

INTERSTATE COMMERCE COMMISSION.

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN RE INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE BALTIMORE & OHIO RAILROAD NEAR FREEPORT, OHIO, ON FEBRUARY 19, 1923.

March 8, 1923.

To the Commission:

On February 19, 1923, there was a rear-end collision between two freight trains on the Baltimore & Ohio Railroad near Freeport, Ohio, resulting in the death of two employees. This accident was investigated in conjunction with a representative of the Public Utilities Commission of Ohio.

Location and method of operation.

This accident occurred on the C. L. & W. Sub-Division of the Akron Division, extending between Holloway and Lorain, Ohio, a distance of 123.6 miles; in the vicinity of the point of accident this is a single-track line over which trains are operated by time-table and train orders, with a manual block-signal system providing for an absolute block behind passenger trains. Under the rules, trains are required to keep at least five minutes apart, except in closing up at stations. The accident occurred about 15 feet west of the eastern end of bridge No. 9, located approximately $2\frac{1}{2}$ miles west of the station at Freeport; approaching this point from the east the track is tangent for about 3 miles, followed by a 6-degree curve to the right about 1,600 feet in length, the accident occurring on this curve at a point about 642 feet from its eastern end. The grade is level for more than 1,200 feet east of the point of accident. Owing to a rock cut just east of the bridge the view from the engineman's side of a westbound train is limited to about 12 car lengths. The weather was clear at the time of the accident, which occurred at about 9.18 a. m.

Description.

Westbound freight train first No. 83 consisted of 41 cars and a caboose, hauled by engine 4244, and was in charge of Conductor Whitehill and Engineman Stephan. This train passed Piedmont, the last open office, 3.8 miles from Freeport, at 8.33 a. m., 2 hours and 8 minutes late, passed train No. 73 at Freeport, made a stop about 1 mile west of this point on account of a brake beam being down, and after proceeding approximately $1\frac{1}{2}$ miles farther came to a stop with the rear end of the caboose about 15 feet west of the eastern end of bridge No. 9, this stop being on account of brake-pipe leakage causing the brakes to creep on. Shortly after coming to a stop at this point the rear of the train was struck by train No. 73.

Westbound freight train No. 73 consisted of 12 cars and a caboose, hauled by engine 2800, and was in charge of Conductor DeChant and Engineman Duckworth. This train left Freeport shortly after train first No. 83 passed, and collided with the rear end of that train while traveling at a speed estimated to have been between 15 and 18 miles an hour.

Engine 2800, together with its tender, was derailed to the right and came to rest on its right side, its head end being in the creek and the rear end near the top of the bank. The caboose of train first No. 83 was knocked into the creek, while the rear truck of the adjacent car was derailed. The employees killed were the engineman and head brakeman of train No. 73.

Summary of evidence.

At Freeport, train first No. 83 passed train No. 73 in accordance with instructions. On reaching a point just west of the crossover which connects with a long siding paralleling the main track on the north, this crossover being about 2,600 feet west of the house track switch at Freeport, train first No. 83 was brought to a stop on account of a hanging brake beam. Flagman McBride immediately went back to flag, and said that on being recalled he placed two torpedoes on the rail about 7 or 8 car lengths west of the crossover switch. On his way back to the caboose he noticed train No. 73 pulling out. After getting started he stood on the rear platform of the caboose, and noticed train No. 73 gaining on them, therefore on reaching a point about five car lengths east of the curve on which the accident occurred he threw off a five-minute fusee, at which time his train was traveling at a speed of about 8 or 10 miles an hour, and train No. 73 was about 80 or 90 car lengths behind. The fusee did not stick up, but stopped on the ballast on the engineman's side of the track with the flame next to the rail. As train first No. 83 was traveling at a low rate of speed, the engineman sounded a whistle signal indicating that the brakes were sticking, and as train No. 73 was following closely, Flagman McBride got off when his train was about $\frac{1}{2}$ car length east of bridge No. 9, and ran back to flag, and he said that on reaching a point about one car length from the straight track the engine of train No. 73 passed him, the accident occurring immediately afterwards. Flagman McBride stated that when train No. 73 came to a stop he was opposite the car ahead of the caboose, and the burning fusee was 7 or 8 car lengths to the rear of the caboose, Flagman Bryant of that train later picking it up and extinguishing it. Flagman McBride stated that the speed of his train entering the cut was such that he could easily have gotten off without personal injury, that he was riding on the rear of the caboose watching the following train, and that had he gotten back to the straight track the accident would undoubtedly have been averted, provided Engineman Duckworth was keeping a proper lookout ahead. Conductor Whitehill knew that train No. 73 was following closely

