

Log A-113

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C.

ISSUED: October 20, 1977

Forwarded to:

Honorable John M. Sullivan
Administrator
Federal Railroad Administration
400 Seventh Street, S.W.
Washington, D.C. 20590

SAFETY RECOMMENDATION(S)
R-77-32 through 35

About 2:45 a.m., on December 16, 1976, 1 SDP-40F locomotive unit and 11 cars of Amtrak train No. 6 derailed while leaving a 2° 30' curve on the Burlington Northern track near Ralston, Nebraska. Forty-eight of the 178 passengers, and 15 of the 19 crewmembers on the train were injured. Property damage was estimated to be \$816,000. 1/

Investigation of the accident disclosed that train No. 6 derailed while moving at 53 mph on a track maintained to the Federal Track Safety Standards for Class 4. An examination of the track in the curve leading to the point of derailment disclosed variations in alignment, gage, superelevation, crosstie conditions, and tieplate movement. The track, even with these irregularities, complied with the standards for Class 4. This track, however, had additional critical conditions which contributed to the accident but which were not ascertained by using procedures in the Federal Track Safety Standards.

Therefore, the National Transportation Safety Board recommends that the Federal Railroad Administration:

Develop methods and criteria for track inspectors to determine when timber crossties are impaired by inservice dynamic forces to the extent that they do not adequately hold track spikes. (Class II, Priority Followup) (R-77-32)

1/ For more detailed information on this accident, read Railroad Accident Report, Derailment of Amtrak train on Burlington Northern Railroad, Ralston, Nebraska, December 16, 1976. (NTSB-RAR-77- 8).

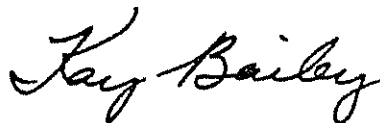
49 CFR

Amend track geometry standard 213.53 Gage, so that it establishes a maximum rate-of-change in track gage. (Class II, Priority Followup) (R-77-33)

Amend track structure standard 49 CFR 213.109 (b-2) Crossties, so that it is possible to obtain a standard and effective inservice evaluation of the subjective assessment of "A timber crosstie is considered to be defective when it is... impaired to the extent it will not hold spikes." (Class II, Priority Followup) (R-77-34)

Investigate and test to determine if timber crosstie track spiking requirements as contained in track structure standard 49 CFR 213.127 are adequate for the tonnage and speed of present locomotives and trains. (Class II, Priority Followup) (R-77-35)

BAILEY, Acting Chairman, McADAMS, HOGUE, and HALEY, Members, concurred in the above recommendations.



By: Kay Bailey
Acting Chairman