

INTERSTATE COMMERCE COMMISSION.

REPORT OF THE CHIEF OF THE BUREAU OF SAFETY IN RE INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE NEW YORK, ONTARIO & WESTERN RAILROAD NEAR COOKS FALLS, N. Y., ON NOVEMBER 29, 1922

December 19, 1922.

To the Commission:

On November 29, 1922, there was a rear-end collision between two freight trains on the New York, Ontario & Western Railroad near Cooks Falls, N. Y., resulting in the death of 3 employees.

Location and method of operation.

This accident occurred on that part of the Southern Division which extends between Cornwall and Sidney, a distance of 148.27 miles, this is a double-track line over which trains are operated by time-table, train orders, and an automatic block-signal system. The point of accident is 2,524 feet north of the station at Cooks Falls, approaching this point from the north there are several curves and tangents followed by a curve of $1^{\circ} 15'$ which is 1921 feet in length, and a tangent extending beyond the point of accident, 971 feet distant. The grade approaching the point of accident from the north is ascending, varying from 0.18 to 0.57 per cent, being 0.18 per cent at the point of accident.

The signals are of the two-arm, two-position, lower quadrant type; signal 141.4 is 164 feet north of the point of accident, while 7,344 feet farther north is signal 142.8. An unobstructed view of signal 141.4 can be obtained for a distance of approximately 1,400 feet.

Under the rules, second-class and extra trains may stop at various designated points, among them Cooks Falls, for water, without flag protection against second-class and extra trains when the rear of the train can be seen a distance of 1,000 feet; otherwise full protection is required. The rules also provide that second-class and extra trains must approach these stations under full control, prepared to stop

The weather was clear at the time of the accident, which occurred at about 4 25 a. m.

Description.

Southbound freight train extra 316 consisted of 26 cars and a caboose, hauled by engine 316, and was in charge of Conductor Sherman and Engineman Bell. This train left Cadosia at 2.30 a. m., passed East Branch, 9.49 miles from Cooks Falls and the last open office, at 3 02 a. m., and

stopped for water at Cooks Falls at 3 50 a. m. , the train had been standing at this point about 35 minutes, the delay being due to three overheated journals, when the rear end was struck by train No. 34.

Southbound freight train No. 34 consisted of 20 cars and a caboose, hauled by engine 279, and was in charge of Conductor Brucklacher and Engineman Davis. This train left Cadonia at 3 30 a. m. , passed East Branch at 4 00 a. m. , and collided with extra 316 while traveling at a speed estimated to have been between 18 and 25 miles an hour.

The caboose of extra 316 was demolished and the car ahead badly damaged. Engine 279 came to rest on the right side of the track leaning against a rock embankment, while the first car was considerably damaged. The employees killed were the engineman, fireman and head brakeman of train No. 34.

Summary of evidence

Immediately after extra 316 came to a stop at the water tank, Flagman Oles went back to a point estimated to have been about 1,200 feet from the rear of his train, from which point he could see the red markers on his train and the stop indication of signal 141 4. He had been out about 30 minutes when he saw train No. 34 approaching. He stated that as soon as they came in sight he began to give stop signals and continued giving them until the engine had passed, that no acknowledgement was given to his signals, and that the engineman of train No. 34 did not shut off steam until within five or six car lengths of the caboose of extra 316; he did not think the brakes were applied at any time. He stated that he did not place torpedoes on the rail or light a fusee, which he had intended to do when recalled, and as the engineman could see his signals for a considerable distance, he thought the protection afforded was sufficient.

Conductor Sherman, of extra 316, stated that when train No. 34 approached he noticed the flagman about 30 car-lengths from the caboose, giving stop signals, and also saw the automatic signal displaying a stop indication. He stated that the engineman of train No. 34 did not shut off steam until within four or five car lengths of the rear of the caboose, and thought its speed at this time was between 20 and 25 miles an hour. Conductor Sherman said it had been impressed on him that the rule relieving crews of flagging at certain water stations only applied while taking water, and so he always sent the flagman back when his train was so far from the water tank, the train having stopped on this occasion with the engine about 1,500 feet from the tank. Water had been taken, the engine coupled to the train, and they were about ready to proceed when the accident occurred.

According to the statements of Conductor Brucklacher and Brakemen Kelder and Peck, of train No. 34, the air brakes were in good condition at Cadonia, 19.08 miles from Cooks Falls, and worked properly when reducing speed at one point en route, while no difficulty was experienced in handling the undamaged portion of the train after the accident. None of these employees, all of whom were in the caboose at the time of the accident, was able to say just when the engineman last sounded the whistle. Conductor Sherman, of extra 316, heard it at about the time train No. 34 passed Hortons, 2.42 miles distant while Flagman Oles thought he also had heard it when it was in that vicinity.

After the accident, the reverse lever of engine 279 was found in back motion, six notches from the back of the quadrant, while the throttle was wide open and latched.

Conclusions.

This accident was caused by the failure of Engineman Davis, of train No. 34, properly to observe and obey signal indications. Apparently Engineman Davis failed to see the flagman, or to see the stop indication of the home signal and the rear end of extra 316 until only a few car lengths distant. All of the employees on the engine were killed, and in view of the fact that the signals were functioning properly, with the weather conditions entirely favorable to the observance of these signals, no reason can be advanced for such failure upon the part of Engineman Davis.

It also appears that when his train stopped some distance from the water tank, it had been the practice of Conductor Sherman, of extra 316, to have his flagman protect the train, but in view of the rule relieving train crews of this duty at certain points when there is a clear view of the rear of the train a distance of at least 1,000 feet, there would have been no responsibility on the train crew of extra 316, if they had not provided any flag protection at this point, inasmuch as the home signal was visible a distance of about 1,400 feet and the rear end of extra 316 fully the same distance.

This accident directs attention again to the necessity for automatic train control; the automatic block-signals were functioning properly, weather conditions were favorable to their observance, and the engineman was thoroughly experienced, having had 28 years' experience in engine service, yet for some unknown reason the signal indications were disregarded. Had an adequate system of train control been in use, this accident would not have occurred.

All of the employees on engine 279 were experienced men. At the time of the accident the crew of train No. 34 had been on duty about 9 hours, after nearly 11 hours off duty; the crew of extra 316 had been on duty about 10 hours after off-duty periods ranging from about 13½ hours to several days.

Respectfully submitted,

W. P. Borland,

Chief, Bureau of Safety.