and gaining on them, that his train was not maintaining proper speed, and that this cut just east of bridge No. 9 was one of the most dangerous places on this division for the engineman of a following train to see a caboose, and said the precautions he took were to instruct Flagman McBride to put down torpedoes west of the crossover at Freeport, and to throw off a lighted fusee just before entering the cut, at which time the speed was about 7 miles an hour. Engineman Stephan stated as the engine of train first No. 83 started around the curve he looked back and saw train No. 73 about 40 or 50 car lengths from his caboose. His engine was about 10 car lengths west of the bridge, moving at a speed of 15 or 18 miles an hour, when he noticed the brake-pipe pressure being reduced, the train stalling when the engine was about 35 car lengths west of the bridge.

As train first No. 83 came to a stop on the main track just west of the crossover at Freeport, Conductor DeChant and Engineman Duckworth, of train No. 73, decided to pull out of the house track, head in at the crossover, and pull around train first No. 83, however, on starting to make this move, the flagman of train first No. 83 was called in, and it was therefore decided to follow that train. Fireman Moore was on the deck of the engine from the time the torpedoes were exploded and the whistle signal sounded in acknowledgment, until just before the accident occurred; he noticed Engineman Duckworth consulting his time-table just before rounding the curve, at which time Head Brakeman Hart was on the left side of the cab. The first intimation Fireman Moore had of anything wrong was when the air brakes were applied in emergency, and on looking out he saw the caboose of train first No. 83 about three car lengths distant. Fireman Moore stated he had handled engine 2800 at Piedmont on this trip, and there were no steam leaks on the engineman's side to interfere with vision, also that he was of the impression the speed of his train was excessive in view of the close proximity of train first No. 83. Conductor DeChant stated that after the accident he went to the head end of his train, meeting Flagman McBride about five car lengths from the point of accident; while looking around Conductor Whitehill informed him a lighted fusee had been dropped. He immediately ran back to the rear of train No. 73, and on reaching the caboose saw Flagman Bryant, of his own crew, holding the burning fusee. Flagman Bryant stated the fusee was about three car lengths east of the caboose, and had been burning about two and one-half minutes when he picked it up; the conductor said he thought the fusee had been burning about four minutes, and that about two minutes elapsed between the time the accident occurred and the time he saw the fusee. The flagman also said the fusee was in plain view of a train approaching from the east.

Assistant Road Foreman of Engine Canfield made an examination of engine 3300 immediately after the accident and found slid flat spots on the driving wheels, about 6 inches in length, while the rails showed that these wheels started sliding at a point 125 feet east of where the accident occurred.

Conclusions.

This accident was caused by the failure of Engineman Duckworth, of train No. 73, properly to observe and obey the flagging signals of Flagman McBride, of train first No. 83.

Torpedoes had been left on the main track just west of Freeport, while a lighted fusee had been dropped off near the point of the curve. Apparently no attention was paid to these signals in the way of reducing speed, and it was not until his engine was very close to the caboose of train first No. 73 that Engineman Duckworth applied the air brakes. That the brakes took hold well is fully evidenced by the flat spots on the driving wheels and marks on the rails, while the conductor said he braced himself, thinking the train had broken in two. The fusee which was found burning after the accident apparently had been burning approximately two minutes at the time of the accident, and if train first No. 83 had traveled at a speed of 6 or 8 miles an hour from that point to the point of accident it would have consumed about one minute, which would have given the flagman about a minute in which to provide further protection. The distances and time intervals are so short, however, that it is impossible to say definitely exactly how much time Flagman McBride had at his disposal, or that he could have provided materially better protection than was provided under the circumstances.

The manual block system in use on this line provided only for the blocking of trains behind passenger trains, and provided no protection in the case of a train following a freight train. Had an adequate block system applying to all trains been in use on this line, this accident would probably have been prevented.

While several members of both crews had been in the service but a short time, those in direct charge of the trains involved were experienced men. At the time of the accident none of the employees had been on duty in violation of any of the provisions of the hours of service law.

Respectfully submitted,

W. P. BORLAND,

Director.