

INTERSTATE COMMERCE COMMISSION

- - -

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN RE
INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE
LOUISVILLE AND NASHVILLE RAILROAD AT NELSONVILLE,
KY., ON JANUARY 11, 1923.

February 14, 1923.

To the Commission:

On January 11, 1923, there was a head-end collision between two freight trains on the Louisville & Nashville Railroad at Nelsonville, Ky., resulting in the death of one employee and the injury of five employees.

Location and method of operation.

The Lebanon Branch of the Louisville Division is a single-track line extending between Lebanon Junction and Sinks, Ky. a distance of 107.2 miles, over which trains are operated by time-table and train orders, no block-signal system being in use. Southbound trains are superior to opposing trains of the same class. The accident occurred between the switches at Nelsonville, at a point 686 feet north of the south passing-track switch; approaching from the south the track is tangent for 2,250 feet, followed by a curve of $1^{\circ} 32'$ to the left 1,476 feet in length, the accident occurring on the curve 166 feet from its southern end. Approaching from the north the track is tangent for 2,231 feet, followed by the curve on which the accident occurred, at the bottom of two descending grades, that from the south being 0.77 per cent for a distance of 3,000 feet, and that from the north 0.85 per cent for a distance of 3,600 feet. Owing to a bluff, buildings and trees, the view across the inside of the curve is restricted to less than 1,000 feet. The weather was clear at the time of the accident which occurred at about 12.07 a.m.

Description.

Northbound second class freight train second No. 52 consisted of 39 cars and a caboose, hauled by engine 1551, and was in charge of Conductor Osborne and Engineman Underwood. At Lebanon, Ky., 28.1 miles south of Nelsonville, the crew received train order No. 197, Form 19, reading as follows:

"Second No 52 eng 1551 meet second No 87 eng 1488 at Loretto First No 55 eng 1561 at Santos First No 55 take siding Nos 49 and 81 have arrived at Lebanon."

At New Haven, Ky., 5.8 miles south of Nelsonville, the last open office, train order No. 215, Form 19, was received, reading as follows

"Second No 52 eng 1551 meet second No 55 eng 1481 at Boston and No 53 eng 1 at Lebanon Junction."

Santos, the meeting point with train first No. 55, is 1.5 miles south of Nelsonville, while Boston, the meeting point with train second No. 55, is 4.6 miles north of Nelsonville. Train second No. 52 departed from New Haven at 11.51 p.m., passed Santos without stopping, and collided with train first No. 55 at Nelsonville while traveling at a speed of about 25 miles an hour.

Southbound second class freight train first No. 55 consisted of 27 cars and a caoose, hauled by engine 1561, and was in charge of Conductor Argenbright and Engineman Sweat. The crew received train orders No. 197 and 215, Form 31, at Lebanon Junction, departing from that point at 11:45 p.m., passed Boston and collided with train second No. 52 at Nelsonville while traveling at a speed of about 25 miles an hour.

The engines were derailed, but remained upright, in badly damaged condition. The first 15 cars of train second No. 52 and the first 5 cars of train first No. 55 were destroyed or badly damaged. The employee killed was the fireman of train second No. 52.

Summary of evidence.

When train second No. 52 stopped at New Haven, Engineman Underwood saw the train order board displayed and it occurred to him that there would be an order changing the meeting point with train first No. 55 from Santos to Boston or Lebanon Junction. Head Brakeman Huffman took the engineman's copy of train order No. 215, providing for a meet with train second No. 55 at Boston, read it correctly, and delivered it to the engineman. Engineman Underwood said the brakeman told him they would "meet them at Boston and Lebanon Junction" and he assumed that the meet with train first No. 55 at Santos had been changed to Boston and then read the order in that way, after which he gave it to the fireman to read, and then placed it in his pocket.

Approaching Santos he sounded the station whistle and he said the head brakeman said "highball" and assumed that the brakeman had received a proceed signal from the rear of the train; the head brakeman, however, said he did not receive any signal from the rear end and that as the engineman sounded two short blasts on the whistle he supposed the engineman had received a proceed signal from his side of the train. Approaching Nelsonville, Head Brakeman Huffman was the first to see the headlight of train first No. 55 and called to the engineman. Head Brakeman Huffman said he had forgotten to meet with train first No. 55 at Santos.

Conductor Osborne, of train second No. 52, said that after leaving New Haven he completed some reports and then got up in the cupola, re-read the orders, and looked out in an endeavor to ascertain the location of his train. He said he then saw that the train had passed Santos, asked the flagman if the train had passed that point, and on leaning farther out of the window saw the light on a switch at Nelsonville, it being at about this time that the air brakes were applied from the head end of the train. Conductor Osborne further stated that he understood they were to meet train first No. 55 at Santos, and had not overlooked this order, nor had he confused it with the order to meet train second No. 55 at Boston. Flagman Lawrence had been riding in the cupola of the caboose, but was watching the conductor go over some reports which he had written, and did not notice his train pass Santos, and when the Conductor asked him where they were he looked out of the window, but had not located himself at the time the air brakes were applied. Neither of these employees had heard any whistle signals sounded.

Engineman Sweat, of train first No. 55, said that as his train approached Nelsonville at a speed of about 30 miles an hour, he noticed the reflection of a headlight which he at first thought was from an automobile on the highway paralleling the track, but as his train rounded the curve he saw it was the headlight of an engine, it then being apparently 15 car lengths distant, and he at once applied the air brakes in emergency. The statements of the other members of the crew did not bring out any additional facts of importance.

Conclusions.

This accident was caused by the failure of train second No. 52 to wait at Santos for train first No. 55, as provided for by train order No. 197.

The engineman mis-read the order, the head brakeman forgot it, and neither the conductor nor flagman were paying sufficient attention to the operation of their train to know that it had passed the meeting point without stopping. For such inattention to duty there can be no excuse.

This accident again directs attention to the inherent weakness of the time-table and train-order system of operation, and to the necessity for having the increased protection provided by a block-signal system. Had an adequate block system been in use, this accident undoubtedly would not have occurred.

With the exception of a fireman who was killed, all of the employees involved were experienced men. At the time of the accident the crew of train first No. 55 had been on duty about $1\frac{1}{2}$ hours and the crew of train second No. 52 about 12 hours, after from 8 to 12 hours off duty.

Respectfully submitted,

W. P. FORLAND,

Director.