



National Transportation Safety Board

Washington, D.C. 20594

Safety Recommendation

Date: August 6, 2001

In reply refer to: R-01-12

Mr. Allan Rutter
Administrator
Federal Railroad Administration
1120 Vermont Avenue, N.W.
Washington, D.C. 20590

About 7:00 p.m. central standard time, on December 20, 1998, National Railroad Passenger Corporation (Amtrak) train No. 21, the *Texas Eagle*, derailed on Union Pacific Railroad (UP) tracks in Arlington, Texas. Train No. 21 was en route from Chicago, Illinois, to San Antonio, Texas. The train was traveling westbound at a reduced speed of about 36 mph due to reports of rough track near milepost (MP) 231. Three locomotives and six cars derailed in a curve at MP 230.62. Of the 198 passengers and 18 employees on the train, 12 passengers and 10 employees were injured. No fatalities resulted from the accident. The damages were estimated at about \$1.4 million.¹

Safety Board investigation of the accident revealed that the track on which the derailment occurred had been upgraded from class 3 to class 4 track less than 2 months before the accident. But the investigation also revealed that the track had not been maintained to class 4 standards and that the super-elevation at times did not meet even class 3 standards.

According to the UP, track and signal work necessary to upgrade the main No. 1 track (the track where the derailment occurred) from class 3 to class 4 was done before the end of October 1998, about 2 months before the accident. The track had been resurfaced, and the super-elevation had been increased from 1.25 inches to 3.5 inches. (The managers of track maintenance stated that the track may have been resurfaced one other time after November 1; however, the UP did not have a record of the work.)

On October 25, 1998, the UP redesignated the track as class 4. Beginning on November 1, the UP raised the speed limit (then 40 mph) by 5 mph each week until the limit reached 60 mph, which was the speed limit the company imposed on both freight and passenger trains using this track.

On November 18, 1998, the FRA regional track inspector inspected the track using a T-10 car. According to the FRA inspector, the track was inspected using standards for class 3

¹ For more information, see National Transportation Safety Board, *Derailed Amtrak Train 21 on the Union Pacific Railroad at Arlington, Texas, December 20, 1998*, Railroad Accident Report NTSB/RAR-01/02 (Washington, D.C.: NTSB, 2001).

instead of class 4 track. In Safety Board interviews, FRA track inspectors were asked if the inspection procedures required that the inspector check with the railroad track department to obtain the current track classification information before beginning an inspection. One FRA inspector replied, "Normally, we don't. We use what we think to be the current timetable."

The regional FRA inspector who conducted the November 18 inspection said she based the inspection on a timetable she had been provided by the FRA, which she believed to be the current UP timetable for the track. That timetable reflected the previous, class 3, classification. Before beginning the inspection, she did not check with the UP track department or request a copy of the latest timetable, nor did FRA procedures require that she do so.

The November 18 test did not uncover any defects using class 3 standards. After the accident, Safety Board investigators reviewed the results of the FRA's November 18 test and compared the results to the requirements for class 4 track. By class 4 standards, the test results revealed problems with gage, cross level, track warp, and surface alignment. The gage in three places was too wide; one gage exception was as much as 57.64 inches wide and 3 feet long.² The average super-elevation was 1.25 inches, which met standards for class 3 track but not for class 4, which required 3.25 inches. The track had warped where the cross-elevation changed quickly from 2 inches to level; the warped area was 1.91 inches wide and 17 feet long. The left (high) rail had a 1-inch dip, and the right (low) rail had a 1.38-inch dip. The alignment and surface of the track were irregular. These conditions would have prevented the UP from legally operating trains at the 60 mph speed authorized at the time.

Because the FRA inspector relied on outdated information when the inspection was performed and made no effort to obtain the most recent information, the Safety Board concluded that FRA track inspection procedures were inadequate to ensure that track inspectors obtain up-to-date track classification information before beginning an inspection, with the result that the November 18, 1998, FRA inspection of the accident track did not reveal deficiencies that would have required either corrective action or a lowering of the maximum authorized speed.

The National Transportation Safety Board therefore makes the following safety recommendation to the Federal Railroad Administration:

Revise your procedures to ensure that all Federal Railroad Administration track inspectors obtain current track classification documentation before they inspect a track. (R-01-12)

The Safety Board also issued safety recommendations to the Association of American Railroads, the American Short Line and Regional Railroad Association, and the Union Pacific Railroad.

Please refer to Safety Recommendation R-01-12 in your reply. If you need additional information, you may call (202) 314-6607.

² Maximum allowable gage for class 4 track is 57.5 inches.

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

Original Signed

By: Carol J. Carmody
Acting Chairman