



# National Transportation Safety Board

Washington, D.C. 20594

## Safety Recommendation

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**Date:** November 21, 2000

**In reply refer to:** H-00-30

Ms. Julie Cirillo  
Acting Assistant Administrator and  
Chief Safety Officer  
Federal Motor Carrier Safety Administration  
400 Seventh Street, S.W.  
Washington, D.C. 20590

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About 10:30 a.m. on October 21, 1999, in Schoharie County, New York, a Kinnicutt Bus Company school bus was transporting 44 students, 5 to 9 years old, and 8 adults on an Albany City School No. 18 field trip. The bus was traveling north on State Route 30A as it approached the intersection with State Route 7, which is about 1.5 miles east of Central Bridge, New York. Concurrently, an MVF Construction Company dump truck, towing a utility trailer, was traveling west on State Route 7. The dump truck was occupied by the driver and a passenger. As the bus approached the intersection, it failed to stop as required and was struck by the dump truck. Seven bus passengers sustained serious injuries; 28 bus passengers and the truckdriver received minor injuries. Thirteen bus passengers, the busdriver, and the truck passenger were uninjured.<sup>1</sup>

After the accident, a mechanical inspection of the dump truck airbrake system by National Transportation Safety Board investigators revealed the absence of a tractor protection system. This system is required<sup>2</sup> 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.

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<sup>1</sup> 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.

<sup>2</sup> Federal Motor Vehicle Safety Standard 121, section 5.3.

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 tractor 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 Federal Motor Carrier Safety Administration:

Advise relevant staff of the importance of requiring a brake application during inspections of tractor protection systems and the consequences of not doing so, as evidenced by the circumstances of the October 21, 1999, accident in Central Bridge, New York. (H-00-30)

The Safety Board also issued safety recommendations to the National Highway Traffic Safety Administration, the National Association of State Directors of Pupil Transportation Services, the Maintenance Council of the American Trucking Associations, and the Commercial Vehicle Safety Alliance. In addition, the Safety Board reiterated safety recommendations to the National Highway Traffic Safety Administration.

Please refer to Safety Recommendation H-00-30 in your reply. 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