

Log R-120

# NATIONAL TRANSPORTATION SAFETY BOARD WASHINGTON, D.C.

ISSUED: February 15, 1978

Forwarded to:

Mr. R. D. Spence  
President and Chief Operating Officer  
Consolidated Rail Corporation  
6 Penn Center Plaza  
Philadelphia, Pennsylvania 19104

SAFETY RECOMMENDATION(S)

R-78-1 through 4

About 11:05 p.m., on June 12, 1977, ConRail freight train WA-4 collided with the rear of ConRail freight train WA-6 at Stemmers Run near Baltimore, Maryland. Two crewmembers on each train were injured. Damage was estimated to be about \$300,000. 1/

The accident resulted when the engineer of train WA-4 permitted his train to approach a signal at a speed too great to stop short of the signal and train WA-6 ahead. His excessive speed was based on an erroneous assumption that the signal's aspect would change to a more favorable aspect.

The manner in which the engineer manipulated the automatic brake valve contributed to the accident. On several occasions he applied and released the brakes without allowing sufficient time for his brake system to recharge. This resulted in his having to make a heavier brake application to achieve the same degree of braking as he would have obtained with a fully charged train line.

The Board understands that the engineer of train WA-4 should have adjusted his speed in accordance with the signal indications. However, it appears that if the engineer of WA-6 had transmitted a radio message indicating that train WA-6 was stopping in emergency, it may have alerted the engineer of train WA-4. A requirement for such a procedure, of course, depends upon all mainline trains being equipped with radio.

The engineer's performance on train WA-4 raises the question of whether ConRail's training of new engineers is as effective as one would expect. An analytical monitoring of the performance of an engineer would reveal the degree of understanding of the operating rules and procedures.

1/ For more detailed information read "Railroad Accident Report - Rear End Collision of Two ConRail Freight Trains, Stemmers Run, Baltimore, Maryland, June 12, 1977" (NTSB-RAR-78-1).

(2)

The initial and intermediate terminal brake tests were not performed on the locomotive units and the trains as prescribed by the rules. The postaccident test of train WA-4 disclosed that there were 13 defective cars which could have been detected during the initial terminal brake test. Improper brake test procedures were disclosed during the locomotive test and the intermediate brake test at Bay.

Therefore the National Transportation Safety Board recommends that the Consolidated Rail Corporation:

Insure that ConRail freight trains and locomotives receive proper airbrake tests. (Class II, Priority Action) (R-78-1)

Equip all mainline freight trains with radio capable of communicating between trains, between trains and base stations, and between both ends of the same train. (Class II, Priority Action) (R-78-2)

Supplement Rule 102 by requiring the crewmembers of all trains to notify by radio the appropriate authority (dispatcher, etc.) immediately when a train stops under unpredicted circumstances and require that authority to inform all trains that are approaching the stopped train. (Class II, Priority Action) (R-78-3)

Determine whether engineers on ConRail freight trains fully understand and use train brakes properly. (Class II, Priority Action) (R-78-4)

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



By: Kay Bailey  
Acting Chairman

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