INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN RE INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE ERIE RAILROAD NEAR CAMPVILLE, N.Y., ON MAY 24, 1925.

September 19, 1925.

To the Commission

On May 24, 1925, there was a derailment of a passenger train on the Erie Railroad near Campville, N. Y., the derailed equipment colliding with a freight train passing in the opposite direction on the adjacent main track, resulting in the death of one mail clerk and two employees, and the injury of six passengers, one mail clerk, and two Pullman employees.

Location and method of operation

This accident occurred on that part of the Susquehanna Division extending between Susquehanna, Pa., and Elmira, N. Y., a distance of 81.2 miles; in the vicinity of the point of accident this is a double-track line over which trains are operated by time-table, train orders, and an automatic block-signal system. The accident occurred about 1.8 miles east of Campville; approaching this point from the east the track is tangent for nearly 1 mile, followed by a compound curve to the right about 3,000 feet in length, the curvature varying from 1°29' to 3°15', the accident occurring on this curve at a point 1,485 feet from its eastern end, at which point the curvature is 3°. Approaching from the west the track is tangent for a considerable distance, followed by the curve on which the accident occurred. The grade is 0.01 per cent ascending for westbound trains approaching, and for a considerable distance beyond the point of accident.

The track is laid with 100-pound-rails, with 19 ties to the rail-length, tie-plated, and ballasted with stone; it is maintained in good condition. The speed of passenger trains on the curve involved is limited to 50 miles an hour.

The weather was cloudy at the time of the accident, which occurred at about 2.06 a.m.

Description

Westbound passenger train No. 5 consisted of one mail car, one express car, one baggage car, two coaches, and five Pullman sleeping cars, in the order named, hauled by engine 2917, and was in charge of Conductor Lashier and Engineman Richardson. The first, sixth, seventh, and tenth cars were of all-steel construction, while the remainder were of steel-underframe construction. According to the train sheet, this train left Binghamton at 1.48 a.m., seven minutes late, passed Endicott, the last open office, 7.5 miles from Binghamton, at 2.00 a.m., and on reaching a point about 5.8 miles beyond Endicott was derailed while traveling at a speed estimated to have been between 50 and 60 miles an hour, the derailed equipment colliding with the fifth car of freight train extra 2716, which was passing in the opposite direction on the adjacent track.

Eastbound freight train extra 2716 consisted of 84 cars and a caboose, hauled by engine 2716, and was in charge of Conductor Thomas and Engineman Frederick. This train passed Owego, 6.9 miles west of Campville, at 1.36 a.m., and shortly after passing Campville, while rounding the curve at a speed estimated to have been 20 miles an hour, the fifth car in the train was struck by engine 2917, of the passenger train.

Engine 2917, together with its tender, came to rest on its right side, badly damaged, parallel to and north of the tracks, 436 feet beyond the first mark of derailment. The first four cars and the forward truck of the fifth car in this train were also derailed, but remained practically upright and in general line with the track.

Engine 2716 and the first four cars in the freight train passed engine 2917 and were not derailed or damaged. The fifth to the eleventh cars, inclusive, the thirteenth car, the twenty-fifth to the twenty-eighth car, inclusive, and the fifty-second and fifty-third cars in this train, were derailed, seven of those near the head end of the train being demolished.

The employees killed were the engineman and fireman of train No. 5.

Summary of evidence.

Conductor Lashier, of train No. 5, stated that no stops were made between Binghamton and the point of accident, and the only slow downs made were for curves, he was riding in the rear car near its rear end, working on reports, at the time of the accident and had noticed nothing unusual as to the speed of the train, which was reduced for two curves after leaving Binghamton, and he said that on approaching the curve on which the accident occurred the speed was again reduced, the air brakes being applied and then released. The first he knew of anything wrong was on feeling a shock, about the intensity of an emergency application of the air brakes, immediately following which there was a second and final shock, this being a more severe one, he looked at his watch about ten seconds afterwards and it was then 2.06 a.m. Conductor Lashier at first thought the freight train had buckled in front of his own train, but on going back with his lantern and making an inspection of the westbound track he found marks on the ties on the outside of the high rail, showing where his own train was derailed just before the engine of the freight train was reached. He examined the rail for some distance east of this point, but in the darkness he found nothing wrong with it.

Baggagemaster Whealon, who was riding in the third car from the engine, said he noticed no application of the air brakes prior to the derailment, his first knowledge of anything wrong being when the car was derailed. He had not been paying particular attention to the operation of the train and was unable to give any estimate as to its speed.

Head Brakeman Montgomery, of train No. 5, was riding in the fifth car of the train at the time of the accident, and the first knowledge he had of anything wrong was when the train came to a sudden stop; he looked at his watch immediately afterwards and it was 2.06 a.m. He said that he did not notice any air-brake application immediately prior to the accident, nor any lurching of the train on the curve such as occurs when a train is traveling at an excessive rate of speed; he passed through a vestibule when about two train-lengths from where the accident occurred, and he estimated the speed at that time to have been about 50 miles an hour. After the accident he made a thorough examination of the track and found marks on the ties just ahead of the forward Pullman car, but no marks on the rail.

