

Log H-586A



# National Transportation Safety Board

Washington, D.C. 20594

## Safety Recommendation

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Date: MAR 13 1996

In reply refer to: H-96-5

Honorable Rodney E. Slater  
Administrator  
Federal Highway Administration  
400 7th Street, S.W.  
Washington, D.C. 20590

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About 2:35 a.m. on May 2, 1995, National Railroad Passenger Corporation (Amtrak) train No. 81, the Silver Star, on its southbound run from New York, New York, to Tampa, Florida, struck an O&J Gordon Trucking Company tractor-lowbed semitrailer combination that had been lodged for 30 to 35 minutes on a rural, high-vertical-profile (hump)<sup>1</sup>, passive<sup>2</sup> grade crossing about 1 mile north of Sycamore, South Carolina. At the time of the accident, the train was using a single main line track belonging to CSX Transportation, Inc. (CSXT). The two locomotive units and 14 cars of the 16-car consist derailed. The tractor and semitrailer were substantially damaged. No fire ensued.<sup>3</sup>

The train was carrying 279 passengers, 9 service crew members, and 5 operating crew members. Thirty-three persons sustained minor injuries. Combined property damage to the train and truck exceeded \$1 million.

The Safety Board determined that the truckdriver failed to understand that the substandard profile of the grade crossing was incompatible with the truck he was operating. The Safety Board looked at several potential countermeasures that would improve driver awareness of hump crossings and possibly reduce the likelihood of collisions between trains and lowbed trucks. One of those countermeasures involved installing appropriate signs at hump crossings to warn lowbed vehicle operators of potential hazards.

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<sup>1</sup>A grade crossing where the railroad tracks are significantly elevated above the approaching roadway, creating a "hump" profile.

<sup>2</sup>A grade crossing with passive devices such as signs but lacking other visual or audible signaling devices or gates that automatically activate when a train approaches.

<sup>3</sup>For more detailed information, read *Highway Accident Report--Highway/Rail Grade Crossing Collision at Sycamore, South Carolina, May 2, 1995* (NTSB/HAR-96/01).

In 1986, as a result of its 1985 study of grade crossing accidents,<sup>4</sup> the Safety Board issued Safety Recommendation R-86-50 asking the FHWA to require that warning signs be installed at hump crossings. The FHWA responded that, in its view, changes to the *Manual on Uniform Traffic Control Devices* (MUTCD) were not warranted at that time. Based on this response, the Safety Board classified the safety recommendation "Open--Unacceptable Action." In a 1988 study of 189 heavy truck accidents,<sup>5</sup> the Safety Board reiterated this recommendation, prompting the FHWA to respond that because problems remained with resolving when and where such signs should be placed, the recommended requirement would be "premature, if not infeasible." Based on this response, the Safety Board, on May 22, 1991, reclassified Safety Recommendation R-86-50 "Closed--Unacceptable Action."

On June 12, 1995, 9 years after the Safety Board issued Safety Recommendation R-86-50, the FHWA published a notice of proposed amendments to the MUTCD requesting comments on a proposed warning sign for substandard vertical curves over railroad crossings. In light of the fact that so much time has already elapsed since this issue was first presented to the FHWA, and since the need for effective warnings at hump crossings has not diminished, the Safety Board believes that the proposed change to the MUTCD to include warning signs for hump crossings should be implemented without further delay.

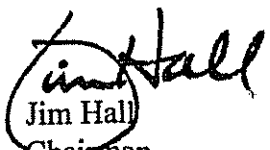
Therefore, the National Transportation Safety Board recommends that the Federal Highway Administration:

Adopt the proposed changes that are published in the notice of proposed amendments to the *Manual on Uniform Traffic Control Devices* regarding warning signs for substandard vertical profiles at railroad grade crossings. (Class II, Priority Action) (H-96-5)

Also, the Safety Board issued Safety Recommendations H-96-1 through -4 to the Secretary of Transportation; R-96-1 to the American Public Transit Association; H-96-6 and -7 to the American Association of Motor Vehicle Administrators; H-96-8 to the American Trucking Associations, Inc.; R-96-2 to the American Short Line Railroad Association; H-96-9 and -10 to Operation Lifesaver, Inc.; R-96-3 to Class I railroads and railroad systems; and H-96-11 and -12 to O&J Gordon Trucking Company. If you need additional information, you may call (202) 382-6208.

Chairman HALL, Vice Chairman FRANCIS, and Members HAMMERSCHMIDT, GOGLIA, and BLACK concurred in this recommendation.

By:

  
Jim Hall  
Chairman

<sup>4</sup>Safety Study--Passenger/Commuter Train and Motor Vehicle Collisions at Grade Crossings (1985) (NTSB/SS-86/04).

<sup>5</sup>Safety Study--Case -Summaries of 189 Heavy Truck Accident Investigations (NTSB/SS-88/05).