

R-322B

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C.

ISSUED: August 15, 1980

Forwarded to:

Mr. R. M. Bressler
President and Chief Executive Officer
Burlington Northern
176 East 5th Street
St. Paul, Minnesota 55101

SAFETY RECOMMENDATION(S)

R-80-33

About 4:00 p.m., on March 14, 1980, westbound Amtrak train No. 7, the Empire Builder, derailed two locomotive units and eight cars while moving at 37 mph through a 6°08' curve on the Burlington Northern (BN) track at Glacier Park, Montana. Of the 170 passengers and 20 crewmembers, 115 persons were injured and 35 were hospitalized. Property damage was estimated at \$546,800. 1/

Investigation of the accident disclosed that maintenance forces were to replace several of the low rails in the curve because of corrugations and shelling. These conditions were noted by BN inspectors as early as March 7, 1980; however, no slow order was issued to protect against the possibility of these rails breaking under a train or causing a derailment because of excessive car bouncing or rocking. Federal regulations require a maximum speed of 20 mph over such rails until they are replaced. Also, several of the rails exhibited 1/2-in. rail end batter, which required the track to be reclassified to Class 1 with a maximum speed of 15 mph for passenger trains until the rails were replaced.

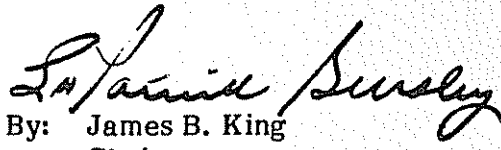
In addition, track conditions were found during the postaccident investigation that could cause gage widening or tipping of the high rail in the curve. Previous industry tests have indicated that these conditions can be troublesome when the crossties are frozen in the ballast, as was the case at Glacier Park, particularly if snow and ice get between the base of rail and tie plates. Snow was plowed from the track about 30 minutes before the arrival of No. 7, and plowing could have aggravated the weakened track condition.

1/ For more detailed information read, "Railroad Accident Report-- Derailment of Amtrak Train No. 7 on Burlington Northern Track, Glacier Park, Montana, March 14, 1980 (NTSB-RAR-80-6)."

Therefore, the National Transportation Safety Board recommends that the Burlington Northern:

Insure that track supervisors and inspectors take proper action to protect against conditions affecting safety of railway operations pending correction of defective track conditions as prescribed in Burlington Northern maintenance of way circulars and Federal regulations. (Class II, Priority Action) (R-80-33)

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

for 
By: James B. King
Chairman