IN RE INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE WASHINGTON, BALTIMORE & ANNAPOLIS ELECTRIC RAILROAD AT FFRNDALF, MD., ON MAY 5, 1921.

May 13, 1931.

On May 5, 1931, there was a head-end collision between a passenger train and a work extra on the Washington, Baltimore & Annapolis Electric Railroad at Ferndale, Md., which resulted in the death of 1 employee, and the injury of 10 passengers and 13 employees. After investigation of this accident, the Chief of the Bureau of Safety reports as as follows:

Location and method of operation.

The accident occurred on the Annapolis Short Line Division, which extends between Baltimore and Annapolis, Md., a distance of 25.8 miles. Between Baltimore and Short Line Junction, a distance of 7 miles, this is double-track line, while between Short Line Junction and Annapolis, a distance of 18.8 miles, within which territory this accident occurred, it is a single-track line; trains are operated by time-table and train orders, and between Baltimore and Short Line Junction an automatic block-signal system is in use; there is no block-signal system in use between Short Line Junction and Annapolis. This accident occurred at a point 368 feet. north of the station at Ferndale. Approaching this point from the north the track is tangent for a distance of 2,360 feet, followed by a 3-degree 30-minute curve to the right 803 feet in length; the accident occurred on this curve at a point about 225 feet from its southern end. Approaching

1,500 feet followed by the curve on which the accident occurred. The grade is 1.6 per cent descending for southbound trains for a distance of 3,000 feet. This grade ends about 400 feet south of the point of accident and is followed by more than 1 mile of 0.557 descending grade. The view of the motorman of trains approaching the point of accident from either direction is considerably obscured by shubbery on the inside of the curve. It was raining at the time of the accident, which occurred at about 3.25 p. m.

Description.

Southbound passenger train No. 339 consisted of motor 84 and trailer 334, both of semi-steel-underframe construction, and was in charge of Conductor Harris and Motorman Ellison. It left Baltimore at 2.50 p. m. on time, and at Short Line Junction, which is 1.7 miles north of Ferndale, the crew received a clearance card stating that all trains due had arrived and departed. Train No. 339 departed from Short Line Junction at 3.20 p. m., 7 minutes late, and collided with work extra 7 at Ferndale while travelling at a speed estimated to have been about 35 miles an hour.

Work extra 7 consisted of motor 7, of semi-steel underframe construction, and 4 flat cars of wooden construction, and was in charge of Conductor Johnson and Motorman Dyson. At the time of the accident the only train order held by the crew of the work extra was train order No. 6 reading as follows:

. "Car 7 will work extra between Linthicum and Elvaton from 12.30 p. m. until 5 p. m."

This order was made complete at 12.20 p. m. are no open offices between Short Line Junction and Annapolis at which the time of passing trains is reported to the dis-Patcher, but according to the statements of the crew of work extra 7, their train followed train No. 337 from Shipley, 0.5 mile south of Short Line Junction, to Marley, 3.8 miles south of Ferndale; train No. 337 passed Short Line Junction at 2.48 p. m. After unloading some tools at Marley, work extra 7 proceeded northward at about 3.03 p. m. and at Glenburnie, 1.7 miles south of Ferndale, picked up a section crew; the work extra then proceeded to Ferndale, came nearly to a stop for the purpose of letting two of the section men get off, and had proceeded only a few hundred feet when it collided with train No. 339 while travelling at a speed of about 10 miles an hour.

Motor 7, of the work extra, was telescoped a distance of about 25 feet by motor 84, of train No. 339. Aside from the vestibule, which was demolished, the damage to motor 84 was confined to the running gear and electrical equipment under the body of the car. The employee killed was the motorman of work extra 7.

Summary of evidence.

Motorman Ellison of train No. 339 said his train had no stop to make at Ferndale and was approaching the station at a speed of about 50 miles an hour when he saw the work extra approaching around the curve apparently about 5

car-lengths distant. He at once shut off the current, applied the air brakes in emergency and then reversed the current. The rails were wet and motor Ellison thought the wheels skidded but estimated that the speed had been reduced to about 25 miles an hour at the time of the accident. He said the air brakes on his train were in good condition and had worked properly at all stopping points. The first knowledge Conductor Harris had of anything wrong was when he felt the brakes applied in emergency, his other statements brought out no additional facts of importance.

