Log R-615A



# National Transportation Safety Board

Washington, D.C. 20594

Safety Recommendation

Date: May 31, 1989

In reply refer to: R-89-34 and -35

Mr. W. Graham Claytor, Jr. President National Railroad Passenger Corporation 400 North Capitol Street, N.W. Washington, D.C. 20001

About 3:15 p.m. mountain daylight time on August 5, 1988, westbound National Railroad Passenger Corporation (Amtrak) train 7, The Empire Builder, derailed near Saco, Montana, while operating on the Burlington Northern (BN) Railroad. Five passengers and 1 Amtrak service crewmember received serious injuries; 87 passengers and 13 Amtrak service crewmembers received minor injuries. The estimated damage was \$2,778,000.1

Although operational testing was not a causal factor in this accident, the Safety Board has long been an advocate of effective operational testing as a means of promoting safe train operations. The information gained is of primary importance for quality assurance in monitoring rules compliance and routine performance for safety enhancement purposes. The Board understands that in order to be objective this type of testing must be surreptitiously performed, which, in many instances, is time consuming. It appears that information on operational testing of Amtrak employees could be easily obtained from Amtrak's host railroads. The Board believes that Amtrak should implement a program with each of its host railroads to periodically obtain information the host railroad has compiled on Amtrak employees and that this information should be sent to the tested employees' immediate supervisors.

Amtrak train 7 departed Chicago with misapplied emergency windows, instructional placards missing from some emergency windows, no emergency windows in the sleeping compartment designated for handicapped passengers, and no emergency windows on the lower level of the dormitory/coach car.

<sup>&</sup>lt;sup>1</sup>For more detailed information, read Railroad Accident Report- "Derailment of National Railroad Passenger Corporation Train 7 on Burlington Northern Railroad Near Saco, Montana, August 5, 1988" (NTSB/RAR-89/03).

As a result of its investigation of a fire on board an Amtrak passenger train in Gibson, California, on June 23, 1982,<sup>2</sup> the Safety Board recommended that Amtrak:

# R-83-64

Provide an emergency escape window exit in each sleeping compartment as well as in all passenger hallways.

In its response to Safety Recommendation R-83-64, Amtrak advised the Safety Board that it was in the process of installing these windows. Consequently, Safety Recommendation R-83-64 was placed in an "Open--Acceptable Action" status.

However, during its investigation of the Saco accident, the Safety Board learned that in one instance, emergency response personnel experienced difficulty in extricating a handicapped passenger from the sleeping compartment designed for handicapped passengers. Through oversights, Amtrak did not install the interior emergency exit window feature in lower-level end sleeper compartments at the time these types of windows were installed in the other sleeping compartments. Also, instructional placards for removing upper- and lower-level windows were not installed on the cars' exteriors. Further, Amtrak informed Board investigators that the installation of these lower-level emergency windows and upper- and lower-level placards could take as long as 2 years. The Safety Board considers 2 years to be excessive and believes that passengers should not occupy lower-level end sleeper compartments that are not equipped with emergency exit windows or the appropriate placards with instructions for removing the exit windows from inside and outside the compartment. Based on the new information that this work could take up to 2 years, the Board has reclassified Safety Recommendation R-83-64 as Open--Unacceptable Action."

On September 18, 1988, the Safety Board reiterated Safety Recommendation R-83-64 and also recommended that Amtrak:

#### R-88-71

Install placards that show instructions for removal of sleeper car compartment windows from inside and outside the compartments.

<sup>&</sup>lt;sup>2</sup>Railroad Accident Report--"Fire Onboard Amtrak Passenger Train No. 11, Coast Starlight, Gibson, California, June 23, 1982" (NTSB/RAR-83/03).

### R-88-72

Immediately affix a placard with the universal handicapped facilities symbol on doors and windows of sleeper compartments designated for occupancy by handicapped passengers.

# R-88-73

Prohibit the use of all sleeper compartments that are not equipped with emergency exit windows.

Amtrak pointed out in its November 3, 1988, response that metal placards showing step-by-step instructions for window removal from outside the car are affixed to all four corners of Amfleet and Superliner cars and that a red-lettered sign is in place on Superliner cars instructing rescue agencies to go to the corners of the cars for window removal instructions. The Safety Board is aware of how the Superliner cars are placarded but does not believe that placarding is adequate. Crush damage sustained during an accident or a car's final resting position may make the ends of a car inaccessible. The Board believes Amtrak should apply placards outside each window depicting window removal from the outside and inside each window depicting window removal from the inside. Further information obtained during the Board's investigation of this accident indicates that Amtrak does intend to install placards that show instructions for removal of sleeper car compartment windows from inside and outside the compartment, as outlined in Safety Recommendation R-88-71. However, since the installation of emergency exit windows in sleeping compartments affects the removal instruction the Board has classified Safety Recommendation R-88-71 as "Open--Unacceptable Action." The Board urges Amtrak to expedite the installation of the emergency exit windows and the placards that show instructions for the removal of these windows.

With respect to affixing a placard with the universal handicapped facilities symbol on doors and windows of sleeper compartments as outlined in Safety Recommendation R-88-72, the Safety Board is pleased to note that Amtrak has already begun this project and expects its completion in 1989. Pending a further update and notification that the project has been completed, Safety Recommendation R-88-72 has been placed in an "Open-Acceptable Action" status. The Board is also pleased that Amtrak has placed on its cars 138,000 posters showing emergency evacuation systems similar to those used in the airline industry.

The Safety Board is disappointed with Amtrak's continued use of sleeping compartments that are not equipped with emergency exit windows. The Board continues to believe that this presents an undue risk to passenger safety and urges Amtrak to reconsider its position. Pending Amtrak's consideration of the Board's comments, Safety Recommendation R-88-73 is being held in an "Open--Unacceptable Action" status.

The lack of a means to get from inside an overturned car to the ground outside prolonged the evacuation time in this accident. It is fortunate that an extended evacuation time was available. Had fire broken out or other conditions existed, the results could have been catastrophic. People attempting to evacuate an overturned passenger car may encounter significant scaling problems before getting to a position where they can try to reach the ground. The Safety Board agrees with Amtrak that a ladder may solve some problems while introducing others; however, the Safety Board believes Amtrak should devise some mechanism to provide an escape route from an overturned passenger car.

Therefore, the National Transportation Safety Board recommends that the National Railroad Passenger Corporation:

Develop and implement a program with each host railroad Amtrak operates over to obtain the information on operating tests performed by the host railroad on Amtrak employees, and relay that information to the tested employee's immediate supervisor(s). (Class II, Priority Action) (R-89-34)

Develop procedures and equipment for evacuation of passenger cars involved in an accident, and train employees in those procedures and equipment. (Class II, Priority Action) (R-89-35)

Also, the Safety Board issued Safety Recommendations R-89-31 through -33 to the Burlington Northern Railroad Company and R-89-36 to each Amtrak host railroad.

KOLSTAD, Acting Chairman, and BURNETT, LAUBER, NALL, and DICKINSON, Members, concurred in these recommendations.

: James L. Kolstad Acting Chairman