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UNITED STATES OF AMERICA NATIONAL TRANSPORTATION SAFETY BOARD WASHINGTON, D.C.

ISSUED: June 22, 1973

Adopted by the NATIONAL TRANSPORTATION SAFETY BOARD at its office in Washington, D. C. on the 7th day of June 1973

FORWARDED TO:
Mr. Eugene K. Garfield
President
Auto Train Corporation
1801 K Street, N.W.,
Washington, D.C. 20006

SAFETY RECOMMENDATIONS R-73-25 thru 27

Observations made by a representative of the National Transportation Safety Board after the collision of a motor truck with the second locomotive unit of the Auto Train at Hortense, Ga., on March 13, 1973, disclosed several situations which the Safety Board believes should be brought to your attention.

As a result of the collision, the 14 automobile-carrying boxcars on the head end of the train were derailed and came to rest with several of the boxcars on their sides and at least one on its roof. Gasoline leaked from the tanks and systems of automobiles loaded in these boxcars. The leaking gasoline created an extremely dangerous threat of explosion and fire within the boxcars and in the immediate vicinity of the wreckage during most of the 24-hour period after the accident. The end doors of several of the boxcars were knocked open, and, because the automobiles were not secured to the loading tracks in the car, several automobiles were thrown out of the boxcars. Gasoline spilled from these automobiles.

A fire which started immediately after the collision destroyed the second locomotive unit and the first boxcar and its contents. This fire was prevented from spreading to the other wrecked equipment by the quick response of the local fire department. The continued surveillance by the firemen and by railroad personnel probably prevented additional fires.

These boxcars do not have a fire-extinguishing system or any type of fire-alarm system. An opening about 6 inches in diameter is provided in the end doors of the cars as a means of ventilation.

The Safety Board realizes that the Auto Train Corporation has little control over the condition of the automobiles since the automobiles are received directly from the highway. The gasoline in full tanks can create a dangerous condition if it is caused to overflow by the motion of the train or by heat expansion. If the gasoline became ignited while the train was moving, a fire could reach major proportion before it is detected. However, if the boxcars were provided with an automatic fire-alarm and protection system, a fire could be controlled and extinguished with little damage. Even in this accident, such a system would have provided some protection, although some of the end doors were knocked open.

All but three of the passenger-carrying cars derailed as a result of the accident, and the dining car was turned on its side as it came to rest. It is the Safety Board's understanding that the loose furniture which slid to the lower side of the car was responsible for most of the passenger injuries which occurred in this car.

The problem of loose furniture in a car as well as other injury-producing features has been brought to the attention of the railroad industry by the Safety Board in the reports of accidents which occurred at Franconia, Va., on January 27, 1970; at Collinsville, Okla., on April 5, 1971; and at Salem, Ill., on June 10, 1971. (Copies of these reports are enclosed.)

As a result of the observations made during the recent Auto Train derailment, the National Transportation Safety Board recommends that the Auto Train Corporation:

- Determine the feasibility of providing the automobilecarrying boxcars with automatic fire-extinguishing systems that will provide adequate protection from gasoline fires.
- Take measures to require that automobiles taken aboard will be carrying no more than three-fourths of normal fuel tank capacity.

3. Survey the passenger-carrying cars and, where feasible, eliminate injury-producing features such as loose furniture, sharp corners, and insecure seats.

These recommendations will be released to the public on the issue date shown above. No public dissemination of the contents of this document should be made prior to that date.

Reed, Chairman, McAdams, Thayer, and Haley, Members, concurred in the above recommendations. Burgess, Member, was absent, not voting.

By: John H. Reed

Chairman

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