INTERSTATE COMMERCE COMMISSION

WASHINGTON

REPORT NO. 3625

WESTERN MARYLAND RAILWAY COMPANY

IN RE ACCIDENT

NEAR PINESBURG, MD., ON

APRIL 25, 1955

SUMMARY

Date:	April 25, 1955	
Railroad:	Western Maryland	
Location:	Pinesburg, Md.	
Kind of accident:	Rear-end collision	
Trains involved:	Freight	: Freight
Train numbers:	Extra 239 East	: B.& O. Extra 948 East
Engine numbers:	Diesel-electric units 239A and 59A	: Diesel-electric units 948 and 182X
Consists:	54 cars, caboose	: 76 cars, caboose
Speeds:	Standing	: 20 m. p. h.
Operation:	Train movements with current of traffic by signal indications; movements against current of traffic by train orders	
Tracks:	Double; 3° curve; 0.586 percent descending grade eastward	
Weather:	Raining	
Time:	1:02 a. m.	
Casualties:	3 injured	
Cause:	Failure to provide adequate protection for preceding train	
Recommendation:	That the Western Maryland Railway Company install an adequate block system for movements against the current of traffic in the territory in which this accident occurred.	

INTERSTATE COMMERCE COMMISSION

REPORT NO. 3625

IN THE MATTER OF MAKING ACCIDENT INVESTIGATION REPORTS UNDER THE ACCIDENT REPORTS ACT OF MAY 6, 1910.

WESTERN MARYLAND RAILWAY COMPANY

May 27, 1955

1/15

Accident near Pinesburg, Md., on April 25, 1955, caused by failure to provide adequate protection for the preceding train.

REPORT OF THE COMMISSION[1]

CLARKE, Commissioner:

On April 25, 1955, there was a rear-end collision between two freight trains on the Western Maryland Railway near Pinesburg, Md., which resulted in the injury of three employees.

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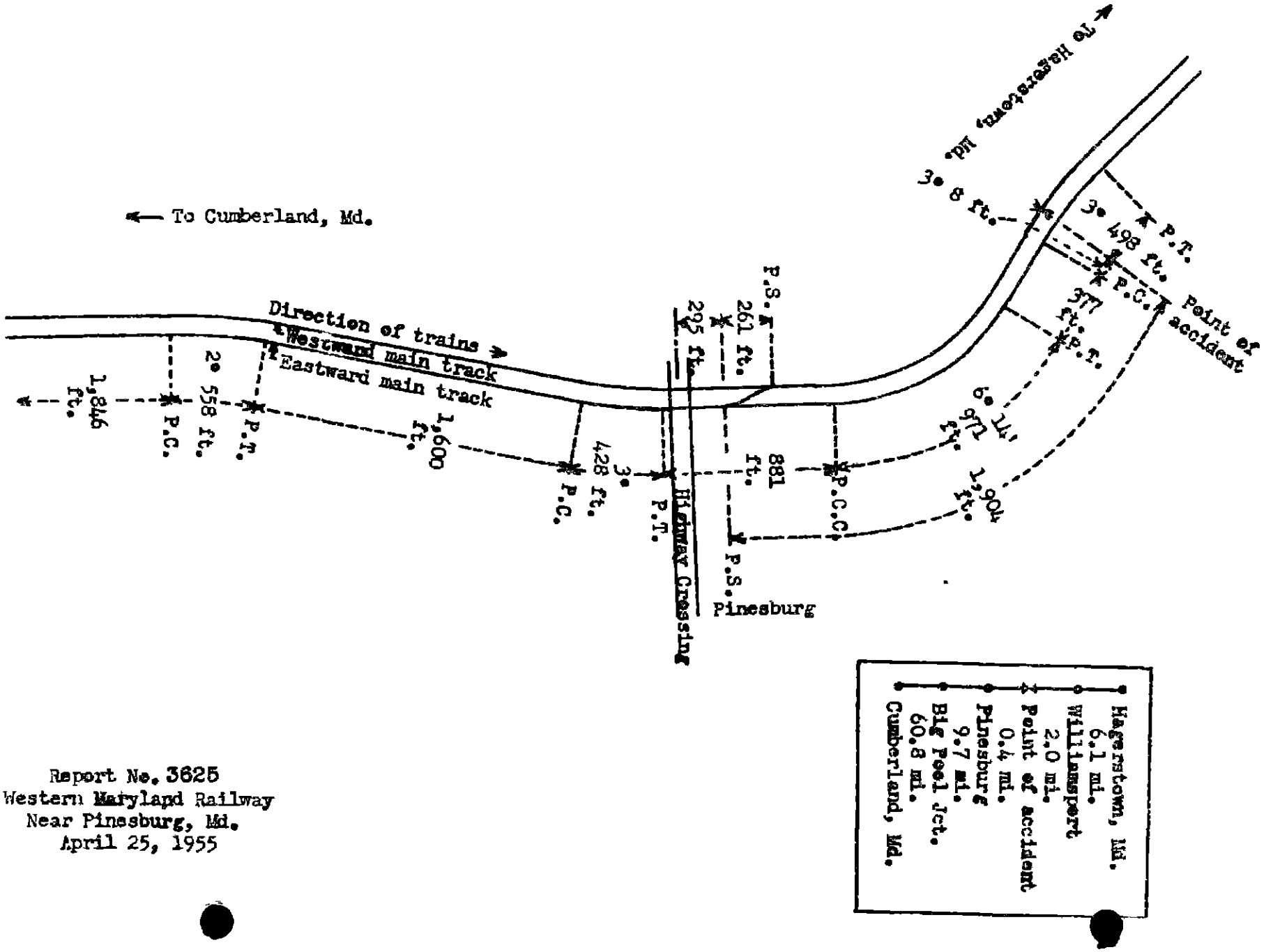
[1] Under authority of section 17 (2) of the Interstate Commerce Act the above-entitled proceeding was referred by the Commission to Commissioner Clarke for consideration and disposition.



