

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C.

ISSUED: February 24, 1978

Forwarded to:

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Greater Cleveland Regional
Transit Authority
1404 East Ninth Street
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SAFETY RECOMMENDATION(S)

R-78-7 through 9

Recommendations R-77-26 and 27 were made to the Greater Cleveland Regional Transit Authority (GCRTA) by the National Transportation Safety Board on September 6, 1977, as a result of the preliminary investigation of the head-on collision between two GCRTA trains on the eastbound track of the Shaker Heights Line near 92nd and Holton Streets in Cleveland, Ohio, on July 8, 1977, which resulted in injuries to 60 persons. The continuing investigation of the accident by the Safety Board has developed the following information. 1/

The Shaker Heights Line is an east-west double-track transit line through the accident area. Traffic normally is operated on the eastbound and westbound tracks by the signal indications of an automatic block signal system in an established traffic pattern to the right. There are no block signal-operated safety appurtenances. The cars are equipped with 2-way radios.

The trains were on the same track because the GCRTA track department had scheduled a tie-tamping machine to work on the westbound track between Shaker Square and Pennsy Crossing. The GCRTA did not have operating rules in effect to govern a single-track operation on the Shaker Heights Line at the time of the accident. The operating department personnel therefore developed their own procedures. Two supervisors were assigned to the crossovers to notify trains of the need to change tracks. However, a supervisor was not at Pennsy Crossing when the single-track operation began, and trains were allowed to pass the crossovers before anyone had determined that the track was clear. There was not even a method of communications between the crossovers.

1/ For more detailed information on this accident read "Railroad Accident Report--Head-On Collision of Two Greater Cleveland Regional Transit Authority Trains, Cleveland, Ohio, July 8, 1977" (NTSB-RAR-78-2)

The Safety Board investigation revealed that the motorman on the eastbound train had not heard an order from the GCRTA radio control to monitor channel 1 instead of channel 2. It is possible that if the motorman had been listening to the channel over which train orders were being sent at the time of the accident, the collision might have been averted.

In a letter to the Safety Board on November 18, 1977, the GCRTA enumerated several actions it would take to comply with recommendations that the Safety Board made following its investigation of an earlier GCRTA accident. This accident emphasizes the need for well defined and understandable operating rules for all situations on the Shaker Heights Line.

As a further result of its investigation, the National Transportation Safety Board recommends that the Greater Cleveland Regional Transit Authority:

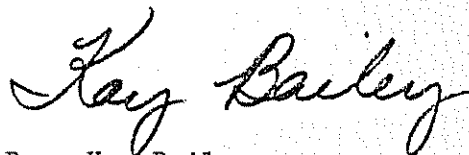
Provide established means of communication between control points during a single-track operation. (Class II, Priority Action) (R-78-7)

Insure that all trains are notified of any change in the use of radio channels before using a new channel assignment. (Class II, Priority Action) (R-78-8)

Implement on the Shaker Heights Line as soon as possible the Safety Board's Recommendation R-77-21 which recommended that the GCRTA:

"Operate trains on an absolute block. If it becomes necessary to enter an occupied block in an emergency, provide procedures that will insure safe operation."
(Class II, Priority Action) (R-78-9)

BAILEY, Acting Chairman, McADAMS, HOGUE, and KING, Members, concurred in the above recommendations.



By: Kay Bailey
Acting Chairman