailment. The NTSB was assisted by the FBI in evaluating the damage to the locomotive windshield which found no evidence of damage that could have been caused by a firearm.

The parties to the investigation include the Federal Railroad Administration, National Railroad Passenger Corporation (Amtrak); Philadelphia Police Department; Philadelphia Office of Emergency Services; Philadelphia Fire Department; Brotherhood of Locomotive Engineers and Trainmen; International Association of Sheet Metal, Air, Rail and Transportation Workers; and the Brotherhood of Maintenance of Way Employees.