Report No. 3625
Western Maryland Railway
Near Pinesburg, Md.
April 25, 1955

Location of Accident and Method of Operation

This accident occurred on that part of the Hagerstown Division extending between Cumberland and Hagerstown, Md., 79.0 miles. In the vicinity of the point of accident this is a double-track line, over which trains moving with the current of traffic are operated by signal indications. Trains moving against the current of traffic are operated by train orders. At Big Pool Jct., 80.6 miles east of Cumberland, this line forms a junction with a single-track line which extends westward 2.1 miles to a connection with a line of the Baltimore and Ohio Railroad at Miller, W. Va. Trains of the Baltimore and Ohio Railroad regularly are operated over that portion of the Western Maryland Railway extending between Miller and Hagerstown, via Big Pool Jct. At Pinesburg, 70.5 miles east of Cumberland, a facing-point crossover connects the two main tracks. The accident occurred on the westward main track at a point 70.9 miles east of Cumberland and 1,934 feet east of the west crossover-switch at Pinesburg. From the west on the westward track there are, in succession, a tangent 1,800 feet in length, a 3° curve to the left 428 feet, a tangent 381 feet, a compound curve to the left, having a maximum curvature of 6°14', 971 feet, a tangent 377 feet and a 3° curve to the right 8 feet to the point of accident and 498 feet eastward. Throughout a distance of more than 1 mile immediately west of the point of accident the grade for east-bound trains varies between 0.165 percent and 0.763 percent descending and averages 0.47 percent descending. At the point of accident the grade is 0.586 percent descending eastward.

Between points approximately 1,250 feet and 700 feet west of the crossover at Pinesburg the main tracks are laid in a cut the walls of which rise to a height of about 40 feet above the level of the tracks. On the curve east of Pinesburg the tracks are laid in a rock cut the west end of which is approximately 500 feet east of the crossover. The north wall of this cut rises to a height of approximately 60 feet above the tracks. Between this cut and the point of accident the tracks are laid in a side-hill cut, and embankments and outcroppings of rock closely parallel the westward track on the north.

This carrier's operating rules read in part as follows:

35. The following signals will be used by flagmen:

* * *

Night signals--A red light,
Torpedoes and
Fusees.

91. Unless some form of block system is used, trains in the same direction must keep not less than five minutes apart, except in closing up at stations. * * *

99. When a train stops under circumstances in which it may be overtaken by another train, the flagman must go back immediately with flagman's signals a sufficient distance to insure full protection, placing two torpedoes, and when necessary, in addition, displaying lighted fusees. * * *

* * *

The maximum authorized speed for freight trains is 40 miles per hour, but it is restricted to 30 miles per hour on the curve east of Pinesburg.

