

CIRCULATED *June 29/20*

IN RE INVESTIGATION OF A HEAD-END COLLISION WHICH OCCURRED
ON THE LOUISVILLE & NASHVILLE RAILROAD NEAR
BAY MINETTE, ALA., ON APRIL 16, 1920.

June 17, 1920.

On April 16, 1920, there was a head-end collision between two passenger trains on the Louisville & Nashville Railroad near Bay Minette, Ala., which resulted in the death of 2 employees and 1 express messenger, and the injury of 3 employees, 1 express messenger and 18 passengers. After investigation of this accident the Chief of the Bureau of Safety reports as follows:

This accident occurred on the Mobile & Montgomery Division, which extends between Montgomery and Mobile, a distance of 178.35 miles. The greater portion of this division is a single-track line over which trains are operated by time-table and train orders, no block-signal system being in use. Approaching the point of accident from the south there is a curve to the right of 1° 42' nearly 600 feet in length followed by about 1,200 feet of tangent; approaching from the north there is a 3-degree curve to the left about 2,400 feet in length, followed by about 600 feet of tangent to the point of accident. There is a cut extending from about the end of the 3-degree curve to the point of accident, the sides of which have a maximum height of about 20 feet. The grade is .78 per cent ascending for southbound trains. At the time of the accident there was a heavy rain and electrical storm.

Northbound passenger train No. 2 consisted of 3 express cars, 3 coaches, 5 Pullman sleeping cars and a private car, hauled by engine 203, and was in charge of Conductor Kalinski and Engineman

Spruell. All the cars were of steel or steel-underframe construction except the first two, which were of wooden construction. At Mobile the crew of train No. 2 received a copy of train order No. 201, form 19, reading as follows:

"No 3 eng 202 meet no 58 eng 205 at
Atmore and no 2 eng 203 at Pinchona."

Pinchona is about 4 miles north of Bay Minette. Train No. 2 left Mobile at 1.45 a. m., 14 minutes late, Bay Minette at 2.54 a. m., 51 minutes late, and at about 3.00 a. m. collided with train No. 3 at a point about 1 mile north of Bay Minette while traveling at a speed estimated to have been between 45 and 50 miles an hour.

Southbound passenger train No. 3 consisted of 1 baggage car, 2 express cars, 1 baggage car, 3 coaches and 5 Pullman sleeping cars, hauled by engine 202 and was in charge of Conductor Davis and Engineman Freeman. All the cars were of steel or steel-underframe construction except the third car, which was of wooden construction. At Flomaton the crew received a copy of train order No. 201, previously quoted, together with train order No. 208, reading as follows:

"No. 3 engine 202 run 1 hour and 5 minutes late
Flomaton to Bay Minette and 55 minutes late Bay Minette
to Mobile."

Train No. 3 left Flomaton at 1.54 a. m., 1 hour and 9 minutes late, passed Dyas, the last open telegraph office, at 2.48 a. m., 1 hour and 13 minutes late, passed Pinchona without stopping, and collided with train No. 2 while traveling at a speed estimated to have been between 30 and 40 miles an hour.

Both engines were practically destroyed. The first express car in train No. 2 was demolished, while the second was so

badly damaged that it was afterward destroyed. The first car of train No. 3 came to rest in an upright position with its rear end telescoping the head end of the fourth car; the second car was derailed and badly damaged while the third car was demolished. Fire broke out in the wreckage but was kept under control. The employees killed were the engineman and train porter of train No. 2.

The fireman of train No. 2 saw the headlight of the engine hauling train No. 3 just before the accident occurred. No whistle signal of any kind was sounded and no remarks were passed between him and the engineman. The statement of the conductor indicated that there was an emergency application of the air brakes just before the accident occurred.

Conductor Davis, of train No. 3, received train order No. 201 from Operator Gatlin at Flematon, and according to the operator both he and Engineman Freeman read the order in the operator's presence; the operator then repeated the names of the meeting points, which were confirmed by both the engineman and conductor. Engineman Freeman said that there was considerable conversation in the office at the time and that he had Bay Minette in his mind when the conductor read the order. He understood the meet with train No. 2 to be at Bay Minette and stated that after the conductor had finished reading the order he repeated the name of the meeting point as Bay Minette. When he returned to his engine he did not give the order to the fireman as the latter was working on the fire and had on his gloves, but told him that they had meeting points with other trains at Atmore and Bay Minette. In the vicinity of Dyas he noticed an odor of coal smoke and thinking that there was a train

ahead, and on account of the severe storm, making it necessary to maintain a careful lookout, he did not follow his usual practice of reading the order before passing the last station prior to the meeting point, the idea being firmly fixed in his mind that Bay Minette was the meeting point. Approaching the point of accident he saw a small light which he thought to be a fire near the track, but in a few seconds he realized that it was a headlight, applied the air brakes in emergency and jumped. The fireman, however, stated that he saw the headlight first and notified the engineer.

