INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN RE INVESTIGATION OF AN ACCIDENT WHICH OCCURRED AT THE INTERSECTION OF THE TRACKS OF THE NEW YORK, CHICAGO AND ST. LOUIS RAILROAD AND THE PENNSYLVANIA RAILROAD NEAR FORT WAYNE, IND., ON NOVEMBER 16 1926.

December 13, 1926.

To the Commission.

On November 16, 1926, there was a side collision between a passenger train on the New York, Chicago and St Louis Railroad and a freight train of the Pennsylvania Railroad at the intersection of the tracks of the two railroads near Fort Wayne, Ind., which resulted in the injury of three employees.

Location and method of operation

This accident occurred at the intersection of the double-track line of the Chicago Division of the New York, Chicago and St. Louis Railroad with a single-track line of the Pennsylvania Railroad The Chicago Division of the first-named road extends between Chicago, Ill., and Fort Wayne, Ind., a distance of 152.1 miles, and train movements are governed by time-table, train orders, and an automatic block-signal system. On this line there is also an automatic train-control system in service, the territory covered extending from the outskirts of Chicago and terminating at signal 373, which is located just west of the point of accident. The automatic signals involved are signals 374 and 373, located approximately 5,000 and 400 feet, respectively, west of the crossing. These signals are so controlled as to operate in two positions only, caution and stop, and the track circuits controlling signal 373 are looped around the Pennsylvania crossing.

Approaching the crossing on the line of the New York, Chicago and St. Louis Railroad there is a curve to the right of 3° 02' which is 986 feet in length, followed by about 1,775 feet of tangent track extending to the crossing and for some distance beyond. The grade is 0.661 per cent descending for a short distance.

There is no interlocking plant at the crossing, train movements being governed by a board, on which there are two red lights, mounted on a mast located immediately east of the crossing. When in the horizontal position this board or target indicates that trains on the New

York, Chicago and St. Louis Railroad may proceed, and when in the vertical position it authorizes Pennsylvania trains to use the crossing. In addition, on the New York Chicago and St. Louis Railroad there is a stop board a short distance west of the crossing, while there is also a rule in the time-table which requires all eastbound trains to stop clear of the crossover located immediately west of the crossing and then to proceed only on signal from the switch tender.

The weather was misty at the time of the accident, which occurred at 7.47 or 7.48 p.m.

Description

Eastbound passenger train No. 4 of the New York, Chicago and St. Louis Railroad consisted of two refrigerator cars, three baggage cars, two coaches, one Pullman sleeping car and one dining car, hauled by engine 163, and was in charge of Conductor E. J. Harper and Engineman Vicory. According to the train sheet this train passed Hadley, the last open office, 4 miles from the point of accident, at 7.44 p.m., and shortly afterwards it collided with a Pennsylvania freight train which was occupying the crossing.

Engine 163 remained upright and was not derailed. The rear truck of the tender was derailed, while the first refrigerator car was overturned, slight damage was sustained by the second refrigerator car. Three of the cars in the Pennsylvania freight train and the forward truck of another car were derailed.

Summary of evidence

Engineman Vicory, of train No. 4, stated that signal 374 was displaying a caution indication as his train approached it, he estimated the speed of his train was then about 60 miles per hour. He stated that he operated the forestalling feature of the automatic train-control device, and at the signal location made a 10 or 12-pound brake-pipe reduction, the brakes applied properly, and speed was reduced to about 25 miles per hour. On reaching the beginning of the curve he made another brake-pipe reduction of 8 or 10 pounds, but this second application did not have any apparent effect on the speed of the train. After rounding the curve he saw the freight train on the crossing with the crossing signal in the stop position, while automatic signal 373 was in the caution position, and when about eight car-lengths distant from signal 373 he placed the brake valve in the emergency posi-

tion, he did not think he obtained an emergency effect, but thought the speed of the train had been reduced to about 3 or 4 miles an hour by the time the collision occurred. Engineman Vicory also said that he did not release the brakes at any time after making the first brake-pipe reduction. When he was asked what he considered to have been the cause of the accident, Engineman Vicory replied that it was due to misjudgment of speed, together with the condition of the rails, adding that he must have misjudged the speed all the way up to the point where he moved the brake-valve handle to the emergency position, but he also advanced the theory that his failure properly to control the speed of the train might have been due to the fact that there was an uneven place in the track on the curve approaching the point of accident, and the sway of the engine while passing that point may have caused his hand, which was resting on the brake valve, to move the brake-valve handle from lap to holding position, thus resulting in the release of the train brakes without a brake-pipe exhaust which would have warned him of what was taking place. According to his statements the air brakes had worked properly when making all of the various stops en route from Chicago to the point of accident.

