## R-205C

## NATIONAL TRANSPORTATION SAFETY BOARD WASHINGTON, D.C.

ISSUED: March 21, 1979

Forwarded to:

Honorable Louis J. Gambaccini Commissioner Department of Transportation State of New Jersey 1035 Parkway Avenue Trenton, New Jersey 08625

SAFETY RECOMMENDATION(S)

R-79-29 through -31

About 6:30 p.m., on June 9, 1978, northbound Conrail commuter train No. 400, consisting of four self-propelled cars, struck the rear of Amtrak train No. 60, the Montrealer, consisting of 1 locomotive unit and 14 cars, at Seabrook, Maryland. The impact caused eight cars of train No. 60 and three cars of train No. 400 to be derailed. Sixteen crewmembers and 160 passengers were injured and damage was estimated to be \$248,050. 1/

Emergency release mechanisms for doors and instructions for their operation should be clearly marked for use in case of derailment, collision, and fire. In this accident, the door operating instructions were locked inside the cabinet containing the operating device in the cars of train No. 400, and there was no sign on the cabinet to indicate the device was inside. The conductor of train No. 400 had not been trained to use the device. Amtrak and Conrail had not provided training and familiarization in railroad emergencies to local rescue organizations. The failure to provide identification of the emergency mechanism and Conrail's failure to train the crewmembers to use the device caused the removal of injured passengers to be delayed.

Although the locked cabinet prevents misuse of the device during normal operations, the Safety Board believes that it is important to provide passengers a means of escaping from a car on their own without depending on crewmembers who may be disabled in an accident. While emergency windows permit escape, they are not as safe a means of exit as regular exit doors. Locks could be installed to prevent doors from being operated when power is applied.

<sup>1/</sup> For more detailed information read "Railroad Accident Report--Rear End Collision of Conrail Commuter Train No. 400 and Amtrak Passenger Train No. 60, Seabrook, Maryland, June 9, 1978" (NTSB-RAR-79-3).

The injuries to persons aboard train No. 400 were caused by being propelled into seatbacks which collapsed and onto unpadded metal strips bordering the tops and sides of the seats. The Safety Board concluded that if the commuter cars on train No. 400 had been designed to eliminate injury-producing interior features, the number of injuries resulting from the collision would have been greatly reduced.

Therefore, the National Transportation Safety Board recommends that the New Jersey Department of Transportation:

> Change the emergency release mechanism for the doors on all cars of the type involved in this accident so that the doors can be opened by passengers under emergency conditions, and properly identify the operating emergency equipment. (Class II, Priority Action)(R-79-29)

> Provide a means for emergency personnel to open car doors from the outside. (Class II, Priority Action)(R-79-30)

Alter the interiors of the commuter cars to correct the injury-producing features of the car design. (Class II, Priority Action) (R-79-31)

KING, Chairman, DRIVER, Vice Chairman, McADAMS and HOGUE, Members, concurred in the above recommendations.

By: James B. Ki