

## INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN RE  
INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON  
THE BOSTON & MAINE RAILROAD AT NAHOR, N.H., ON  
OCTOBER 16, 1929.

January 25, 1930

To the Commission:

On October 16, 1929, there was a head-end collision between two freight trains on the Boston & Maine Railroad at Nahor, N. H., resulting in the death of three employees and the injury of six employees. This accident was investigated in conjunction with representatives of the New Hampshire Public Service Commission

## Location and method of operation

This accident occurred on that part of the Southern Division extending between Peterboro and Contoocook, N. H., a distance of 32.77 miles, in the vicinity of the point of accident this is a single-track line over which trains are operated by timetable and train orders, no block-signal system being in use. The accident occurred at a point approximately 500 feet west of the station at Nahor, approaching this point from the west the track is tangent for more than 1 mile, followed by a compound curve to the left about 1,400 feet in length with a maximum curvature of 5°, the accident occurring on this curve at a point about 825 feet from its western end, where the curvature is 3° 40'. Approaching from the east there are

several short curves and tangents, followed by the curve on which the accident occurred. The grade for westbound trains is 1.30 per cent ascending at the point of accident.

Owing to a building on the north side of the track at the east end of the station platform, and some large boulders and a growth of trees on the inside of the curve, neither crew could see the opposing train until they were within a very short distance of each other.

The weather was clear at the time of the accident, which occurred at about 11.49 a.m.

#### Description

The westbound local freight train involved in this accident was being operated as the second section of first-class train No. 8122. It consisted of three cars and a caboose, hauled by engine 1427, and was in charge of Conductor Vantine and Engineer Chapman. This freight train arrived at Elmwood, 3.87 miles east of Nahor, as extra 1427, but in order to expedite traffic, and as was customary in many cases, instructions were issued for it to run from Elmwood to Peterboro, 7.23 miles, both of which points are register stations, as the second section of train No. 8123, a gasoline motor car train. Train second No. 8122 left Elmwood at 11.38 a.m., and collided with extra 1446 at Nahor while traveling at a speed estimated to have been between 20 and 25 miles per hour.

Eastbound freight train extra 1446 consisted of one freight car and a caboose, hauled by engine 1446,

and was in charge of Conductor Raby and Engineer Ian Crosby. This train left Peterboro at 11.38 a.m., no check having been made of the train register, set out a car of coal which was being pushed ahead of the engine, this being done at a siding a short distance east of the station, and then proceeded, colliding with train second No. 8132 while traveling at a speed estimated to have been about 25 miles per hour.

Both engines were locked together and badly damaged, the engine trucks being pushed back under the frames, the engine cabs practically demolished, and the boiler head appurtenances broken, both tender cisterns were jammed against their respective engines. None of the equipment in either train was derailed, with the exception of the caboose of train second No. 8132. The employees killed were the engineer and fireman of train second No. 8132 and the engineer of extra 1446, while the employees injured were the conductor, brakeman and flagman of each train.

#### Summary of Evidence

Conductor Vantine, of train second No. 8132, stated that before departing from Elmwood, the agent came out and informed him that the dispatcher wanted them to hurry, as there was a train waiting for them at Peterboro. Conductor Vantine transmitted this information to the engineer and shortly afterwards the train departed, and the first intimation he had of anything wrong was when he felt the air brakes apply,

followed by the collision. Conductor Vantine stated that it had been practice off and on, for quite a few years to run freight trains as the second section of scheduled passenger trains, and that the practice had been increased on this branch in the past year, the last time his train having been operated as the second section of train No. 8122 between Elmwood and Peterboro, under similar orders, being on October 11, 1929. Statements of Flagman McClure developed nothing additional of importance.

Conductor Raby, of extra 1446, stated that after the work of switching was completed at Peterboro, he registered the arrival of his train, went into the freight office, and received from Operator Sullivan a copy of train order No. 89, Form 19, reading "Eng 1446 run extra Peterboro to Elmwood", together with a clearance card, but that he received no verbal instructions from the operator, nor did the operator make any mention to him of the fact that train No. 8122 was being run in two sections. About the time he received the order from the operator, he had some conversation with Agent Wheeler, who was in the office, as was Traveling Car Agent Gearon, this conversation being of a joking nature so far as the conductor was concerned, and having no bearing on the train order received or the fact that train No. 8122 was being run in two sections. Conductor Raby then left the office and was unaware of the second section of train No. 8122, he proceeded to the fireman's side of the engine and gave

the fireman the engineman's copy of the train order, but did not compare the order with the fireman, nor was any mention made by the fireman or engineman as to whether all overdue trains had arrived or left. The flagman was then called in, after which the conductor went to the register book, located outside of the passenger station, and registered out, but did not check the register. The first knowledge the conductor had of anything wrong was when Brakeman Berry shouted a warning of danger, the collision occurring immediately afterwards. Conductor Raby stated that during the course of switching at Peterboro, before he went to the freight office for his orders, he had observed train No. 8122 standing in the yard at its usual place, with its markers displayed, but no signals displayed for a following section, and he assumed that there was no opposing train due. Conductor Raby acknowledged that in his hurry, he neglected to perform the duty of checking the register, either at the time he registered in or at the time he registered out, to ascertain if all trains due had arrived.

