

INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN RE
INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE
DAYTON & TROY ELECTRIC RAILWAY NEAR DAYTON, OHIO,
ON JUNE 25, 1927.

July 22, 1927.

To the Commission:

On June 25, 1927, there was a head-end collision between two passenger trains on the Dayton & Troy Electric Railway near Dayton, Ohio, which resulted in the death of 3 passengers and 1 employee, and the injury of 35 passengers, 3 employees on duty and 1 employee off duty. This accident was investigated in conjunction with a representative of the Public Utilities Commission of Ohio.

Location and method of operation

The Dayton & Troy Electric Railway extends between Dayton and Piqua, Ohio, a distance of 30.5 miles, and is normally a single-track line over which trains are operated by time-table and train orders, no block-signal system being in use. On account of the length of the sidings, however, they are operated as second main tracks and are governed by double-track rules. One of these sidings, known as siding 100, extends northward from the Dayton terminal a distance of 3.2 miles. Superiority of scheduled trains is not conferred by direction, opposing trains meeting at regular time-table meeting points unless otherwise ordered.

The collision occurred on a single-track section of the line at a point ^{about 3.5 miles} north of Dayton; approaching this point from the south, beginning at the end of double track, the track is tangent for a distance of 1,200 feet, and then there is a compound curve to the left 433 feet in length, the maximum curvature of which is $3^{\circ} 02'$, followed by 1,052 feet of tangent, the accident occurring on this tangent 241 feet from its southern end. Approaching from the north there is a long $4^{\circ} 11'$ curve to the right, followed by the tangent on which the accident occurred. Approaching from both directions the grade is slightly descending but it is nearly level at the point of accident. The surrounding terrain is practically level, but poles located along the west side of the track somewhat restrict the range of vision.

The weather was clear at the time of the accident, which occurred at about 5.12 p.m.

Description

Northbound passenger train No. 204 consisted of motor 250 and was in charge of Conductor Stevens and Motorman Kessler. This train departed from Dayton at 5 p.m., on time, and instead of waiting at Idlewild, at the end of double track and its scheduled meeting-point with southbound train No. 75, it passed that point about on time and shortly afterwards it collided with train No. 75 while traveling at a speed variously estimated to have been from 10 to 35 miles per hour.

Southbound passenger train No. 75 consisted of motor 200, and was in charge of Conductor Hart and Motorman Pemberton. It departed from South End, Tippecanoe City, 15.3 miles north of Dayton, at 4.50 p.m., nine minutes late, and had reached a point within 1,875 feet of the end of double track when it collided with northbound passenger train No. 204 after having been brought practically to a stop.

Both cars came to rest in an upright position with their forward trucks derailed. The front end of the northbound car was demolished, while the southbound car was telescoped about one-third of its length. The employee killed was the motorman of the southbound car.

Summary of evidence

Motorman Kessler, of train No. 204, stated that he received a clearance card at Dayton and departed from that point on time. He had been operating this train less than a week and during that time he had met train No. 75 before his own train had reached the north end of Siding 100. On the day of the accident he entirely overlooked the scheduled meet with train No. 75 until he saw that train approaching. At the time his train entered on the single track it was traveling between 35 and 40 miles per hour, and he then reduced speed slightly for an automobile at a crossing just north of a bridge over the Miami River, or at a point about 1,200 feet beyond the end of double track. Shortly after passing the bridge he saw train No. 75 approaching and at once applied the air brakes. He could not estimate the speed of his train at the time he first saw train No. 75, but said the speed had been reduced to not more than 10 miles per hour at the time of the collision.

Conductor Stevens, of train No. 204, stated that he thought of the meet with train No. 75 shortly after departing from Dayton, but before his train had reached the end of double track he had entirely forgotten it, being

engaged in collecting fares during that time. At the time his train entered on the single track it was traveling at a speed of about 35 miles per hour, but he believed the speed was increased on the descending grade north of the bridge over the Miami River. About 200 feet south of the point of collision the air brakes were applied in emergency and the motor reversed, but the speed was not materially reduced, and he estimated that the car was traveling about 35 miles per hour at the time of the impact. He further stated that to be certain that his train had met train No. 75 it would have been necessary for him to observe all opposing cars between Dayton and the north end of double track. If he sees the train to be met he would pay no more attention to the matter, but if he did not see it he would make inquiry of the motorman; in this particular case, however, he did not say anything to the motorman, being still engaged in collecting fares when the train entered single-track territory.

Conductor Hart of train No. 75 stated that his train had been traveling at a speed of about 35 miles per hour, but upon reaching a point about 350 feet north of Station Stop Two, located 452 feet north of the point of accident, the motorman made a heavy application of the air brakes, which he thought was for the purpose of picking up passengers at that point. This application of the brakes reduced the speed of his train to such an extent that it had nearly stopped at the time it collided with train No. 204. He said the regular meeting point for his train with train No. 204 was at the north end of the double track, although he could have passed that train anywhere on the double track between that point and Dayton.

Master Mechanic Snyder stated that motor 200 had been overhauled at the Tippecanoe Shops on June 21, and was thoroughly inspected before it departed from that point on the day of the accident, while motor 250 was inspected during the evening of June 24, both cars having been found in excellent mechanical condition.

Conclusions

This accident was caused by overlooking time-table meeting point for which Conductor Stevens and Motorman Kessler, of train No. 204, are responsible.

According to the testimony both of these employees overlooked the scheduled meeting-point with train No. 75. Conductor Stevens said he thought of the meet after leaving Dayton, but due to being engaged in collecting fares he forgot it before his train reached the north end of double track; Motorman Kessler, however, could offer no explanation for his oversight.

Had an adequate block-signal system been in use on this line, this accident probably would not have occurred; an adequate automatic train stop or train control device would have prevented it.

The employees involved were experienced men, 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,

W. P. BORLAND,

Director.