

R-411A

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C.

ISSUED: May 28, 1982

Forwarded to:

Mr. D. R. Pote
Chairman
Massachusetts Department of
Public Utilities
100 Cambridge Street
Boston, Massachusetts 02202

SAFETY RECOMMENDATION(S)

R-82-33

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/

Chapter 160, titled "Equipment - Engines and Cars," paragraph 154, subtitled "Brakes and Brakemen," of the Commonwealth of Massachusetts Laws Annotated requires, "...one brakeman for the last car in every freight train to be stationed thereon." There was no brakeman on the last car of Extra 1731 East at the time of the accident. The foreman of Extra 1731 East did not take a caboose with the train because he considered the available caboose to be in an unsafe condition. The foreman said that he considered the caboose unsafe because the doors on both ends did not have locks on them, and the motion of the train would cause the doors to swing open and closed. He also said that the doors inside the caboose to the toilet and lockers would not stay closed and that they too would swing. B&M rule 108 states that in case of doubt or uncertainty about factors affecting the train operation, the safe course must be taken.

The lack of restraining fasteners on the end and locker doors of the available caboose for Extra 1731 East could have been hazardous to crewmembers occupying the caboose. It is not uncommon for caboose occupants to lose their balance because of slack action or side roll while a train is moving, and swinging doors would have the potential for causing an injury. It is doubtful if a train of four cars would produce significant slack action, but nevertheless, if the foreman was in doubt, he could have decided justifiably against using the available caboose. However, this decision did not give him license to


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).

ignore the State statute that requires that a person be stationed on the last car of every freight train. Although the statute does not specifically state that a caboose be attached at the rear of every freight train, it is likely that the statute intended the use of one to provide the person with shelter, heat, light, safety appliances, and a back-up hose. 2/ Whether a person could have been stationed on the rear of Extra 1731 East even without a caboose under the existing conditions is questionable, but nevertheless none was so stationed. Because of the impact at a relatively low speed and the lack of damage to the freight cars, it is likely that a caboose would not have been damaged in the accident, and anyone riding in the caboose probably would have survived.

As a result of its investigation of this accident, the National Transportation Safety Board recommends that the Commonwealth of Massachusetts Public Utilities Commission:

Reevaluate that part of paragraph 154, chapter 160, of the Massachusetts General Laws Annotated which requires, "... one brakeman for the last car in every freight train to be stationed thereon. . .," to determine the advisability and necessity of having a brakeman so positioned. If it is found necessary, then specify the accommodations that shall be provided. (Class II, Priority Action) (R-82-33)

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


By: Jim Burnett
Chairman

2/ A back-up hose attaches to an air hose of the airbrake system. It has a whistle for signaling and a control valve for applying the train brakes.