Fireman Hardy, of extra 1446, stated that the conductor handed up to him a copy of train order No. 89, the fireman read the order to the engineman, who read it back, and the fireman thought that he also remarked to the engineman that they would probably go to Elmwood for Conductor Vantine's train. The first the fireman knew of anything wrong was on seeing the opposing train across the inside of the curve, about eight or nine car-lengths

away, and he shouted a warning of danger and jumped just before the collision occurred. Fireman Hardy said that Engineman Crosby had shut off steam prior to the accident and he thought that the engineman applied the air brakes.

The statements of Brakeman Berry were to the effect that he, the conductor, and flagman, rode in the caboose after the car of coal was set out, but the brakeman did not recall any conversation as to train orders or about train No. 8123 being operated in two sections, he said the conductor usually showed any orders received, but that on this occasion the conductor did not show him the order and he did not know whether the conductor showed the order to the flagman.

Conductor Eaton, of train first No. 8123, stated that he received orders at Elmwood to display signals for the following section and accordingly green flags were displayed from Elmwood to Peterboro. His train departed from Elmwood at 10.28 a.m., according to the train sheet, and he said that after arrival at Peterboro, at 10.46 a.m. according to the train sheet, the signals were taken down, this being done on reaching the turntable in the yard. Conductor Eaton also stated that at the time he registered in at Peterboro, some one spoke to him, diverting his attention from the register book, and that on this account he made an error in registering, writing on two lines, one above the other, instead of writing only on one line, however, he noticed the error before leaving the book, imme-

diately erased and corrected it, while the agent was present, and called the correction to the attention of the agent. Statements of Engineman Moody corroborated in substance those of Conductor Eaton, the engineman said that extra 1446 had not arrived at Peterboro at the time the green flags were taken down.

Operator Sullivan, at Peterboro, stated that before Dispatcher Ainsworth made train order No. 89 complete, the dispatcher told the operator to be sure that Conductor Raby, of extra 1446, understood that train second No. 8122 was not in, and the operator gave the dispatcher his acknowledgment of these instructions. At the time the operator delivered the train order to Conductor Raby in the freight house, the customary place to deliver orders except in the case of a passenger train, at about 11.25 a.m., he told the conductor to look out for train second No. 8122, but the conductor made no reply. Operator Sullivan stated that at the time this took place, Agent Wheeler and Traveling Car Agent Gearon were present in the freight office, and that all the conductor did was to remark something about why the operator had told him to place a car on a track that was occupied by another car with the hopper doors down. After delivering the order to the conductor, the operator left the office and went to dinner, being informed of the accident at his home, at about 11.53 a.m., by Agent Wheeler.

Agent Wheeler stated that at the time the train

order was delivered to Conductor Raby, Operator Sullivan remarked to look out for train second No. 8123, but that the conductor made no reply. Agent Wheeler also confirmed the statements of Conductor Eaton, of train first No. 8122, as to the correction made at the time that conductor registered in, on his arrival at Peterboro. Statements of Traveling Car Agent Gearon were to the effect that a remark was made while he was in the freight office about train second No. 8122, but he did not know who made the remark or whether Conductor Raby was present when it was made.

#### Conclusions

This accident was caused by the failure of Conductor Raby, of extra 1446, to check the train register before departing from Peterboro.

Rule 109, of the book of operating rules of this railroad, reads in part as follows:

\*\*\*Conductors must, unless otherwise instructed, register their trains and make the proper examination of registers personally, and ascertain if all trains due have been registered "

The investigation developed that it was not unusual on this branch, in order to expedite traffic, to operate freight trains as the second section of scheduled passenger trains. On the day of the accident, however, train first No. 8122, the gasoline motor car, arrived at Peterboro, registered, proceeded to the turntable, and had taken down the green flags before extra 1446

arrived. After extra 1446 arrived and while performing switching, Conductor Raby noticed the gasoline motor car standing in the yard at its usual place, but no green flags, indicating a following section, were displayed at this time, and the conductor assumed that there was no opposing train due. When Conductor Raby went to the freight office, after work was completed, and received the train order from Operator Sullivan, it appears that the operator made mention of the fact that train No. 8122 was being run in two sections, but that the conductor did not hear the remark, the operator failing to impress this fact on the conductor's mind, as he had been instructed to do by the dispatcher. The conductor, apparently, was more concerned as to why the operator had told him to place a car on a track that was occupied by another car with the hopper doors down. Conductor Raby then left the office and shortly afterwards his train departed, he had registered its arrival and departure, but no check had been made in order to ascertain if all trains due had been registered.

Operator Sullivan erred in not firmly impressing on the conductor's mind the verbal instructions of the dispatcher, issued as a matter of extra precaution; apparently he made a somewhat feeble attempt to carry out the instructions he had received, but it does not appear that he was thoroughly alive to the situation or particularly energetic in attending to his own duties properly. A little more cooperation on his part might have prevented

the occurrence of this accident.

All of the employees involved were experienced men; at the time of the accident the crews of train second No. 8122 and extra 1446 had been on duty less than 6 hours, and 4 hours, respectively, prior to which they had been off duty 11 hours or more.

Respectfully submitted,

W. P. BORLAND,

Director.