

INTERSTATE COMMERCE COMMISSION.

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN RE
INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON
THE NASHVILLE, CHATTANOOGA & ST. LOUIS RAILWAY
NEAR ADAIRSVILLE, GA., ON JUNE 19, 1924.

July 12, 1924.

To the Commission:

On June 19, 1924, there was a head-end collision between a passenger train and a work train on the Nashville, Chattanooga & St. Louis Railway near Adairsville, Ga., resulting in the death of three employees, and in the injury of six passengers, seven persons carried under contract, and seven employees.

Location and method of operation.

This accident occurred on the Atlanta Division which extends between Atlanta, Ga., and Chattanooga, Tenn., a distance of 136.81 miles; in the vicinity of the point of accident this is a single-track line over which trains are operated by time-table and train orders, no block-signal system being in use. The accident occurred at a point about 1.61 miles south of the station at Adairsville; approaching this point from the north the track is tangent a distance of 1,025 feet, then there is a 1° curve to the left 830 feet in length and tangent 1,430 feet in length, followed by a $1^{\circ} 58'$ curve to the right 1,392 feet in length, the accident occurring on this curve at a point 810 feet from its northern end. Approaching the point of accident from the south there is a $3^{\circ} 6'$ curve to the right 538 feet in length, and a tangent 122 feet in length, followed by the curve on which the collision occurred. The grade is slightly ascending for southbound trains, being 0.57 per cent at the point of accident. The collision occurred about the middle of a fill 500 feet in length and 14 feet high, cut banks on both ends of which restrict the view to the length of the fill. It was daylight and the weather was clear at the time of the accident, which occurred at 5.06 a.m.

Description.

Southbound passenger train No. 3 consisted of one express car, one mail car, one baggage car, two coaches, and three Pullman sleeping cars, in the order named, all of all-steel construction, hauled by engine 551, and was in charge of Conductor Dyer and Engineman Steele. It left Chattanooga, Tenn., at 2.55 a. m., on time, arrived at Acarsville, Ga., at 4.55 a. m., departed at 5.03 a. m., three minutes late, and had proceeded about 1.6 miles when it collided with work extra 583 while traveling at a speed estimated to have been between 35 and 40 miles an hour.

Work extra 583, at the time of the accident, consisted of a caboose and one camp car, both of wooden construction, hauled by engine 383, and was in charge of Conductor Payne and Engineman Robertson. It left Kingston, Ga., approximately 8.2 miles south of the point of accident, and at which point it had tied up the preceding evening, at 4.50 a. m., according to the train sheet, passed Halls, at which point it should have taken the siding for train No. 3, and had proceeded a distance of about $3\frac{1}{2}$ miles when it collided with train No. 3 while traveling at a speed estimated to have been between 30 and 35 miles an hour.

The force of the impact drove work extra 583 backward a distance of about 40 feet, turning both engines over down the hill on the inside of the curve and practically demolishing engine 383 and badly derailing engine 551. The caboose and camp car in the work extra were also badly damaged. The leading truck of the express car, the first car in train No. 3, was derailed. The employees killed were the engineman and fireman of the work extra, and an engine watchman who was riding on the engine of the work extra at the time of the collision.

Summary of evidence.

Conductor L. L. Payne, of work extra 583, stated that he was called at 4 a. m. for duty at 4.30 a. m., and that upon reporting he received the usual work orders together with several other orders not involved in this accident. He delivered those orders to Engineman Robertson and at the same time informed him that they would clear train No. 3 at Halls. On account of having to turn the engine he said his train did not depart from Kingston until 4.48 a. m., but

as train No. 3 is not due at Halls until 5.10 a.m. he considered there was ample time to go to Halls. He showed the train orders to both the brakeman and flagman and told them they would clear train No. 3 at Halls. Shortly after departing from Kingston Conductor Payne said he took a position in the cupola, while the brakeman and flagman were engaged in preparing breakfast, and he did not again think of train No. 3 until he saw it approaching just before the collision; he could not account for his having forgotten about that train. He estimated the speed of his train just prior to the collision to have been between 30 and 35 miles an hour. Conductor Payne said he had compared time with Engineman Robertson before leaving Kingston, and that the engineman seemed to be in his usual condition.

Flagman Reagan, of work extra 383, stated that he did not forget about train No. 3, but as he was engaged in preparing breakfast he was depending upon Conductor Payne to see that they cleared that train at Halls. Brakeman F. L. Payne said he did not read the orders received at Kingston but understood that his train was to clear train No. 3 at Halls, and while he was assisting Flagman Reagan prepare breakfast he was also waiting for Engineman Robertson to reduce speed approaching Halls and was prepared to attend to the switch on entering the siding at that point. He said he was unaware that his train had passed Halls.

Engineman Steele, of train No. 3, said he had no knowledge of work extra 383 until he saw it approaching about four or five car lengths distant, the speed of his train at that time being about 35 miles an hour, and he at once applied the air brakes in emergency and jumped. The testimony of Fireman Chestain corroborated that of Engineman Steele, while the testimony of other members of the crew of train No. 3 developed nothing further of importance.

Conclusions.

This accident was caused by work extra 383 running against an opposing superior train without authority.

As the engineman and fireman were killed there is no way of determining the reason for their having overlooked train No. 3, the conductor, however,

admitted that he entirely forgot about train No. 3 after leaving Kingston. Brakeman Payne and Flagman Reagan said they were aware that their train was to go to Falls for train No. 3, yet both of them apparently depended entirely upon the conductor to see that they cleared the time of train No. 3. Had either of these employees been properly attentive to his duties he would have realized that his train was passing Falls and could have taken such action as was necessary to bring the train to a stop. For such negligence there can be no excuse and both must share with the engineman and conductor the responsibility for this accident.

This accident again calls attention to the inherent weakness of the human element in train operation, and the need for some form of automatic train control device which will intervene and take control of the train when for any cause a crew overlooks an approaching opposing train. Had such a device been in service on this railway this accident would have been prevented. It is also probable that it could have been averted had a block signal system been in use. It is thought that the density of traffic, which is 15 through trains daily at this time of the year and of greater density during the winter season, warrants the installation of such a system.

None of the employees involved in this accident had been on duty in violation of any of the provisions of the hours of service law.

Respectfully, submitted,

W. P. Dorland

Director.