

## **National Transportation Safety Board**

Washington, D.C. 20594

## **Safety Recommendation**

Date:August 15, 2003 In reply refer to: R-03-13

Honorable James M. Loy Administrator Transportation Security Administration West Tower (12th Floor) 601 South 12th Street Arlington, Virginia 22202

The National Transportation Safety Board is an independent Federal agency charged by Congress with investigating transportation accidents, determining their probable causes, and making recommendations to prevent similar accidents from occurring. We are providing the following information to urge your organization to take action on the safety recommendation in this letter. The Safety Board is vitally interested in this recommendation because it is designed to prevent accidents and save lives.

This recommendation addresses railroad passenger accountability procedures. The recommendation is derived from the Safety Board's investigation of the derailment of National Railroad Passenger Corporation (Amtrak) Auto Train P052-18 near Crescent City, Florida, on April 18, 2002, and is consistent with the evidence we found and the analysis we performed.<sup>1</sup>

About 5:08 p.m. eastern daylight time on April 18, 2002, northbound Amtrak train P052-18, the Auto Train, derailed 21 of 40 cars on CSX Transportation track near Crescent City, Florida. The train derailed in a left-hand curve while traveling about 56 mph. The train was carrying 413 passengers and 33 Amtrak employees. The derailment resulted in 4 fatalities, 36 serious injuries, and 106 minor injuries. The equipment and track costs associated with the accident totaled about \$8.3 million.

The National Transportation Safety Board determined that the probable cause of the April 18, 2002, derailment of Amtrak Auto Train P052-18 near Crescent City, Florida, was a heat-induced track buckle that developed because of inadequate CSX Transportation track-surfacing operations, including misalignment of the curve, insufficient track restraint, and failure to reestablish an appropriate neutral rail temperature.

As a result of its investigation of this accident, the Safety Board has issued eight safety recommendations, one of which is addressed to the Transportation Security Administration.

<sup>&</sup>lt;sup>1</sup> For additional information, see National Transportation Safety Board, *Derailment of Amtrak Auto Train P052-18 on the CSXT Railroad Near Crescent City, Florida, April 18, 2002*, Railroad Accident Report NTSB/RAR-03/02 (Washington, DC: NTSB, 2003).

Information supporting this recommendation is discussed below. The Safety Board would appreciate a response from you within 90 days addressing the actions you have taken or intend to take to implement our recommendation.

One issue that arose during the investigation was passenger accountability during the emergency response to the accident. The accident Auto Train was an all-reserved passenger train that was to travel nonstop between Sanford, Florida, and Lorton, Virginia. To account for the Auto Train passengers, Amtrak was using the paper on-board record system described in its *Service Standards Manual for Management Employees*. Given that the train made no scheduled stops for passengers, if this had been a reliable system, Amtrak should have been able to determine soon after the train departed from Sanford exactly how many passengers were on board the Auto Train by using the passenger manifest and the contents of the conductor's ticket collections pouch. Even though the accident occurred only about an hour after the train departed from Sanford, this still should have been sufficient time to develop a comprehensive list. Nevertheless, the incident commander told investigators that he had difficulty obtaining accurate information from Amtrak about the number of people on board the train.

When he arrived on the scene on April 18, the incident commander was told that 468 people were on the train. Subsequently, he was provided with both a greeter list and a passenger list, but the information on the two lists did not match. The incident commander later complained that emergency responders had to spend time attempting to verify the accuracy of the two lists. The day after the accident, Amtrak gave the incident commander a computer printout list, which contained information that did not match either of the two lists provided on April 18. In fact, Amtrak never provided the incident commander an accurate count of the persons on board the train. Even during postaccident interviews, long after the initial emergency response, Amtrak was still erroneously reporting the total number of people on board the train as 468.

Using information gathered and correlated from three sources—Amtrak, Putnam County Emergency Services, and medical records—it took Safety Board investigators almost 5 months to determine the number of Auto Train occupants at the time of the accident. The total number of people on board the train was 446, a discrepancy of 22 from the figure of 468 people that Amtrak gave in the immediate response phase.

In a derailment, the survival of passengers and crewmembers might well depend on emergency responders, who in turn depend on a complete and accurate accounting of all people on the train to ensure that they locate, evacuate, and treat (if necessary) all those on board. If the passenger list does not include every passenger on the train, emergency responders may leave passengers behind. If the passenger list includes people not on the train, emergency responders may be needlessly exposed to prolonged risks as they search for nonexistent passengers. To facilitate an effective emergency response, the incident commander must have an accurate passenger list as soon as possible. Consequently, the Safety Board recommended that Amtrak develop and implement an accurate passenger and crew accountability system for all its longdistance, overnight, and reserved trains that will immediately provide an accurate count of the people on board the train in case of emergency.

In addition to facilitating effective occupant evacuation and treatment during an emergency, having more complete information about those on board a train could benefit U.S.

rail transportation in other ways. An accurate listing of all people on board a train that includes information concerning the identity of each person would be useful for purposes of security as well as safety. To ensure that a passenger and crew identification system meets all safety and security needs, the two Federal agencies primarily responsible for railroad safety and security should collaborate in its creation.

Therefore, the National Transportation Safety Board makes the following safety recommendation to the Transportation Security Administration:

In cooperation with the Federal Railroad Administration, develop and implement an accurate passenger and crew accountability system for all long-distance, overnight, and reserved passenger trains that will immediately provide an accurate count and identity of the people on board the train in case of emergency at any time during the trip. (R-03-13)

The Safety Board also issued safety recommendations to the Federal Railroad Administration, CSX Transportation, Inc., and Amtrak. In your response to the recommendation in this letter, please refer to Safety Recommendation R-03-13. If you need additional information, you may call (202) 314-6177.

Chairman ENGLEMAN, Vice Chairman ROSENKER, and Members GOGLIA, CARMODY, and HEALING concurred in this recommendation.

Original Signed

By: Ellen G. Engleman Chairman