Log R.75 Vot 1822 Rec R-76-18 and 11

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

ISSUED: May 7, 1976

Forwarded to:

Mr. Eugene Kerik Garfield Chairman, Chief Executive Officer and President Auto Train Corporation 1801 K Street, N.W. Washington, D. C. 20006

SAFETY RECOMMENDATION(S)
R-76-18 and 19

The National Transportation Safety Board is investigating the derailment of northbound Auto Train No. 4 which occurred on eastbound track of the Seaboard Coast Line's double-track system near Jarratt, Virginia, on May 5, 1976. The preliminary investigation disclosed a cracked wheel. The crack extended from the back side of the flange through the plate and into the hub of the wheel. This permitted the wheel to become loose and move off of its wheel seat. Further examination disclosed that the crack extended through the vertical leg of the letter B stamped on the back side of the flange which is part of the identification number of the wheel. A loose wheel could have provided the marks found on the track structure leading to the derailment point.

On March 7, 1976, the Safety Board conducted an investigation of the derailment of the Auto Train No. 3 which occurred at Possum Point, Virginia, on the tracks of the Richmond, Fredericks-burg and Potomac Railroad. Investigation of this accident disclosed that a wheel moved off of its axle seat due to a crack which extended through the wheel tread, plate and hub, as in the later accident at Jarratt, Virginia. This fracture also extended through a figure 1 stamped on the back side of the wheel rim.

The analysis of the cracked wheel which resulted in the derailment at Possum Point, disclosed that the crack originated in a stamped mark on the rim of the wheel. This wheel had been exposed to excessive heating from braking and the crack initiation may have resulted partly from this condition. The crack in the wheel in the Jarratt, Virginia, accident has not been completely evaluated at this time. It appears that the crack in the Possum Point accident could have been found by a specialized inspection, and it is possible that the crack in the Jarratt, Virginia, accident could also have been found.

An inspection process initiated by Auto Train after the March 7, 1976, accident has been shown to be inadequate to detect the type of cracks involved in these accidents.

These two accidents do not themselves establish that any general problem of cracked wheels exists on the automobile-carrying cars of Auto Train. However, the accidents do involve very similar occurrences and a specialized inspection employing a changed technique could find any similar cracks, should they be present.

Therefore, the National Transportation Safety Board recommends that the Auto Train Corporation:

- Immediately arrange to have all wheels of the autocarrying cars inspected, in accordance with procedures approved by the Federal Railroad Administration, to determine if cracking as found in these two derailments is developing in any other wheels. (R-76-18.) (Class I -- Urgent Followup.)
- 2. Determine whether there is a systematic source of excessive heating of the wheels of the auto-carrying cars and if so take immediate action to correct the condition. (R-76-19.) (Class I -- Urgent Followup.)

TODD, Chairman, McADAMS, HOGUE, and BURGESS, Members, concurred in the above recommendations. HALEY, Member, was absent, not voting.

By: Webster B. Todd, Jr.

Chairman

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