

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C.

ISSUED: August 19, 1977

Forwarded to:

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Transit Authority
1404 East 9th Street
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SAFETY RECOMMENDATION(S)

R-77-20 through 23

About 11:35 a.m., on August 18, 1976, Greater Cleveland Regional Transit Authority (RTA) train No. 461 struck the rear of train No. 409 which was standing near the East 79th Street Station in Cleveland. Twenty persons were injured and property damage was estimated to be \$61,000. 1/

Investigation of the accident indicates that the method employed in the application of the automatic train stop (ATS) nullifies any protection that could be afforded by that system for an occupied signal block. Train No. 461 was only required to reduce speed to pass a stop signal with the trip arm in an up position. However, after No. 461 passed the stop signal, it resumed speed and passed the stop signal of the occupied block. The trip arm at this signal was not activated. Safety for the movement of the train rested with the operator, who failed to discharge his responsibility, sped past the signal, and struck the standing train.

The investigation also disclosed that the operators are orally informed of operating and safety rules during training and that they are not provided with a copy of those rules. Since the operators are not given refresher courses, the rules become vague and some are forgotten. Some operators have an almost indifferent attitude to the rules.

1/ For more detailed information on this accident, read "Railroad Accident Report, Rear End Collision of Two Greater Cleveland Regional Transit Authority Trains, Cleveland, Ohio, August 18, 1976" (NTSB-RAR-77-5).

RTA operators are not required to make predeparture tests of ATS, ATC, cab signals, brakes or radio equipment. A record of tests made by maintenance personnel is not provided to the operators. Also, cars that are disconnected from multicar trains to be used as single-unit trains may not be tested at all. The brakes are not tested by the operator until after the train departs the terminal.

The requirement that delays be reported to central control is apparently not being enforced. All delays beyond a normal station stop should be immediately reported and central control should in turn notify all trains in the area.

Therefore, the National Transportation Safety Board recommends that the Greater Cleveland Regional Transit Authority:

Develop a system assurance and safety program that will provide and insure the following:

1. A set of operating rules and procedures that will provide objective requirements for a safe and efficient operation.
2. A training program that will originally acquaint operating personnel with the rules and a system of reexamination to keep them current with the rule requirements.
3. A system of supervision which will enforce the rules and will provide an efficient operation.
(Class II, Priority Followup) (R-77-20)

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 Followup) (R-77-21)

Implement a system to insure that general orders and bulletins are read and understood. (Class II, Priority Followup) (R-77-22)

Expand the current test facilities for the ATC so that all equipment entering main track service can be tested, require more comprehensive inspections and tests to include all vital components or systems of the equipment, and provide a record of the results to the operator using the equipment. (Class II, Priority Followup) (R-77-23)

TODD, Chairman, BAILEY, Vice Chairman, McADAMS, HOGUE, and HALEY, Members, concurred in the above recommendations.



fr By: Webster B. Todd, Jr.
Chairman