Description of Accident

Extra 259 East, an east-bound N.Y.C. freight train, consisted of Diesel electric units 2259 and 59A, coupled in multiple-unit control, 54 cars, and a caboose. At Big Pool Jct., 10.1 miles west of the point of accident and the last open office, members of the crew received, among others, copies of train order No. 408 reading in part as follows:

EXTRA 259 EAST AND B.& O. EXTRA 948 EAST
HAVE RIGHT OVER OPPOSING TRAINS ON WESTWARD
TRACK BIG POOL JCT. TO WILLIAMSPORT EAST END.
* * *

and a message containing the information that Extra 60 East left Big Pool Jct. at 11:47 p. m. Williamsport (8 12.) miles east of Big Pool Jct. This train was diverted to the westward track and departed from Big Pool Jct. at 11:58 p. m. It stopped behind Extra 60 East about 12 AC a. m., with the rear end at a point on the westward track 1,904 feet east of the west crossover-switch at Pinesburg. About 40 minutes later the rear end was struck by B.& O. Extra 948 East.

B. & O. Extra 948 East, an east-bound freight train, consisted of Diesel-electric units 248 and 1634, coupled in multiple-unit control, 76 cars, and a caboose. This train was routed to the Western Maryland line at Piller at 12:36 a. m. At Big Pool Jct. copies of train order No. 409 were delivered to members of the crew and the train was diverted to the westward track. It departed from this point at 1:41 a. m., and while moving at a speed of 20 miles per hour it struck the rear end of Extra 239 East.

The caboose and the rear four cars of Extra 239 East were derailed and stopped in various positions on or near the track. The caboose and the rear two cars were badly damaged. The third and fourth rear cars were somewhat damaged. The locomotive and the first two cars of B.& O. Extra 948 East were derailed. Separations occurred between the Diesel-electric units and at each end of the first car. The first Diesel-electric unit stopped with the front end 77 feet east of the point of collision, on the north side of the westward track and parallel to it. This unit was overturned to the left against the embankment north of the track. The second Diesel-electric unit stopped on its right side at an angle of about 40 degrees to the track with the front end elevated on the embankment about 30 feet north of the track and the rear end across the rails of the eastward track. The derailed cars stopped in various positions on or near the track. The Diesel-electric units were badly damaged. The first car was somewhat damaged and the second car was slightly damaged. Inflammable material in the wreckage became ignited and the caboose of Extra 239 East and the first Diesel-electric unit of B.& O. Extra 948 East which were damaged by the collision were further damaged by fire.

The engineer, the fireman and the front brakeman of P.& C. Extra 948 East were injured.

It was raining at the time of the accident, which occurred about 1:02 a. m.

The Diesel-electric units of the locomotive of B.& O. Extra 949 East were equipped with 24-RL brake equipment. A safety-control feature actuated by a foot pedal was provided.

Discussion

P.& O. Extra 930 East, an east-bound freight train consisting of a 3-unit Diesel-electric locomotive, 130 cars, and a caboose, departed from Big Pool Jct. on the eastward track at 10:23 p. m., April 24, 1950. Because of the number of cars in the train it could not clear the eastward track at Williamsport. In accordance with instructions previously issued to the crew it was stopped on the eastward track west of the highway crossing at Pinesburg about 12:45 p. m., with the front end of the locomotive approximately 150 feet west of the crossover. Following eastbound freight trains which it was intended would pass it were operated against the current of traffic on the westward track between Big Pool Jct. and Williamsport and departed from Big Pool Jct. as follows: E.& O. Extra 247 East at 10:44 p. m., Extra 90 East at 11:47 p. m., Extra 249 East at 11:56 p. m., and P.& O. Extra 948 East at 12:41 a. m. B. & O. Extra 246 East passed Williamsport at 11:07 p. m. Extra 90 East stopped within yard limits at that point and the following train stopped behind it.

When Extra 247 East stopped behind Extra 90 East at Williamsport about 2:20 a. m., the fireman was in the caboose and the other members of the crew were on the locomotive. The front end of the train was within yard limits and the rear end was at a point 7,347 feet west of the west yard-limit sign. The marker lamps at the rear of the caboose were lighted and displayed yellow to the rear on the side next to the eastward track and red to the rear on the roadside. Immediately after the train stopped the fireman proceeded eastward with

flagman's signals, in addition to his white light, and stopped in the vicinity of the east crossover-switch at Pinesburg, 1,643 feet west of the point at which the caboose stopped. He said that he placed one torpedo on the rail at this point but later removed it and proceeded between the tracks to the vicinity of the west crossover-switch, 1,904 feet west of the rear end of his train. He thought this was sufficient distance to provide protection for his train but did not place torpedoes. When he observed the reflection of the headlight of an approaching train he lighted a red fusee and gave stop signals as the headlight came into view on the westward track approximately 800 feet west of the crossover. After his signals were acknowledged by the engineer he extinguished the fusee and proceeded to the north side of the westward track. He said he observed that the brakes on the cars of this train were not heavily applied as they passed the point where he was standing and he did not think that an emergency application was made before the collision occurred.

