



National Transportation Safety Board

Washington, D.C. 20594

Safety Recommendation

Date: November 27, 2002

In reply refer to: R-02-23

Mr. Paul Tellier
President and Chief Executive Officer
Canadian National Railway
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The National Transportation Safety Board is an independent U.S. Federal agency charged by Congress with investigating transportation accidents, determining their probable cause, and making recommendations to prevent similar accidents from occurring. We are providing the following information to urge your organization to take action on the safety recommendation in this letter. The Safety Board is vitally interested in this recommendation because it is designed to prevent accidents and save lives.

The recommendation is derived from the Safety Board's investigation of the collision of two Canadian National/Illinois Central Railway (CN/IC) trains near Clarkston, Michigan, on November 15, 2001, and is consistent with the evidence we found and the analysis we performed.¹ As a result of this investigation, the Safety Board has issued four safety recommendations, one of which is addressed to the Canadian National Railway (because the CN/IC is a subsidiary of the Canadian National Railway). Information supporting this recommendation is discussed below. The Safety Board would appreciate a response from you within 90 days addressing the actions you have taken or intend to take to implement our recommendation.

On November 15, 2001, about 5:54 a.m., eastern standard time, CN/IC southbound train 533 and northbound train 243 collided near Clarkston, Michigan. The collision occurred on the CN/IC Holly Subdivision at a switch at the south end of a siding designated as the Andersonville siding. Train 533 had been operating in a southward direction through the siding and was traveling at 13 mph when it struck train 243. Signal 14LC at the turnout for the siding displayed a stop indication, but train 533 did not stop before proceeding onto the mainline track. Train 243 was operating northward on a proceed signal on the single main track about 30 mph when the trains collided. Both crewmembers of train 243 were fatally injured; the two

¹ For additional information, see forthcoming Railroad Accident Report—*Collision of Two Canadian National/Illinois Central Railway Trains near Clarkston, Michigan, November 15, 2001* (NTSB/RAR-02/04).

crewmembers of train 533 sustained serious injuries. The total cost of the accident was approximately \$1.4 million.

The National Transportation Safety Board determined that the probable cause of the November 15, 2001, CN/IC accident in Clarkston, Michigan, was the train 533 crewmembers' fatigue, which was primarily due to the engineer's untreated and the conductor's insufficiently treated obstructive sleep apnea.

The CN/IC has a fatigue awareness training program that includes a guidebook for CN/IC employees and their families from Circadian Technologies, Inc. The course material addresses many fatigue-related issues, such as shift work, work-rest schedules, and proper regimens of health and diet, as well as sleep disorders, including obstructive sleep apnea. The Safety Board commends the CN/IC for its development and use of such a program in addressing the important safety consequences of fatigue. However, the program is not part of a required CN/IC training program, and the CN/IC does not document which of its employees have taken the course. Neither the engineer nor the conductor of train 533 could recall having taken the course. The Safety Board concluded that ensuring that all railroad employees who carry out safety-sensitive duties receive training in fatigue awareness will make these employees more aware of the dangerous and debilitating effects of fatigue on performance and could reduce the incidence of fatigue-related employee impairment.

Therefore, the National Transportation Safety Board makes the following safety recommendation to the Canadian National Railway:

Require all your employees in safety-sensitive positions to take fatigue awareness training and document when employees have received this training. (R-02-23)

The Safety Board also issued safety recommendations to the Federal Railroad Administration. In your response to the recommendation in this letter, please refer to Safety Recommendation R-02-23. If you need additional information, you may call (202) 314-6177.

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

By: Carol J. Carmody
Acting Chairman