Flagman Wilder, of train No. 5, was riding in the rear car and noticed nothing unusual until just prior to the accident, at which time it seemed as though the air brakes were applied in emergency, followed by an abrupt stop. The speed had been reduced at two points after leaving Binghamton and again just before encountering the curve on which the accident occurred. In his opinion the speed on this occasion was no higher than usual and he estimated it to have been about 50 miles an hour.

Operator Packer, stationed at Endicott, stated that the rear end of train No. 5 passed the station at exactly 2.00 a.m., traveling at a speed of 45 or 50 miles an hour. He watched the train as it passed but noticed nothing wrong.

Engineman Frederick, of extra 2716, stated that on rounding the curve, just as engine 2917 passed him, he heard an unusual noise and asked the fireman and head brakeman what the trouble was; the accident occurred about at this time, the air brakes on his train being applied in emergency. Fireman Kellogg was riding on his seat box while rounding the curve at a speed of about 20 miles an hour, watching the passenger train approach, and when the pilot of the engine of that train was about opposite the pilot of his own engine he noticed considerable fire flying, apparently from under the pilot of engine 2917. He estimated the speed of train No. 5 to have been between 50 and 60 miles an hour.

Head Brakeman Gill, of extra 2716, said he was riding on his seat box, just ahead of the fireman watching the approach of train No. 5. Apparently nothing was wrong when the passenger train came into view, but when the engines were about two car lengths apart he saw fire flying from under the fireman's side of engine 2917, as though something might be broken, or the engine derailed and the driving wheels rubbing the rail. He did not think that the speed of train No. 5 was excessive.

Conductor Thomas, of extra 2716, said he was riding in the caboose and the first intimation he had of anything wrong was when the accident occurred, at which time he estimated the speed of his train to have been about 20 miles an hour. Shortly after the accident he examined the track and he said he could see where the engine truck wheels of engine 2917 went over the rail and where something had marked the ties, but he found nothing wrong with the track. The statements

of Brakeman Babcock and Flagman Phillips, both of whom were also riding in the caboose, brought out no additional facts of importance.

Division Engineer Dyke stated that the rail in this vicinity was originally laid in the track in 1914, repairs being made in 1923, at which time rail of the same year's rolling was re-laid at different points; the rail was worn about 1/4 inch on the high side of the curve and 3/16 inch on the low side. The track was ballasted with stone in 1916 and re-ballasted in 1924, while about a week prior to the accident the track was surfaced and the bolts were tightened. The first mark of derailment was on a rail anchor on the gauge side of the right hand rail, Mr. Dyke took measurements of the elevation and gauge of the track after the accident, before any repairs had been made, at intervals of 15 feet, from a point 105 feet east of this mark to a point 30 feet west thereof, these measurements together with notations concerning the same, being as follows:

STATION	ELEVATION	GAUGE	DEGREE OF CURVE
E 105	5¾"	4' 8 7/8"	3° 15'
E 90	do	do	do
E 75	do	do	do
E 60	5½"	do	3°
E 45	5 "	4' 8 3/4"	do
E 30	do	4' 9"	do
E 15	do	do	do
Mark on rail anchor	do	4' 9 3/8"	do
W 15	5½"	4' 9 1/8"	do
W 30	5½"	4' 8 7/8"	do

Mark on rail anchor inside of low rail. Wheel dropped off of high rail at a point 7 feet west of mark on rail anchor. No mark on rail to show where wheel had mounted rail. Tie plates under high rail opposite mark on rail anchor had been forced out and spikes bent back for ¼ to ½", and the track was disturbed west of this point.

Prior to the accident no complaint was received of track conditions on this particular curve, while the wear on the high rail at this point was not excessive, and in his opinion there was nothing about the condition of the track that would have contributed to or caused the derailment.

Track Supervisor Stenson said he inspected this curve on the day prior to the accident but found nothing wrong. He arrived at the scene of the accident about 2½ hours after its occurrence and immediately examined the track, there was nothing to indicate dragging equipment but there was a mark or nick inside the high rail, about 10 feet east of where the wheel dropped off outside of the rail.

Engine 2917 is of the 4-6-2 type, class K-5, having a total weight, engine and tender loaded, of 500,200 pounds, it received class 3 repairs on January 30, 1925. Recent work reports covering this engine were examined but nothing having any bearing on the accident was disclosed, while careful examination of the engine failed to disclose any defect that would have contributed to the accident.

Conclusions

The cause of this accident was not definitely ascertained.

The evidence indicated that the passenger train was the first to be derailed; the first mark of derailment was on a rail anchor on the inside of the low rail of the curve, the first mark on the outer rail being several feet west of this point. Careful examination of the equipment failed to disclose anything which could have contributed to the occurrence of the accident. Examination of the track showed that the tie plates under the outer rail opposite the mark on the rail anchor had been forced outward and the spikes bent backward from 1/4 to 1/2 inch, sufficient evidence was not produced however to indicate that a weakened track condition was responsible, nor did it appear that the train was being operated at an excessive rate of speed, the elevation being ample for the speed of 50 miles an hour which is allowed on the curve under the rules and there being nothing to indicate that this rate of speed was being exceeded materially, if at all.

All the employees involved were experienced men, at the time of the accident the crew of train No.5 had been on duty periods varying from 1 to 7 hours, after off-duty periods varying from 10 to 14½ hours.

Respectfully submitted,

W. P. BORLAND
Director.