

NATIONAL TRANSPORTATION SAFETY BOARD  
WASHINGTON, D.C.

ISSUED: May 28, 1982

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Forwarded to:

Honorable Robert W. Blanchette  
Administrator  
Federal Railroad Administration  
Washington, D.C. 20590

} SAFETY RECOMMENDATION(S)

R-82-34

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About 4:15 p.m. on August 11, 1981, Boston & Maine Corporation (B&M) freight train Extra 1731 East and Massachusetts Bay Transportation Authority westbound commuter train No. 570 collided head-on on the former B&M tracks near Prides Crossing, Beverly, Massachusetts. The train dispatcher allowed Extra 1731 East, a yard switcher, to enter onto the main track because he understood that a coworker would instruct the train to clear the main track for westbound No. 570. The coworker did not have the same understanding about the train's routing as the dispatcher, and Extra 1731 East was allowed to proceed eastward on the same track on which No. 570 had been authorized to proceed westward. The engineer of No. 570 and two trainmen and an unauthorized passenger on Extra 1731 East were killed. The engineer and foreman of Extra 1731 East, and the conductor, the trainman, and 28 passengers on No. 570 were injured. Damage was estimated at \$1,683,200. 1/

Because the long hood of the locomotive unit of Extra 1731 East was forward of the operating compartment, it would normally have served as a buffer between the operating compartment occupied by the crew and the lead car of No. 570. However, as often happens when light and heavy rail equipment collide, the 85,000-pound lead car of No. 570 rode up over the 247,000-pound locomotive unit of Extra 1731 East and pushed the underhood components of the locomotive into the operating compartment, killing three persons.

The need to improve the crashworthiness of locomotives, as well as passenger equipment, has been discussed in several Safety Board reports. The Safety Board believes that locomotive units in both freight and passenger service, including rail rapid transit service, can be designed to provide improved safety for crews and passengers. The Federal Railroad Administration should continue its research and design efforts in this critical area of crewmember and passenger survivability.

1/ For more detailed information read Railroad Accident Report—"Head-on Collision of Boston & Maine Corporation Extra 1731 East and Massachusetts Bay Transportation Authority Train No. 570, Beverly, Massachusetts, August 11, 1981" (NTSB-RAR-82-1).

As a result of its investigation of this accident, the National Transportation Safety Board recommends that the Federal Railroad Administration:

Expedite implementation of Safety Board recommendations to study structural protection for occupants of control cars and locomotive operating compartments. (Class II, Priority Action) (R-82-34)

BURNETT, Chairman, GOLDMAN, Vice Chairman, and BURSLEY, Member, concurred in this recommendation. McADAMS, Member, did not participate.

A handwritten signature in cursive script that reads "Jim Burnett". The signature is written in dark ink and is positioned above the typed name and title.

By: Jim Burnett  
Chairman