

INTERSTATE COMMERCE COMMISSION.

REPORT OF THE CHIEF OF THE BUREAU OF SAFETY IN RE INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE CHICAGO & NORTH WESTERN RAILWAY AT CLINTONVILLE, WIS., ON SEPTEMBER 17, 1922.

October 21, 1922.

To the Commission:

On September 17, 1922, there was a headend collision between a passenger train and a freight train on the Chicago & North Western Railway at Clintonville, Wis., which resulted in the death of 1 employee and the injury of 26 passengers and 2 employees.

Location and Method of operation.

That part of the Ashland Sub-Division on which this accident occurred extends between Kaukauna and Antigo, Wis., a distance of 94.8 miles, and is a single-track line over which trains are operated by time-table, train orders, and a manual block-signal system. Under a time-table rule, manual block rules do not prohibit switch engines or trains from occupying the main track between yard-limit boards, at certain designated points, Clintonville being one of them, and a clear block does not indicate that the main track at such points is clear, approaching trains being required to move under control. The engine or train so occupying the main track, however, must do so in accordance with the rules, the provision of one of which, rule 93, require protection against first-class trains when using the main track within yard limits.

The passing track at Clintonville is on the south side of the main track, and the accident occurred at the east passing-track switch, a facing-point switch for west-bound trains. Approaching this point from the east there are about 1,000 feet of tangent, followed by a 1-degree 30-minute curve to the left which is about 1,200 feet in length, the accident occurring on this curve about 100 feet east of its western end. The grade is ascending and then level, followed by about 2,500 feet of 0.28 per cent descending grade to the point of accident. The switch target is 14 inches wide, with a 10-inch red circle on it, bordered with white. When the switch is closed this target is not visible, the thin edge being towards the approaching train. At a point 1,483 feet east of this switch is a two-position signal which displays a caution indication, its most restrictive indication, when the switch is open. This signal is manually operated, and is so connected that it must be

set in the caution position before the switch can be opened. On account of timber, and a cut through which the curve extends, the fireman on a westbound train can see the east switch a distance of only 1,000 feet, while the engineman can not see it until just before reaching it, the distant signal, however, can be seen by the engineman a distance of about 1,000 feet. Under rule 104a, signals protecting switches do not relieve trainmen of the duty of protecting by flag, as required by rule 99. The weather was clear at the time of the accident.

Description.

Eastbound freight train extra 1875 consisted of 41 cars and a caboose, hauled by engine 1875, and was in charge of Conductor Lyon and Engineman Kruse. It arrived at Clintonville at about 9.30 a. m., pulled in on the passing track and stopped with the engine fouling the main track at the east passing-track switch. The engine was then cut off, pulled out on the main track, backed westward on that track toward the station, and remained on a side track near the station while the crew were eating. The engine then moved eastward on a side track, headed out on the main track at a wye-track switch, and then was backed down the main track and in on the passing track and coupled to its train. It was standing at this point, fouling the main track, and with the passing-track switch open, when it was struck by train No. 141.

Westbound passenger train No. 141 consisted of 1 baggage car, 1 smoking car, and 1 coach, all of wooden construction, and 1 Pullman sleeping car of steel construction, hauled by engine 1443, and was in charge of Conductor Langlois and Engineman Hoffman. This train is due at Clintonville at 10.05 a. m. It passed New London, 16.2 miles from Clintonville and the last open office, at 9.54 a. m., 26 minutes late, and collided with extra 1875 at 10.20 a. m., while traveling at a speed estimated to have been from 15 to 20 miles an hour.

Both engines remained upright but were considerably damaged. The head end of the baggage car of train No. 141 was telescoped a distance of about 15 feet, while the first car in extra 1875 was forced backward and under the second car. The employee killed was the fireman of train No. 141.

Summary of evidence.

