

INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN RE
INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON
THE LEHIGH VALLEY RAILROAD NEAR RUMMERFIELD, PA.,
ON DECEMBER 30, 1926.

January 25, 1927.

To the Commission:

On December 30, 1926, there was a rear-end collision between two freight trains on the Lehigh Valley Railroad near Rummerfield, Pa., which resulted in the death of two employees and the injury of one employee. The investigation of this accident was made in conjunction with representatives of the Public Service Commission of Pennsylvania.

Location and method of operation

This accident occurred on that part of the Seneca Division extending between Tunkhannock and Sayre, Pa., a distance of 64 miles, which is a double-track line over which trains are operated by time-table, train orders and an automatic block-signal system. The point of accident was approximately 2,750 feet east of Rummerfield, approaching this point from the east there is a 1° 35' curve to the left 3,918.9 feet in length and then 1,000 feet of tangent, followed by a 1° 40' curve to the left 910 feet in length, the accident occurring at a point just west of the western end of this curve. The grade is practically level.

The signals involved in this accident are of the three-position upper-quadrant type, operating on the approach lighting principle, the indications are red, yellow, and green, for stop, caution, and proceed, respectively. Signals 2411 and 2391 are located 9,050 feet and about 3-1/2 miles, respectively, east of the point of accident. The view of signal 2411 from the engineer's side of a westbound train is restricted to about 2,200 feet, while signal 2391 can be seen a distance of about 950 feet; a caboose at the point of accident can be seen by an engineer a distance of about 1,500 feet and by a fireman for a distance of more than 5,000 feet.

The weather was slightly hazy and it was just breaking day at the time of the accident, which occurred at about 6.55 a. m.

Description

Westbound freight train extra 461 consisted of 80 cars and a caboose, hauled by engine 461, and was in charge of Conductor Segar and Engineman Litzleman. This train departed from Laceyville, 18.9 miles east of Rummerfield, at 3.53 a. m. and after considerable delay in passing trains at Homet's Ferry, 3.9 miles east of Rummerfield, the train again proceeded and was stopped for water at Rummerfield at about 6.35 a. m. After taking water the train started and had attained a speed of about 10 miles per hour when its rear end was struck by extra 2111.

Westbound freight train extra 2111, designated as JB-1, consisted of 55 cars and a caboose, hauled by engine 2111, and was in charge of Conductor McHale and Engineman Johnson. This train stopped for water at Laceyville at 5.48 a. m., departed from that point at 6.20 a. m., and collided with extra 461 at Rummerfield while traveling at a speed estimated to have been between 35 and 40 miles per hour.

The caboose of extra 461 was demolished, while the first nine cars ahead of the caboose were derailed and scattered on both sides of the right of way. Engine 2111 came to rest nearly upright at a point about 340 feet beyond the point of collision, while the first 11 cars in extra 2111 were derailed, except the forward truck of the tenth car, and came to rest in various positions on the right of way. The employees killed were the engineman and fireman of extra 2111.

Summary of evidence

Engineman Litzleman, of extra 461, stated that all the signals from Homet's Ferry to Rummerfield were in the clear position and while the weather was a little hazy he did not have any difficulty in distinguishing their indications. His train was stopped at Rummerfield for water, and after a delay of about 10 minutes he whistled in the flagman, waited about one minute and then started his train without any signal from the rear end as he was in a hurry to get started knowing he was on short time ahead of extra 2111, which was a fast train. After moving about 15 or 20 car-lengths his train was stopped by an emergency application of the air

brakes, which at that time he assumed was caused by a burst air hose, but later he learned that it was due to the collision. The statements of Fireman Gordon and Head Brakeman Hartshorn were similar to those of Engineman Litzlerman, except that the fireman did not observe the signal indications between Homet's Ferry and Rummerfield.

Conductor Segar, of extra 461, stated that after his train stopped for water at Rummerfield his flagman started back to flag, equipped with red and white lights and torpedoes. The conductor then started forward alongside the train for the purpose of inspecting it and he did not know how far back the flagman went before being called in by the engineman, but he presumed it was about 25 or 30 car-lengths. After his train started he got on the caboose and stationed himself on the rear platform, and shortly afterward he noticed the reflection of the headlight of the approaching train around the mountain east of signal 2411. He observed that the approaching train did not stop at signal 2411 and shortly afterward he heard the explosion of two torpedoes, but still no effort was made to reduce its speed, the engine continuing to work steam. In the meantime the flagman, who was also riding on the rear platform of the caboose, was giving violent stop signals with his red lantern, but these signals were not acknowledged. When the approaching train was within a distance of about 40 rods of his train Conductor Segar realized it was not going to stop and he said he jumped from the caboose to the eastbound main track and started running toward the approaching train, on the fireman's side, when the engine passed him he did not see any one in the cab, the windows of which were closed. He estimated the speed of his own train at 10 miles per hour and of extra 2111 at 35 to 40 miles per hour at the time of the collision. Conductor Segar further stated that fuses were not thrown off as he thought his train was amply protected by the automatic signals, the torpedoes, and the stop signals being given by the flagman, in addition to the markers on his caboose which were burning brightly at the time of the accident.

