Log R-6558

National Transportation Safety Board

Washington, D.C. 20594

Safety Recommendation

Date: MAY 30 1995

In Reply Refer To: R-95-30 through -32

Mr. Alvin R. Carpenter
President and CEO
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On November 30, 1993, a 184-foot-long vehicle operated by Rountree Transport and Rigging (Rountree), Inc., was en route to deliver an 82-ton turbine to a Kissimmee Utility Authority (KUA) electricity generating plant under construction near Intercession City, Florida. The private access road to the plant facility crosses over a single railroad track owned by CSX Transportation, Inc. (CSXT). Because of the configuration of the truck and the profile of the roadway, the cargo deck of the vehicle began to bottom out on the roadway surface as it moved across the tracks. The Rountree crew proceeded to adjust the height of cargo deck to gain greater clearance while the vehicle straddled the track. They had finished raising the cargo deck and were preparing to move the vehicle when the lights and bells at the grade crossing activated. Seconds later, National Railroad Passenger Corporation (Amtrak) train number 88, the Silver Meteor, carrying 89 passengers, struck the side of the cargo deck and the turbine. The locomotive and the first four cars of the eight-car consist derailed, pushing the turbine and parts of the Rountree vehicle in front of them.[1]

The Rountree vehicle and the turbine were destroyed, and the locomotive and the first three railcars were damaged extensively. Total damage from the accident exceeded $14 million. No deaths resulted from this accident. Six persons sustained serious injuries and 53 persons suffered minor injuries, and had to be evacuated to area hospitals.

[1] For additional information, read Highway Accident Report--*Collision of Amtrak Train No. 88 with Rountree Transport and Rigging, Inc., Vehicle on CSX Transportation, Inc., Railroad near Intercession City, Florida, November 30, 1993* (NTSB/HAR-95/01).

From its investigation of this accident, the Safety Board found that the cause of the accident was the vehicle operator's failure to notify CSXT in advance of its intent to cross the railroad track at the accident grade crossing and to ensure through CSXT that it was safe to do so. The Board found that deficiencies in the CSXT and Florida Department of Transportation permitting processes, which resulted in a lack of appropriate guidance for oversize/low-clearance vehicle operators, escort personnel, and permitting officials, were contributory in this accident. Further, the Safety Board identified problems in a number of safety issue areas, including emergency notification procedures, coordination between railroad and highway carriers in arranging to protect the passage of oversize, low-clearance vehicles over rail-highway grade crossings, and coordination between railroad and pipeline carriers during wreck-clearing operations.

To protect train movements, CSXT requires that over-dimension vehicle operators arrange for a flagman or other protective measure should the route of the vehicle include traversing at-grade crossings. However, the company's *Right-of-Way: Passage* application form used before this accident did not request that the applicant list the crossings or the final destination of the vehicle. Further, the CSXT employees preparing the Intercession City and previous forms for Rountree took no proactive measures to determine the entire vehicle route to ensure that all crossings would be protected. The Safety Board recognizes that the vehicle carrier in this accident had the statutory responsibility to advise the rail carrier of all crossings its vehicle would traverse and that rail carriers are not required by Federal or State regulations to coordinate moves with motor vehicles. However, the Safety Board believes that CSXT and other rail carriers should review their procedures for coordinating overdimension, low-clearance vehicle crossing movements for the benefit of public safety.

When train 88 derailed, the locomotive and several other cars came to rest above and/or near two high-pressure hazardous liquid pipelines owned by Central Florida Pipeline Corporation (CFPL). Within minutes of the derailment, an Amtrak employee notified the CSXT dispatcher, who in turn, alerted the appropriate county and CSXT officials indicated on his emergency notification telephone list. The dispatcher was not required to contact nor did he have a method of identifying operators of facilities buried in the derailment area, including CFPL. In addition, none of the railroad personnel or responders to the scene noted the pipeline markers and reported the presence of the pipelines to the incident commander. Consequently no one on scene took any measures to protect themselves or the accident victims from a potential pipeline breach.