As B.& O. Extra 948 East was approaching the point where the accident occurred the enginemen and the front brakeman were maintaining a lookout ahead from the control compartment at the front of the locomotive. The conductor and the flagman were in the caboose. The headlight was lighted brightly. The brakes of this train had been tested and had functioned properly when used en route. The dynamic brake was applied. The engineer sounded the against-current-of-traffic and the grade-crossing whistle signals as the train was approaching Pinesburg and was completing the final blast of the latter signal when he observed stop signals being given with a lighted red fusee in the vicinity of the crossover. The other members of the crew on the locomotive simultaneously called a warning. The engineer said that he immediately acknowledged the signals and the flagman extinguished the fusee. He said that he previously had made a brake-pipe reduction of 6 to 8 pounds in first-service position to reduce speed in compliance with the restriction on the curve east of Pinesburg and that he made an additional 6 to 8 pound brake-pipe reduction in service position in the vicinity of the west crossover-switch.

When the speed was not materially reduced before the locomotive passed the flagman he became concerned. He said that he moved the brake valve to emergency position at a point about 250 feet east of the crossover and then opened the sander valves, released the pedal of the safety-control feature and applied the independent brake. He thought the sanders previously had become obstructed because they had not functioned when the locomotive slipped en route. He said that the speed of the train was reduced to about 25 miles per hour before he left the control compartment. The front brakeman said that the brakes were applied in emergency when the locomotive entered the cut approximately 500 feet east of the crossover. The fireman and the front brakeman left the control compartment and entered the engine compartment before the accident occurred. The engineer jumped off the locomotive approximately 200 feet west of the point of collision. The conductor and the flagman said that they were preparing to detach the caboose from the train at the time the brakes became applied in emergency. The conductor said that the emergency application was made about 18 to 20 seconds before the collision occurred.

Members of the crew on the locomotive of B.& O. Extra 930 East, which was stopped on the eastward track west of the highway crossing at Pinesburg, said that they observed the flagman of Extra 939 East remain in the vicinity of the crossover for a period of approximately 30 minutes. Immediately after the accident occurred the engineer and the front brakeman of this train proceeded to the north side of the westward track and found the unburned portion of a fusee at a point 5 or 6 feet west of the resume-speed sign, which is located 1,713 feet west of the point of accident. They said they were certain this was the fusee used by the flagman because it bore no indications of long exposure to the rain which had been falling intermittently for several hours and no other fusees had been thrown off from passing trains during the period their train had been standing in this vicinity.

After the accident occurred, the brakes of the rear 74 cars and the caboose of B.& O. Extra 948 East were tested. The brakes of two cars were found to be inoperative because of broken pipes. Brake-cylinder piston travel in excess of 9 inches was found on 15 other cars.

Examination of the tape of the speed-recording device of the locomotive of B.& O. Extra 948 East indicates that this train was moving at a speed of 35 miles per hour when the brake application became effective and that the speed was reduced to about 20 miles per hour at the point of collision. In tests made under conditions of visibility similar to those which prevailed at the time of the accident, it was disclosed that because of track curvature and the walls of a cut the view of a flagman's night signals from the engineer's position in the control compartment of an east-bound locomotive approaching the crossover at Pinesburg on the westward track is restricted to a distance of about 800 feet. Under these circumstances it appears that the distance from which flagging signals were given in the instant case was not sufficient to provide full protection, as required by the rules.

The investigation disclosed that during the 30-day period preceding the day of the accident 17 trains were operated against the current of traffic in this territory. The book of operating rules of this carrier contains manual-block rules and these rules are in effect in adjacent single-track territory. With open train order offices located at convenient points and personnel already familiar with operation under these rules, the application of manual-block rules to cover movements against the current of traffic in this territory would provide immediate, additional protection. If an adequate block system had been in use for such movements the following train would have received definite information that the block in which it was moving was occupied by a preceding train.

Cause

This accident was caused by failure to provide adequate protection for the preceding train.

Recommendation

It is recommended that the Western Maryland Railway Company install an adequate block system for movements against the current of traffic in the territory in which this accident occurred.

Dated at Washington, D. C., this twenty-seventh day of May, 1955.

By the Commission, Commissioner Clarke.

(SEAL)

HAROLD D. McCOY,

Secretary.