Flagman Newland, of extra 461, stated that as his train was approaching Rummerfield he got off the caboose about 30 car-lengths from where it stopped, having in his possession torpedoes and red and white lanterns, and stayed at that point until called in

about five or six minutes later, at which time he placed two torpedoes on the right rail about one rail-length apart and returned to the caboose, he then gave the engineman a proceed signal and entered the caboose but shortly afterward returned to the rear platform when he heard a train approaching. He heard the torpedoes explode, noticed that the engine of extra 2111 continued to work steam, and then began giving stop signals with his red lantern; these signals were not acknowledged by the engineman of the approaching train. The statements of Brakeman Durham, of extra 461, who was riding in the caboose of his train until just before the accident occurred, established nothing of importance to the investigation, he stated however that he thought the conductor did not leave the caboose at Rummerfield, that the flagman did not go back until the train stopped, and he was not positive that he heard torpedoes exploded.

Brakeman Curry, of extra 2111 stated that he boarded the engine at Laceyville, told the fireman he would shovel coal into the stoker in the tank, and that he was in the coal space continuously from that point to the point of accident except for a short interval while his train was near Homet's Ferry, at this point the reflector fell off the steam gauge and he entered the cab, picked it up and handed it to the engineman, again returning to the coal space and resuming his work of shoveling coal. He noticed the engineman standing up and replacing the reflector, but did not know as to whether or not the engineman had completed that task before the collision occurred, although he also made a statement that shortly before the collision he noticed the fireman standing on the deck of the engine near the stoker feed, at which time the engineman appeared to be looking ahead. Brakeman ~~Durham~~ further stated that he did not observe the position of any of the signals between Laceyville and the point of collision, that he did not hear the explosion of torpedoes, although they could have exploded without his knowledge on account of the noise of the stoker, that no stops were made between Laceyville and the point of accident, and that as far as he knew no application of the air brakes were made just before the collision occurred. He also said that this was his fourth trip with Engineman Johnson, who had always appeared to be very careful, and that in occasional conversation with Engineman Johnson during the trip on which this accident occurred he had appeared to be in possession of his faculties at all times.

The statements of Conductor McHale and Flagman Wernet, of extra 2111, who were riding in the caboose at the time of the accident, were to the effect that they were unaware of the impending collision until it occurred. Neither noticed the position of the automatic signals as their caboose passed them, but Flagman Wernet stated that when he went back to flag after the accident he noticed a following train stop at signal 2411, which was then displaying a stop indication. Both of these employees stated that the air brakes had been used several times en route and appeared to work satisfactorily in all cases, but that they were not applied when approaching the point of accident.

The statements of members of the crew of west-bound extra 430, which preceded extra 461 from Fernet's Ferry, were to the effect that all signals between that point and Rummerfield were in the clear position at the time their train passed them, while the statements of various members of two train crews which followed extra 2111 indicated that signal 2391 was displaying a caution indication and signal 2411 a stop indication.

Signal maintainer Lewis stated that the signals involved were tested a short time prior to the accident and found to be working properly. He arrived at the scene of the accident about 9 a. m. on the day it occurred and with the assistance of two other signal maintainers careful examination was made of the signals, they were found to be functioning satisfactorily.

Conclusions

This accident was caused primarily by failure properly to observe and obey automatic signal indications, for which Enginemen Johnson and Fireman Langan, of extra 2111, were responsible.

The evidence indicated that signals 2391 and 2411 were operating properly when passed by extras 430 and 461, while they were also displaying proper indications when observed by the crew of the train which was following extra 2111; examination of the signal apparatus subsequent to the accident failed to disclose any irregularities and it seems clearly apparent that these signals were displaying caution and stop indications, respectively, when extra 2111 passed them and that for some reason these indications were not observed or obeyed.

In fact, the evidence indicated that no application of the air brakes was made either when passing the signals in question or even when approaching the point of accident, which latter point could have been seen by the fireman in ample time to have prevented the occurrence of the accident while the view from the engineman's side of the cab was sufficient to have enabled him to bring his train nearly to a stop. Head Brakeman Curry of extra 2111 could not state definitely just what the engineman and fireman were doing as the train approached the point of accident, it is possible they were both on the engineman's side of the cab, engaged in adjusting the reflector which had fallen off the steam gauge, but this is merely a matter of conjecture.

Without discussing the statements of the conductor, middle brakeman and flagman of extra 461, which were conflicting in many details, attention is called to the fact that the flagman said he put down two torpedoes and both he and the conductor said they heard them explode. Head Brakeman Curry, of extra 2111, however, said he did not hear them.

Had an adequate automatic train-control device been in use on this line this accident would have been prevented.

The employees involved were experienced men, and at the time of the accident none of them had been on duty in violation of any of the provisions of the hours of service law.

Respectfully submitted,

W. P. BORLAND,

Director.