The earliest notification that CFPL received was at 1:50 p.m. from an off-duty CFPL employee who happened to see a news broadcast about the accident. By the time that the CFPL employees arrived at the accident site, CSXT had contacted clean-up contractors who were bringing in bulldozers, cranes, and other heavy equipment.

The Safety Board received conflicting accounts from CSXT and CFPL regarding the potential hazard to the pipeline during wreckage-clearing operations. For example, the CFPL manager stated that when using a crane to move a railcar, CSXT crews set it down on the ground above the 10-inch-diameter pipeline. The CSXT contractor said that he had 14 years experience in operating heavy equipment and in installing pipelines and that his crews did not

move the railcar in such a way as to endanger the pipeline. When CFPL excavated the pipelines, it found no visible indications of damage to the exterior of the pipe. Because of the costs and problems involved in performing an internal inspection of the two pipelines, CFPL elected to replace the sections of pipe in the accident area as a precautionary measure.

As a result of its investigation of this accident, the Safety Board concluded that the lack of cooperative action plan between CSXT and CFPL contributed to a break-down in communications. The Safety Board notes that before the Intercession City accident occurred, the Federal Railroad Association identified the need for all railroads and pipelines to actively coordinate their emergency response activities in a March 1993 FRA special notice. The Office of Pipeline Safety subsequently issued a similar recommendation to the pipeline industry in a March 1994 advisory, which was printed in the Federal Register.

The Safety Board is concerned about efforts by both members of the pipeline and the railroad industries to maintain the safety of emergency response, railroad, and pipeline personnel and property following a train derailment. A pipeline breach during an evacuation effort or during wreckage recovery operations would result in the release of a flammable product, which, if ignited could injure nearby workers and destroy or damage nearby property. Even if not ignited, a release would delay the safe resumption of railroad and pipeline operations through an affected area for days or even weeks while the environment is restored. The Safety Board believes that CSXT should work with pipelines located along its rights-of-way in developing more coordinated postaccident emergency response procedures.

Therefore, the National Transportation Safety Board recommends that CSX Transportation Corporation--

> Revise your permitting process and forms to ensure that overdimension vehicle operators provide load and complete route information so that CSX Transportation Corporation (CSXT) can ensure protection; ensure that CSXT employees issuing permits are familiar with the process and include a staffed 24-hour CSXT telephone number on the permit forms. (Class II, Priority Action) (R-95-30)
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> Cooperate with Central Florida Pipeline Corporation and any other pipelines in your operational areas to develop a program to notify the pipelines when railroad accidents endanger pipeline operations. (Class II, Priority Action) (R-95-31)
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> Develop, in coordination with hazardous liquid and gas pipeline operators, procedures for coordinating emergency response and wreckage clearing operations with public safety officials to ensure that the actions of its employees and its contractors do not endanger personnel safety or the facilities of others on or adjacent to the railroad right-of-way. (Class II, Priority Action) (R-95-32)

Also, the Safety Board issued Safety Recommendations H-95-7 to the American Association of State Highway and Transportation Officials, H-95-8 and -9 to the Specialized

Carriers and Rigging Association, H-95-10 to the International Association of Chiefs of Police, H-95-11 to the National Sheriffs' Association, H-95-12 to the National Committee on Uniform Traffic Laws and Ordinances, P-95-31 to the American Gas Association, P-95-32 to the Interstate Natural Gas Association of America, P-95-33 to the American Public Gas Association, P-95-34 to the American Petroleum Institute, P-95-35 to the Central Florida Pipeline Corporation, P-95-36 to the State of Florida Division of Emergency Management, R-95-24 and -25 to the Association of American Railroads, R-95-26 and -27 to the American Short Line Railroad Association, R-95-28 to the National Railroad Passenger Corporation, and R-95-29 to the Osceola County (Florida) Emergency Management Division.

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 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 recommendations in this letter. Please refer to Safety Recommendations R-95-30 through -32.

Chairman HALL, Vice Chairman FRANCIS, and Member HAMMERSCHMIDT concurred in these recommendations.

By: James E. Hall
Chairman