



U.S. Department  
of Transportation  
**Federal Transit  
Administration**

Administrator

1200 New Jersey Ave., S.E.  
Washington, DC 20590

September 22, 2009

Re: Urgent Safety Recommendations by the National Transportation Safety Board

Dear Colleague:

I write to you today to follow-up on two urgent recommendations that were issued today by the National Transportation Safety Board (NTSB). These recommendations have resulted from the ongoing investigation of the deadly collision between two Washington Metropolitan Area Transit Authority (WMATA) Metrorail trains on the Red Line on June 22, 2009. As you know, nine persons died and 70 persons were injured as the result of this two-train collision.

The NTSB's recommendations pertain to rail transit operators that use audio frequency track circuits in their train control systems. The FTA advises such operators that post accident testing following the June 22, 2009, collision identified the existence of a spurious signal generated in a track circuit module transmitter by parasitic oscillation propagated from the transmitter through a metal rack to an adjacent track circuit module receiver, and through a shared power source. This spurious signal established an unintended signal path and mimicked a valid track circuit signal, bypassed the rails, and was sensed by the module receiver. As such, the ability of the track circuit to detect the train was lost.

In the wake of this finding, the FTA immediately advises all the pertinent operators to examine track circuits that may be susceptible to parasitic oscillation and spurious signals capable of exploiting unintended signal paths and eliminate those adverse conditions. Failing to do so could affect the safe performance of your train control systems. This work should be conducted in coordination with your signal and train control equipment manufacturers.

FTA will provide further direction shortly regarding the need for the same universe of operators to develop a program to periodically determine that electronic components in their train control systems are performing within design tolerances.

We at the FTA and the U.S. Department of Transportation hold safety as our number one priority. I cannot overstate the urgency that train operators utilizing the pertinent signal systems attend immediately to this important safety advisory.

Please call me directly on (202) 366-4040 if I can be of further assistance.

Sincerely yours,

Peter M. Rogoff