Conductor Davis said he read the order while Engineer Freeman was standing directly behind him and that the engineer then repeated the order, after which Conductor Davis asked the operator if that was correct and the operator verified it. As they were returning to their train he told the engineer to remember that they were to meet trains at Almore and at Pinchona, this being his practice, as he himself was not familiar with the road. After passing Dyls he went out upon the platform of the car on which he was riding to see where the train was, but on account of the storm was unable to determine its location. He was under the impression that the distance from Dyls to Pinchona was 6 miles, but on going back into the car and on looking at his time-table he noted that the distance was only 4 miles. Thinking that the train must be nearly at the station he was about to go out upon the platform a second time when he felt the engineer shut off steam, this being followed by an emergency application of the air brakes. Neither he nor the flagman knew that their train had passed Pinchona and they had not heard the engineer sound the whistle after leaving

Dyas, although the engineman said that he had sounded the whistle several times, including a station signal approaching Pinchona.

There is a passing track at Pinchona with a short spur leading from it; the only station building is a telephone booth located about half way between the passing-track switches, this being the only building in the vicinity. Conductor Davis had been employed on the New Orleans & Mobile Division for about 19 years and on November 1, 1919, was assigned to through service between New Orleans and Montgomery, this service including two divisions, the New Orleans & Mobile Division and the Mobile & Montgomery Division. With two or three exceptions all of his service on the Mobile & Montgomery Division had been on night trains and he was not familiar with all of the stations, particularly those at which his train did not stop. He stated that at no time after leaving Dyas was he able to determine the location of his train.

This accident was caused by the failure of train No. 3 to stop and wait for train No. 2 at the meeting point established by train order No. 201, due to a misunderstanding of this order on the part of the engineman of train No. 3, and to the failure of the train crew to see to it that the train order was being obeyed and to note that their train had passed the meeting point in violation of this order.

The investigation of this accident disclosed that at the time of receiving his orders Engineman Freeman had Bay Minette in his mind, and claimed to have understood the conductor to read the name of the meeting point with train No. 2 as Bay Minette. The failure of Engineman Freeman to comply with that part of rule 210

requiring enginemen to show their orders to their firemen eliminated any possibility of the fireman discovering the engineman's error in regard to the meeting point. The conductor claimed that the engineman read the order and named the meeting point as Pinchona; on account of his unfamiliarity with the division on which the accident occurred the conductor stated he was unable to determine the location of his train and did not know that it had passed that point until after the accident had occurred. In view of his unfamiliarity with the road, and especially in view of the weather conditions existing, Conductor Davis should have exercised unusual care in the operation of his train with a view to seeing that the requirements of the train order were properly observed and obeyed. At the time of the accident Flagman Pruett was in the next to the last car on his way forward through the sleeping cars for the purpose of announcing the stop at Bay Minette. At that time he realized that his train must have been in the vicinity of Pinchona and knew that it was required to meet train No. 2 at that point. Under these circumstances had either Conductor Davis or Flagman Pruett taken proper precautions to know whether or not the requirements of train order No. 201 were being observed and obeyed, they would have discovered that the meeting point was being passed before the opposing train arrived and could then have stopped their train in time to have averted the accident.

Engineman Freeman was employed as a fireman in 1888 and promoted to engineman in 1895. Conductor Davis was employed as a flagman in 1900, promoted to freight conductor in 1905, and to

extra passenger conductor in 1908. Flagman Pratt was employed as a flagman in February, 1918. The records of these employees were good. At the time of the accident the crew of train No. 3 had been on duty about 6-1/2 hours after periods off duty ranging from 13 hours to 36 hours. None of the crew of train No. 3 had been on duty in violation of any of the provisions of the hours of service law.

The fact was brought out by the investigation that although Conductor Davis had been operating through trains over this line for several months, he was not fully qualified upon the physical characteristics of the Mobile & Montgomery Division, and this was one of the circumstances which led up to this accident. The necessity of train and enginemen being thoroughly familiar with the territory over which they operate is apparent.

This accident again directs attention to the inherent weakness from the standpoint of safety of the train-order system of operation, as compared with the block system. In the territory between Montgomery and Florence there are 26 daily scheduled trains of all classes, the majority being through trains, and between Florence and Mobile there are 22 scheduled trains of all classes, all of which are through trains, while the average daily movement in and out of Montgomery for the first 15 days in April averaged 34-1/2 trains. Traffic of this density on a single-track road warrants the installation of a block-signal system, and had an adequate block system been in use this accident undoubtedly would not have occurred.