

INTERSTATE COLDERCE COLDISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN RE INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE CHICAGO, NORTH SHORE AND MILWAUKEE PAILROAD NEAR KENOSHA, WIS., ON FEBRUARY 23, 1930.

March 20, 1930.

To the Commission.

On February 23, 1930, a passenger train struck an automobile at a grade crossing near Kenosha, Wis., on the Chicago, North Shore and Milwaukee Railroad, resulting in the derailment of the passenger train as well as a fieight train approaching in the opposite direction and causing the death of 2 occupants of the automobile and 9 passengers, and the injury of 125 passengers, 4 employees on duty, 1 employee off duty, and 1 other person, all of the passenger train, 3 of the injured passengers subsequently died.

Location and method of operation

This railroad 's an electric line and extends between Molvaukee, Wis , and Chicago, Ill., a distance of 96.67 miles. In the vicinity of the point of accident it is a double-track line over which trains are operated by time table, train orders, and an automatic block-signal system. The accident occurred at a grade crossing north of Kenosha, Wis., where a highway known as the Burlington Road crosses the tracks at a right angle, approaching the point of accident from the north the track is tangent for more than onehalf mile, this tangent continuing for a distance of about 1 mile beyond the crossing. The grade for southbound trains is 0 2 per cent descending at the point of accident. Approaching the crossing from the east on the Builington Road, the highway is tangent for a distance of 625 feet, within 525 feet of this distance, the road ascends 13 feet, and it is then level to the crossing, 100 feet distant, and for some distance beyond the crossing.

There is a two-story building located about 150 feet east of the railroad tracks and 75 feet north of the high-way and two smaller buildings are located north of this building. After a westbound motor vehicle has passed these buildings, the driver has an unobstructed view toward the north for more than one-half mile, south of the highway, the view is unobstructed for approximately 700 feet.

The crossing is protected by a warning signal of the wigwag type, located north of the highway and $9\frac{1}{2}$ feet east of the center line of the northbound track. This signal consists of a bell and a swinging banner with a red light in the center of the banner, which is visible on the

highway for a distance of 700 feet east of the tracks. This signal is actuated by trains approaching from either direction when they encounter the control circuit, which extends for a distance of 2,400 feet on each side of the crossing and at points 2,100 feet from the crossing there are located indicating lamps, for the purpose of showing the motorman of an approaching train whether or not the crossing signal is working properly. When the signal is operating for two trains moving in opposite directions, it continues its operation until the train last passing the crossing cuts it out.

The weather was clear at the time of the accident, which occurred at 10.45 p.m.

Description

The automobile involved was a Buick five-passenger touring car, occupied by two men, and was moving westward on the highway over the crossing at a speed variously estimated to have been between 25 and 45 miles per hour when it was struck by southbound passenger train No. 436.

Southbound passenger train No. 436 consisted of five motor cars, of steel construction, and was in charge of Conductor Durr and Motorman Hall—This train departed from Milwaukee, Wis., at 10 p.m., on time, passed Radine, Wis, at 10.36 p.m., one minute late, and was derailed when it struck an automobile at a grade crossing while traveling at a speed variously estimated by the members of its crew to have been between 35 and 60 miles per hour, the derailed equipment then sideswiped northbound extra 456, which was passing at the time.

Northbound freight train extra 456 consisted of lempty car, 12 loaded cars, and a caboose, hauled by electric motor 456, and was in charge of Conductor Harris and Motorman Norris. This train passed Kenosha Tower at 10.40 p.m., according to the train sheet, and was derailed while proceeding over the Burlington Road crossing at an estimated speed of 15 miles per hour.

The automobile was thrown into the air and the engine block fell out under the first motor car of train No. 436, derailing this train to the left or east, sideswiping the first car in extra 456 on the northbound track. Train No. 436 was then diverted to the west and came to rest in a wide ditch on the west side of the southbound track with the first car at a point 546 feet from the crossing, leaning against the bank of the ditch. The second car came to rest parallel with the first car, the next two cars were diagonally across the ditch, and the last car was parallel with the track. None of these cars was entirely overturned. The track was torn up for a distance of 273 feet and the rail from the southbound track curved around

under the freight train on the northeound track, causing the derailment of the first seven cars of this train, these cars remained upright. The automobile was demolished.

