

INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN
RE INVESTIGATION OF AN ACCIDENT WHICH OCCURRED
ON THE MICHIGAN RAILROAD NEAR FRANKENMUTH JUNC-
TION, MICH., ON NOVEMBER 29, 1924.

January 16, 1925

To the Commission:

On November 29, 1924, there was a head-end collision between two passenger trains on the Michigan Railroad near Frankenmuth Junction, Mich., which resulted in the death of 1 employee, and the injury of 22 passengers and 2 employees.

Location and method of operation

This accident occurred on the Northeastern Division, a single-track electric line extending between Bay City and Flint, Mich., a distance of 48.3 miles. Trains are operated by time-table and train orders, no block-signal system being in use. Train orders are transmitted by telephone, the crews receiving the orders at booths in which there are machines for making such orders in triplicate. The accident occurred at a point 2,490 feet south of the Junction switch. Approaching from the north there is a 3° curve to the right 867 feet in length and then 1,628 feet of tangent extending to the point of accident. Approaching from the south there is a long tangent, a 2° curve to the right 312 feet in length, 53 feet of tangent, a curve of 2° to the left 235 feet in length, and then 163 feet of tangent to the point of accident. The grade from the north is from 1 to 1.78 per cent descending for a distance of 2,600 feet and then is 1.34 per cent ascending for a distance of 500 feet to a bridge over Cass River, which is just north of the point of accident. Approaching from the south the grade is 1.01 per cent descending for 1,000 feet, level for 700 feet, and then 1.12 per cent ascending for a distance of 600 feet to the bridge. The weather was cloudy at the time of the accident, which occurred at 4.15 p.m.

Description

Northbound passenger train second No. 157 consisted of motor 813, of all-steel construction, in charge of Conductor Kelly and Motorman Ingram. At Third Avenue, in Flint, 23.70 miles from Frankenmuth Junction, which is shown on the employees' time-table as "Jct.," the crew received a copy of train order No. 22 which provided in

part for a meet with train No. 22 at Frankenmuth Junction, this order was made complete at 3.18 p.m. The train had nearly reached the Junction when Motorman Ingram saw train No. 22 approaching, and he had succeeded in reducing the speed of his train to about 10 miles an hour when the accident occurred.

Southbound passenger train No. 22 consisted of motor 847, of wooden construction, in charge of Conductor Zinterhoffer and Motorman Smith. At Shops, 6.65 miles north of Frankenmuth Junction, the crew received a copy of train order No. 22 providing for a meet with train second No. 157 at Frankenmuth Junction, this order being made complete at 3.54 p.m. Train No. 22 then proceeded to Dock, about half way to Frankenmuth Junction, where it met train first No. 157 according to time-table schedule, it then proceeded, passed Frankenmuth Junction without stopping, and collided with train second No. 157 while traveling at a speed estimated to have been about 30 miles an hour.

Motor 813 telescoped motor 847 a distance of about 8 feet, the two cars then becoming separated and motor 813 running backward a distance of about 400 feet. The employee killed was the motorman of train No. 22.

Summary of evidence

Motorman Ingram, of train second No. 157, said his first knowledge of anything wrong was when his train was rounding one of the curves south of the point of accident, at which time he saw train No. 22 approaching, apparently about 400 feet distant. He estimated that he had reduced the speed of his train from 30 miles an hour to about 10 or 12 miles an hour when the accident occurred. The statements of Conductor Kelly brought out no additional facts of importance.

Conductor Zinterhoffer, of train No. 22, said that both he and Motorman Smith went into the telephone booth at Shops, the motorman receiving the order over the telephone and calling it out to the conductor who wrote it down on the train-order machine. Two copies of the order were then detached, one for each member of the crew, the third copy remaining in the machine. The first section of train No. 157 was met at Dock and Conductor Zinterhoffer said that when he noticed that Motorman Smith was passing Frankenmuth Junction without stopping he pulled the emergency cord which should have opened the air-brake valve in the forward vestibule, and then saw Motorman Smith look back. He said he then gave the motorman three rings on the bell cord, this signal meaning, "stop at once, emergency." Motorman Smith looked back again and Conductor

Zinterhoffer said that once more he pulled the bell cord three times and that the motorman looked back for the third time. Conductor Zinterhoffer then started for the head end of the car and he said he was about to enter the smoking compartment in the forward end of the car when he saw train second No. 157 approaching. Conductor Zinterhoffer further stated that when he opened the emergency valve the train was more than 1,000 feet from the point of collision, but that he did not remember whether or not the brakes applied; he said, however, that the speed of the car seemed to increase and he estimated that at the time of the accident it was about 25 miles an hour. Conductor Zinterhoffer made a further statement that Motorman Smith had been in the habit of disregarding emergency stop signals and that on one occasion he had reported such an occurrence to Superintendent Hollar, this latter statement, however, was denied by the superintendent.

The statements of the crew of train first No. 157, and also of the crew of a work extra which was at Dock when train first No. 157 met train No. 22 at that point, were to the effect that the motorman of train first No. 157 sounded the whistle signal calling attention to the fact that his train was carrying signals for a following section and that an acknowledgement of this signal was sounded by Motorman Smith of train No. 22. The conductor of the work train also stated that he asked Motorman Smith where he was going to meet train second No. 157 and that Motorman Smith motioned that he was going to Frankenmuth Junction.

Examination of the third copy of train order No. 22, which was in the train-order machine in the booth at Shops, showed that there was no error in the order as transcribed by the conductor. Search of the wreckage was made for the emergency valve on motor 847 which Conductor Zinterhoffer said he opened, but it could not be found.

Conclusions

This accident was caused by failure to obey a meet order.

In view of the fact that Motorman Smith made no statement to any one prior to his death, no definite reason can be assigned for his failure to stop at Frankenmuth Junction in order to meet train second No. 157, as directed by train order No. 22. On the other hand, no evidence was discovered which would tend either to confirm or contradict the statements of Conductor Zinterhoffer. If his statements are correct, then he did all that was within his power to attract the attention of Motorman Smith to the fact that he was overrunning a meeting point.

The rules of this company do not provide for any signal to be given by the conductor to the motorman when a train is approaching a meeting point. A signal of this character is in common use on steam railroads for the purpose of providing a check against possible oversights on the part of enginemen, and it is believed that a similar rule should be in force on high speed interurban lines.

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 they had been on duty about 1 1/4 hours, after about 14 hours off duty.

Respectfully submitted,

W. P. BORLAND

Director