Conductor Johnson, of work extra 7, said his train had stopped at Ferndale to let some section men get off. The train was just departing from Ferndale when from his position in the front vestibule of motor 7 he saw train No. 339 approaching, apparently 3 pole-lengths distant, and he said he at once opened the doors and got out of the vestibule and that the motorman shut off the current and applied the air brakes. Conductor Johnson said that when starting north from Marley he had talked with Motorman Dyson about opposing trains and both of them were of the opinion that as the train leaving Baltimore at 3.20 p. m. had passed, the next southbound train they had to look out for was the train leaving Baltimore at 3.30 p. m., entirely overlooking train No. 339; neither of them consulted their time-tables Conductor Johnson had been in at this particular time. charge of this work train on Monday and Tuesday, no work being done on Wednesday on account of weather conditions.

Brakeman Colburn and Hohenberger, of work extra 7, were riding in the rear of motor 7. They said their train had nearly stopped at Ferndale to let two section men get off, and was proceeding at a speed of about 10 miles an hour when they heard some one call out, the brakes being applied just before the accident occurred. On this railroad brakeman are not held responsible for the execution of train orders or for the safe movement of their train in any way, their duties being to attend to the trolleys and assist the conductor in any way he may desire, and neither of these the brakeman had looked at their time-tables or realized that they were occupying the main track on the time of a superior train.

Under time-table No. 7 Annapolis Short Line trains left Baltimore en route to Annapolis every half hour at 20 and 50 minutes past the hour oetween 5.20 a.m. and 6.50 p and 50 minutes past the hour oetween 5.20 a.m. and 6.50 p and inclusive. Under time-table No. 8, which took effect on May 2, 1931, at 4.00 a.m., the trains leaving Baltimore at 9.50 a.m., 10.50 a.m., 11.50 a.m., 12.50 p.m. and 1.50 p.m., instead of being operated daily as theretofore, were scheduled to be operated only on Saturdays and Sundays. Train No. 339, leaving Baltimore at 2.50 p.m., therefore was the first train to leave at 50 minutes after the hour since 8.50 a.m., this fact apparently being overlooked by both Conductor Johnson and Motorman Dyson.

Conclusions.

This excident was caused by work extra 7 being operated against train No. 339, an overdue superior train, without proper authority, for which Conductor Johnson and Motorman Dyson are responsible.

The statement of Conductor Johnson indicates that in some manner he and Motorman Dyson reached the conclusion that inasmuch as the train leaving Baltimore at 2.20 p. m. had passed, the next southbound train they would have to meet would be the train leaving Baltimore at 3.20 p. m., both of them overlooking train No. 339, which was scheduled to leave Baltimore at 2.50 p. m. This accident could have been avoided had either of these employees consulted the time-table before proceeding northward from Marley, for they would have seen that the train scheduled to leave Baltimore at 2.50 p. m. was operated daily.

The line on which this accident occurred, at present extending between Short Line Junction and Annapolis, was taken over by the Washington, Baltimore & Annapolis Electric Railroad on March 16, 1921, and a contract was made 6 days previous thereto for the installation of an automatic block-signal system between the two points. Had such a system been in use at the time of this accident, its occurrence undoubtedly would have been prevented.

Conductor Johnson was employed as a brakeman in 1918, promoted to extra motorman and extra conductor in January, 1919, and to freight conductor in April, 1919.

On September 20, 1919, he failed to observe an order and

ran by a meeting point. Motorman Dyson was transferred from the shop department to the transportation department in March, 1914, and assigned to service as an extra motorman and inspector, his record was clear.

At the time of the accident the crew of train No. 339 had been on duty a little more than 10 hours, after about $11\frac{1}{2}$ hours off duty, the crew of work extra 7 had been on duty about $8\frac{1}{2}$ hours, previous to which they had been off duty 31 hours or more.