Summary of Evidence

Conductor Durr, of train No. 436, was riding in the rear of the first car and knew nothing of what occurred except that he knew they hit something, say a flash, and then they were off the track. He estimated the speed of their train at the time of the accident to have been 55 or 60 miles per hour and was unable to say whether or not the motorman sounded a road crossing whistle signal. Collectors Wade, Hickey and Kindel, who were riding in the second, third and fourth cars, respectively, stated they felt the air brakes applied in emergency just before the accident occurred and they estimated the speed to have been between 35 and 45 miles per hour at the time of the accident. The statements of Collector Searle, who was in the fifth car, added wothing of importance, while the motorman of train No. 436 was too seriously injured to be interviewed.

Motorman Norris, of extra 456, stated that he had sounded the whistle for the crossing and when his train was about 500 feet from the crossing he noticed that the Wigwag was in operation There was an automobile standing on the east side of the crossing and another automobile approaching from the east, which passed around the standing automobile and proceeded over the crossing at a speed of about 45 miles per hour. Fotoman Norris said that when he say this automobile was not going to stop for the crossing, he immediately applied the air brakes in emergency. His train had been traveling at a speed between 30 and 35 miles per hour, and this speed had been reduced to about 15 miles per hour muen he reached the crossing, he thought his train was about 400 feet from the crossing Then he applied the air brakes. The headlight on his own train, as well as the headlight of train No. 436, was burning brightly. The statements of Head Brakeman Grooms and Brakeman Anderson, who were riding on the motor of extra 456 practically corroborated those of Motorman Norris, except that Head Brakeman Grooms aaid the automobile was moving at a speed of 20 or 25 miles per hour and seemed to change its speed as it approached the crossing, while Brakeman Anderson said it was moving at a speed of 35 or 40 miles per hour.

Algot Lindquist, an eyemitness to the occurrence of the accident, stated that he was driving a Ford sedan on the Burlington Road and as he approached the crossing from the east he saw the vigrag in operation and heard the bell

ringing. He looked to his left and sew a freight train approaching and it was about 500 feet from the crossing when he first say it Mr Lindquist continued until he reached a point about 30 feet from the crossing, where he stopped his car. Miss Irene Sand, who was riding with him, then called is attention to a train coming from the north, which was approaching at a much higher rate of speed than the freight train. Mr. Lindquist said his car vas the only one around the crossing, but when he had been there about one-half minute another automobile drove up, passed around him at a speed of about 25 miles per hour, and proceeded on the crossing directly in front of the passenger train Mr. Lindquist said that the headlights on both trains were burning brightly and he had heard a train whistle before he saw the wigwag signal, and this whistle was sounded continuously until the time of the collision, but he did not know from which train it vas sounded. Miss Sand stated that just as they passed the building located about 150 feet east of the tracks. she say the passenger train approaching from the north and it was then less than one-half mile distant, but was approaching at about tince the speed of the freight train. While they were varing there an automobile drove by them at a fast rate of speed and on the crossing in front of the passenger train, and the freight train reached the crossing just after the automobile had been struck.

Vice President Fallon made the statement that he was of the opinion that inasmuch as the seven derailed cars of extra 456 were derailed to the west, or on the side towards train No. 436, then extra 456 must have been struck only a glancing blow and that the rails that were torn up had curved around under the cars of the freight train and caused their derailment.

Conclusions

This accident was caused by an automobile being driven upon a crossing at grade directly in front of a passenger train which was approaching at high speed.

The investigation indicated that the automobile approached the crossing at too high a rate of speed, passed around another automobile standing just east of the crossing, and then started over the tracks. In all probability, the driver of this car saw the freight train approaching from the south and thought he could clear the crossing before the freight train reached it, and apparently did not look toward the north to see if there was a train approaching from that direction. While there are buildings located to the right of the highway, they are about 150 feet east of the tracks, and the view is unobstructed between these buildings and the tracks, with the result that a train can be seen approaching from the

north for a distance of at loost one-holf mile. The evidence also indicated that the vigrag signal was in operation and that at least one of the trains was whist-ling as it approached the crossing. The automobile standing at the crossing no doubt obstructed the view of the driver of the approaching car toward the north to some slight extent, but there is no reason why he could not have prevented the accident had he exercised any of the care required to be exercised when approaching a mailroad crossing at gride.

All of the employees/involved were experienced men with the exception of one of the collectors of the passenger train, who had been employed by this multiple less than one year, and at the time of the accident none of them had been on duty in violation of any of the provisions of the iours of service law.

Pespectfully submitted,

". P. BORLAND,

Director.