Fireman Hickman said he called the indication of the distant signal, which was acknowledged by the engineman, and that after rounding the curve he saw the crossing signal in the vertical position, indicating that his train should be brought to a stop, while he could also see the cars of the Pennsylvania freight train on the crossing. He also stated that when the engineman saw the freight train on the crossing he made an emergency application of the air brakes which reduced the speed of the train to about 20 miles an hour just before the crossing was reached.

Conductor E. J. Harper said the brakes had been applied before the train reached the curve and he thought they were afterwards released. Shortly before the crossing was reached he felt the brakes apply in emergency, at which time the speed was about 20 miles an hour. His statements were practically corroborated by those of Brakeman E. S. Harper and Flagman Emery, except that the flagman did not know whether or not the brakes were released after the first application.

Track Supervisor Parkhurst, who was riding on train No. 4, said the train rounded the curve at a rate of speed which was much higher than usual and that the first application of the air brakes which he noticed was made when the train was approaching the crossing, although

he said other applications might have been made without attracting his attention. After the accident he heard the engineman tell some one that he had supposed he was approaching signal 373 and that when he discovered his train was approaching the crossing it was too late to stop. Engineman Vicory, however, said that he did not remember making any such statement, and in this connection it is to be noted that he had been employed as an engineman for a period of 23 years and had been assigned to train No. 4 since January 1, 1926, and there was nothing to indicate that he was not familiar with the signal locations.

After the accident inspection of the brake valve on engine 163 disclosed that it was in good condition.

Conclusions

This accident was caused by the failure of Engineman Vicory, after having operated the forestalling feature of the automatic train-control device, properly to control the speed of his train and to bring it to a stop at points where stops were required by rule and by the stop indication of the signal governing movements over the crossing.

Under the rules in effect on this road the caution indication which Engineman Vicory received at signal 374 authorized him to proceed to the next signal prepared to stop and at a speed not exceeding 25 miles per hour. According to Engineman Vicory's own statement the speed of his train when passing signal 374 was about 60 miles per hour and it was not reduced to the prescribed rate of 25 miles per hour until about the time he reached the beginning of the curve, approximately half way through the block. Engineman Vicory said he then made a further brake-pipe reduction but that this was without effect. Other members of the train crew felt no further application of the brakes until the emergency application was made just a few seconds before the collision occurred.

Engineman Vicory offered two possible explanations for his failure to properly control the speed of his train, first, that he underestimated the rate of speed both at the time he made the first application at signal 374 and as he approached the crossing, and, secondly, that he may inadvertently, because of the swaying of his engine when passing over a rough point in the track, have moved

the brake valve from lap to holding position, which would cause the train brakes to release without his knowledge. Either of these explanations is plausible, but neither of them relieves Engineman Vicory of full responsibility for his failure properly to control his train.

West of the point of the accident there is an automatic train-control device in service. Had this device been allowed to function, an automatic application of the brakes would have occurred at the track element located a short distance west of signal 374 and the train would undoubtedly have been stopped before reaching signal 373, and then train No. 4 would probably have approached the crossing at low speed, under full control, and the accident would have been prevented. However, the engineman forestalled the operation of the automatic train-control device, which was an acknowledgement on his part that he had observed the caution indication of the automatic block signal, and it was then incumbent upon him to control the speed of his train as required by signal indications and by the rules of the railroad company. His failure to do so, for which there appear to be no mitigating circumstances, was the direct cause of this accident.

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

Respectfully submitted,

W. P. BORLAND,

Director.