Log R-403

NATIONAL TRANSPORTATION SAFETY BOARD WASHINGTON, D.C.

ISSUED: September 29, 1982

Forwarded to:

Mr. W. H. Dempsey President Association of American Railroads 1920 L Street, N.W. Washington, D.C. 20036

SAFETY RECOMMENDATION(S)

R-82-103 and -104

On February 24, 1982, cars No. 5 through No. 24 of Seaboard Coastline train No. 175 derailed near Pembroke, North Carolina. The traincrew had received an automated voice warning from a wayside defect detector and were in the process of stopping the train when the derailment occurred. The total damage resulting from the derailment was \$1,233,000. There were no injuries or fatalities.

The National Transportation Safety Board's investigation of the accident indicated that the derailment occurred because of a broken wheel on LTTX 200078, a piggyback flatcar. The broken wheel, designated as D-28, was 7 years old and made of wrought steel. In January 1980, the Association of American Railroads (AAR) had removed the D-28 wheel from standard status because of the high failure rate of wheels of this type that were over 2 years old. The AAR has also issued instructions that all D-28 wheels must be removed from cars when the cars are on a repair track and are jacked for any reason. The Seaboard Coastline Railroad had the LTTX 200078 on its repair track on February 10, 1982, but since the repairs did not require jacking of the car, the wheel was not removed.

There are approximately 15,000 D-28 wheels in service, predominately in cars owned by Trailer Train Corporation. Most of these wheels were installed between 1976 and 1979. The Safety Board recognizes that massive wheel replacement is a difficult and expensive operation. However, the information available to the Safety Board indicates that the D-28 wheel has exhibited an unacceptably high failure rate after it has been in service for over 2 years. Additionally, since no wheels have been manufactured since January 1980, even the newest wheels are probably nearing 2 years of service. Accordingly, the Safety Board believes that the existing removal program should be accelerated and that the changeover should be completed by October 1, 1984.

- Therefore, the National Transportation Safety Board recommends that the Association of American Railroads:

Advise their membership of the circumstances of this wheel failure accident and warn them of the failure record of the D-28 wheel. (Class II, Priority Action) (R-82-103)

Issue instructions that all D-28 wheels be removed prior to October 1, 1984. (Class II, Priority Action) (R-82-104)

The National Transportation Safety Board is an independent Federal agency with the statutory responsibility "...to promote transportation safety by conducting independent accident investigations and by formulating safety improvement recommendations." (P.L. 93-633). The Safety Board is vitally interested in any actions taken as a result of its safety recommendation(s). Therefore, we would appreciate a response from you regarding action taken or contemplated with respect to the recommendation(s) in this letter.

GOLDMAN, Vice Chairman, and McADAMS, BURSLEY, and ENGEN, Members, concurred in these recommendations. BURNETT, Chairman, did not participate.

By: Jim Burnett
Chairman

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