



National Transportation Safety Board

Washington, D.C. 20594

Safety Recommendation

Date: November 21, 2000

In reply refer to: H-00-33

Mr. Walter B. McCormick, Jr.
President and Chief Executive Officer
American Trucking Associations
Maintenance Council of the American Trucking Associations
200 Mill Road
Alexandria, Virginia 22314-4677

Mr. Steve Campbell
Executive Director
Commercial Vehicle Safety Alliance
5430 Grosvenor Lane
Bethesda, Maryland 20814

The National Transportation Safety Board is an independent Federal agency charged by Congress with investigating transportation accidents, determining their probable cause, and making recommendations to prevent similar accidents from occurring. We are providing the following information to urge your organization to take action on the safety recommendation in this letter. The Safety Board is vitally interested in this recommendation because it is designed to prevent accidents and save lives.

This recommendation addresses the adequacy of commercial vehicle airbrake inspections. The recommendation is derived from the Safety Board's investigation of the October 21, 1999, school bus and dump truck collision in Central Bridge, New York,¹ and is consistent with the evidence we found and the analysis we performed. As a result of this investigation, the Safety Board has reiterated two safety recommendations and issued six new safety recommendations, one of which is addressed to both the Maintenance Council of the American Trucking Associations and the Commercial Vehicle Safety Alliance. Information supporting this recommendation is discussed below. The Safety Board would appreciate a response from you within 90 days addressing the actions you have taken or intend to take to implement our recommendation.

¹ For additional information, read National Transportation Safety Board. 2000. *School Bus and Dump Truck Collision in Central Bridge, New York, on October 21, 1999*. Highway Accident Report NTSB/HAR-00/02. Washington, DC.

After the accident, a mechanical inspection of the dump truck airbrake system by Safety Board investigators revealed the absence of a tractor protection system. This system is federally required² to protect the air supply of the towing vehicle in case of a catastrophic failure in the trailer brake system.

This vehicle was originally manufactured as a chassis, and the dump truck body was later added to the chassis. The vehicle had been modified, by adding a hitch and altering the airbrake system, to make it capable of towing a trailer with an airbrake system. The Safety Board contacted the chassis manufacturer, the body manufacturer, and the owner to determine who modified the vehicle for towing. The owner claimed that the body manufacturer performed the modifications, but the body manufacturer had no record of performing the service and did not believe that it would have done so.

The Commercial Vehicle Safety Alliance vehicle inspection procedures for a tractor protection system require the inspectors to instruct the driver to release the vehicle's emergency or parking brakes, exit the vehicle, and then disconnect both air lines from the towing vehicle. After both lines are disconnected, the inspector is to check the trailer glad hands for escaping air. A second check is to occur when the air stops flowing from the supply line. The inspector must then ask the driver to return to the tractor and make a service brake application.

In the accident vehicle, Safety Board investigators found that removing both the trailer air lines did not result in any unusual bleed back from the trailer emergency relay valve and that air ceased exhausting from the supply glad hand on the truck at 45 pounds per square inch of system air. Upon a service brake application, the truck's remaining system air rapidly exhausted out of the service glad hand, indicating a defective tractor protection system. Because of the manner in which the glad hands had been plumbed into the truck's original air system, failure to conduct the additional service brake application would have given a false indication that a tractor protection valve existed and was operating properly.

This vehicle underwent as many as 15 separate mechanical inspections in its lifetime, performed by different inspectors and agencies. A carrier inspection profile indicated that three roadside inspections were conducted between 1988 and 1998. The vehicle was operated for 12 years and over 187,000 miles without any inspector ever discovering the absence of a traction protection valve. Because this equipment deficiency was never detected, the Safety Board concludes that when inspecting the tractor protection system, inspectors may have assumed during the first inspection step that the tractor protection system was present and working as required, so they did not perform the second step, which was applying the service brake.

Therefore, the National Transportation Safety Board recommends that the Maintenance Council of the American Trucking Associations and the Commercial Vehicle Safety Alliance:

Advise your members of the importance of requiring a brake application during inspections of tractor protection systems and the consequences of not doing so, as

² Federal Motor Vehicle Safety Standard 121, section 5.3.

evidenced by the circumstances of the October 21, 1999, accident in Central Bridge, New York. (H-00-33)

The Safety Board also issued safety recommendations to the National Highway Traffic Safety Administration, the Federal Motor Carrier Safety Administration, and the National Association of State Directors of Pupil Transportation Services. Additionally, the Safety Board reiterated safety recommendations to the National Highway Traffic Safety Administration. In your response to the recommendation in this letter, please refer to H-00-33. If you need additional information, you may call (202) 314-6440.

Acting Chairman HALL and Members HAMMERSCHMIDT, GOGLIA, BLACK, and CARMODY concurred in this recommendation.

Original Signed

By: Jim Hall
Acting Chairman