



National Transportation Safety Board

Washington, D.C. 20594

Safety Recommendation

Log R-660A

Date: MAR 13 1996

In reply refer to: R-96-2

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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)¹, passive² 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.³

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 a probable contributing cause of the accident was the absence at the crossing of emergency notification information that the driver may have used to notify the railroad of the blocked crossing. No signs were posted that would inform the public of steps to take or phone numbers to call in the event of problems at the crossing. There was no indication of which railroad was responsible for the crossing, nor was there any unique name or

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

²A 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.

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

number posted that would have made it possible for anyone reporting a problem to have readily identified this particular crossing to the operating railroad.

Because time is critical when a vehicle becomes lodged on a grade crossing, it is imperative that a railroad be notified as soon as possible to allow them the greatest opportunity to notify any trains en route to the blocked crossing. In this accident, 30 to 35 minutes elapsed between the time the vehicle became lodged and the train reached the crossing. The Safety Board reconstructed the time that it likely would have taken for a call to 911 to have reached CSXT, and for a CSXT dispatcher to reach the train crew. The reconstruction suggested the process would take no more than 4 minutes. That would have been sufficient time for the train to have stopped short of the accident crossing. Consequently, the Safety Board concluded that had the driver taken the appropriate action and notified authorities shortly after becoming lodged, this accident would probably not have occurred.

In a meeting held in October 1995 concerning this accident, industry representatives stated that after becoming lodged on a crossing, a driver should notify authorities of the potential hazard and proceed to dislodge the vehicle. This position is reiterated in the American Trucking Associations' manual, which states that drivers operating lowbed trailers should avoid places—like hump crossings—where there are significant changes in road grade. The manual further advises that if a driver becomes lodged on a crossing, he should immediately call authorities, give the crossing location, and notify the railroad.

It is possible that, had emergency notification information been posted prominently at the crossing, the driver would have seen it and would have reacted differently. If the driver had seen such information, he would have known immediately that he should notify someone of the hazard after he became lodged, and he would have known whom to notify. Thus, the Safety Board concludes that, had emergency notification information been posted at the accident crossing, the truckdriver may have used it to notify the railroad, thereby avoiding the accident.

In 1986, the Safety Board issued Safety Recommendations R-86-48 and -55 asking that the Federal Railroad Administration and the Federal Highway Administration work together to develop and require a system in each State similar to a successful toll-free emergency notification system implemented by the State of Texas. After 5 years the Safety Board classified these recommendations "Closed--Acceptable Alternate Action," recognizing that some promotional activities had been undertaken by the two Federal agencies. Unfortunately, the implementation of emergency notification systems has been slow; in the past 9 years, only two other States (Delaware and Connecticut) have introduced grade crossing emergency notification systems. The Safety Board notes that several railroads have recognized the value of the toll-free emergency notification systems and have developed their own systems for use either by the public or by law enforcement or other public officials.

The most striking aspect of all the public systems is the fact that the general public has welcomed them and has readily used the systems to report problems at grade crossings. Thus, the Safety Board believes that existing emergency notifications systems have proven their value and

should be implemented nationwide. Each new system should, at a minimum, contain the following:

- A toll-free telephone number directed to a communications center that is staffed at all hours during which trains are operated;
- Permanently posted signage located at each grade crossing providing information on the railroad, the toll-free telephone number, the crossing DOT/AAR inventory number, and the name of the road or street on which the crossing is located; and
- A program to inform appropriate law enforcement and emergency response agencies of the availability of the system and to advise them on its use.

Most existing systems service active crossings, the theory being that (1) active crossings are more heavily traveled and (2) the primary purpose of the public notification system is to allow the timely reporting of malfunctioning signals. The fact is, however, that a blocked crossing represents a hazard fully equal to that of a malfunctioning signal. Further, crossing blockages or similar problems are as likely to occur at passive as at active crossings, and they represent a similar potential risk in terms of injuries and property damage. The Safety Board therefore believes that emergency notification systems should service passive, as well as active, crossings.

To make countermeasures effective in the shortest possible time, the Safety Board believes that emergency notification systems should be developed and implemented by all Class I railroads and railroad systems on all their crossings. The Safety Board also recognizes that similar systems may be appropriate for some of the smaller railroads and transit systems and believes that associations representing these entities, such as the American Short Line Railroad Association and the American Public Transit Association, respectively, should encourage their memberships to develop and implement similar notification systems.

Therefore, the National Transportation Safety Board recommends that the American Short Line Railroad Association:

Encourage your members to develop and implement, without delay, a 24-hour toll-free emergency notification telephone system for use by the public in promptly reporting emergencies at all your members' highway/rail grade crossings, both active and passive, and provide information at each crossing to inform the public of the 24-hour telephone system. (Class II, Priority Action) (R-96-2)


Also, the Safety Board issued Safety Recommendations H-96-1 through -4 to the Secretary of Transportation; H-96-5 to the Federal Highway Administration; 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.; 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.

The National Transportation Safety Board is an independent Federal agency with the statutory responsibility "to promote transportation safety by conducting independent accident investigations and by formulating safety improvement recommendations" (Public Law 93-633). The Safety board is vitally interested in any action taken as a result of its safety recommendations. Therefore, it would appreciate a response from you regarding action taken or contemplated with respect to the recommendation in this letter. Please refer to Safety Recommendation R-96-2 in your reply. If you need more 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