After engine 1875 had been placed on the side track near the station, Conductor Lyon was delayed in eating, and while so engaged Rear Brakeman Willard entered and told him train No. 141 was 30 minutes late, and that he

would take the engine and set out a car which had a hot box. Conductor Lyon said he looked at his watch and then told the brakeman not to make the movement until train No. 141 had arrived, and he assumed the brakeman heard his instructions. Rear Brakeman Willard claimed he inquired of the conductor if he should perform this work and that he was answered in the affirmative, that he then went to the engine and asked Engineman Kruse if they had time enough to make the movement and that the engineman said there was plenty of time, although it was then between 10.10 a. m. and 10.15 a. m., and all they knew about train No. 141, which was already overdue, was the verbal information obtained by one of the brakemen from the operator that the train was about 30 minutes late. Engineman Kruse admitted that he told both brakemen that there was time enough to make the movement, and that this was after he had looked at his watch and also after Brakeman Willard had looked at his time-table and said that train No. 141 was due to leave Bear Creek, 6.3 miles from Clintonville, at 9.51 a. m. Engine 1875 headed out on the main track at the wye-track switch, at which time Engineman Kruse saw nothing to indicate the approach of train No. 141, but he did notice that the distant signal protecting the switch was in the caution position. Head Brakeman Ploutz handled the wye-track switch, the engine had backed in on the passing track and been coupled to the train, he boarded the engine, took a red flag and torpedoes, got off and started ahead to flag train No. 141, which came in sight at about this time. While Brakeman Ploutz was handling the wye-track switch, Brakeman Willard had crossed over to the train, and had run back to the tenth car in readiness to make the cut for the purpose of setting out the car with the hot box, he then heard the whistle of train No. 141, and started running towards the head end of his train, using his hat as a flag in the endeavor to stop train No. 141. Conductor Lyon did not know the engine had left the track near the station, and after hearing the whistle sounded by the engine of train No. 141, was waiting for it to arrive at the station when he heard the noise of the collision. On reaching the scene of the accident he learned for the first time that engine 1875 had fouled the main track when it came to a stop on its arrival at Clintonville, and in this connection Rear Brakeman Willard said that when the train arrived at Clintonville he had intended stopping it with the rear end clear of a certain street crossing and the head end clear of the main track, but that the engineman pulled ahead a little farther than he had intended he should.

Engineman Hoffman, of train No. 141, saw the distant signal governing the east passing-track switch displaying a caution indication, at which time the speed of his train was about 35 miles an hour, and said he then made an air-brake application of about 8 pounds, that the

speed was being gradually reduced, and that when about 150 feet from where the accident occurred Fireman Engel called to him and he at once placed the brake valve in the emergency position and opened the sanders, at about which time he saw a flagman with a red flag which had not been unfurled. Engineman Hoffman thought the speed at the time of making the emergency application was about 20 miles an hour, and that it was about 18 miles an hour at the time of the collision, he had not released the brakes after the first application. It further appeared from the statements of Engineman Hoffman that he had often found signals protecting switches similar to this one displaying a caution indication when the switch was closed and no train near it, and when he first saw the distant signal displaying a caution indication he concluded that this was another instance of that character and contented himself with merely reducing the speed so that he could stop at the switch if properly flagged. Engineman Hoffman did not know where the fireman was riding while the train was rounding the curve, or whether he was in position to observe the position of the switch.

The distant signal involved in this accident is one of 111 installed on this Division at points where the physical conditions are such that the view is obscured. While surprise tests are made with these signals, no record of the same is kept, and the superintendent said no case had come to his attention where an engineman had disregarded a caution indication.

Conclusions.

This accident was caused by extra 1875 occupying the main track on the time of a superior train without authority, and without flag protection, and the failure of Engineman Hoffman, of train No. 141, properly to obey a signal indication.

After the crew of extra 1875 had finished eating, the engine was moved out on the main track, backed on its train, and was standing near the frog of the passing-track switch, with the switch open, all of this being done on the time of the overdue superior train, without any kind of flag protection, and with no other authority than the verbal information given by the operator to one of the brakemen that the superior train was about 30 minutes late. The only excuse offered by any of the employees involved in this movement was that they were relying on this verbal information, or, as Engineman Kruse expressed it, were taking a chance.

Engineman Hoffman saw the distant signal displaying a caution indication, but assured that the switch was closed and that the signal had not been restored to its proper position. There is no excuse for the action of Engineman Hoffman in practically ignoring a restrictive signal indication.

All of the employees involved were experienced men. At the time of the accident the crew of extra 1825 had been on duty about 7 hours after periods off duty of 10 hours or more; the crew of train No. 141 had been on duty about 3 hours after 13 hours or more off duty.

Respectfully submitted,

W. P. BORLAND,

Chief, Bureau of Safety.