

INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN RE
INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE
TOLEDO, PEORIA & WESTERN RAILROAD NEAR BREEDS, ILL.,
ON FEBRUARY 18, 1929.

May 31, 1929

To the Commission:

On February 18, 1929, there was a rear-end collision between a mixed train and a light engine on the Toledo, Peoria & Western Railroad near Breeds, Ill., which resulted in the injury of two passengers.

Location and method of operation

This accident occurred on that part of the Western Division extending between Peoria, Ill., and Keokuk, Iowa, a distance of 112.8 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, no block-signal system being in use. The accident occurred at a point approximately 1.3 miles east of Breeds, approaching this point from the west there is a compound curve to the left 1,637.9 feet in length, ranging in curvature from $4^{\circ} 20'$ to 5° , tangent track for a distance of 369.4 feet, and then a compound curve to the right 2,112.8 feet in length, the maximum curvature of which is $4^{\circ} 06'$, the accident occurring on this latter curve at a point about 1,420 feet from its western end where the curvature is $3^{\circ} 02'$. The grade is 1.07 per cent ascending for eastbound trains for a distance of approximately 3,000 feet to the point of accident and for some distance beyond that point. Owing to an embankment on the inside of the curve on which the accident occurred the view from an approaching eastbound engine is restricted to from 300 to 600 feet.

The weather was clear at the time of the accident, which occurred at about 5.50 a.m.

Description

Eastbound mixed train No. 2 consisted of 15 freight cars, 1 combination mail and baggage car and 1 coach, hauled by engine 10, and was in charge of Conductor Lionberger and Engineman LaBodie. At La Harpe, 61.9 miles west of Breeds, the crew received a copy of train

order No. 301, Form 10, which read in part as follows:

"Eng 54 run extra Bushnell to Hollis
ahead of No 2 unless overtaken ***".

Train No. 2 left La Harpe at 1.25 a.m., 2 hours and 55 minutes late, and after setting out some cars at Bushnell, 37.3 miles from Breeds, the train departed from that point at 3.43 a.m., 3 hours and 13 minutes late. Stops were made at four subsequent points, including Breeds, and the train was ascending the grade east of Breeds at a low rate of speed when its rear end was struck by engine 54.

Light engine 54 was in charge of Engineman Amick and Fireman Taylor. This engine doubleheaded westbound train No. 5 from Peoria to Bushnell, at which latter point the crew received a copy of train order No 301, Form 10, previously mentioned, and while engine 54 was still at this point train No. 2 arrived and departed. Engine 54 left Bushnell at 4.05 a.m., and after passing Breeds it collided with train No. 2 while traveling at a speed variously estimated to have been between 18 and 35 miles per hour.

The rear vestibule of the coach was crushed while the forward end of this car overrode the steel underframe of the combination car and telescoped it about 10 feet, the forward end of engine 54 was also damaged. None of the equipment was derailed except one pair of wheels of the rear truck of the coach.

Summary of evidence.

Engineman LaBodie, of train No. 2, stated that the last stop was made at Breeds and after departing from that point the train attained a speed of about 25 miles per hour before reaching the grade on which the accident occurred, but at this approximate locality the speed began to reduce gradually, on account of a brake sticking, until the train was traveling at a speed of about 4 miles per hour, he then felt a jar and his train came to a stop. He further stated that shortly before the accident occurred the fireman had informed him that a brake was sticking on the 5th or 6th car from the rear end of the train and he tried to release it by moving the brake-valve handle to the full release position and then returning it to the running position. This action failed to release the brake and

he then sounded a whistle signal to indicate to the train crew that a brake was sticking but to his knowledge no one attempted to release the brake. Engineman LaBodie further stated that no trouble had been experienced with the brakes until after his train left Breeds.

The statements of Fireman Steubinger, of train No 2, were to the effect that the speed of his train was not more than 20 miles per hour at any time after leaving Breeds and that from the way his train was operating he surmised the brakes were sticking so he looked back and observed fire flying and informed the engineman to this effect. He corroborated the statements of the engineman as to how the engineman tried to release the brakes and also as to the sounding of the whistle signal.

Conductor Lionberger, of train No. 3, stated that he received train order No. 301 and when he arrived at Bushnell he noticed engine 54 was then at that point, and after setting out some cars his train departed ahead of that engine. Several stops were made after leaving Bushnell and the flagman threw off fuses at three points, on Bushnell hill, and when stopping at Cuba and at Canton, the last-named point being 5.9 miles from Breeds. The usual speed was maintained after departing from Breeds until the train rapidly slowed down on the grade on which the accident occurred. Just as soon as speed began to reduce both he and the flagman started towards the rear of the coach, in which they had been riding, and upon reaching the rear platform he heard engine 54 approaching. He said he immediately got off and started back giving stop signals with a red lantern, not taking time to light a fuse, and had reached a point about two and one-half coach-lengths from his train when the headlight of engine 54 came into view about 15 freight car-lengths distant, the flagman accompanied him and was giving stop signals with a white light. Conductor Lionberger said he continued to give stop signals but received no response from the approaching engine and when that engine passed him he shouted a warning to the engineman but did not know whether the engineman heard him as the cab windows were closed. He said the speed of engine 54 was 30 or 35 miles per hour and that it was still working steam at the time of the accident. He also said that the marker lights were burning brightly on the rear of his train and that the speed was about 10 miles per hour at the time he got off. Conductor Lionberger further stated that he was aware that engine 54 was following his own train and that in his opinion all the precautions were taken that were necessary, as his train had maintained the usual speed until just before the occurrence of

the accident

The statements of Flaxman Landon, of train No. 2, practically substantiated those of Conductor Lionberger as to the movement of their train and the throwing off of fuses, as well as the speed of engine 54 as it approached the point of accident and the failure of the engineman of that engine to respond to their signals, except that he estimated the speed of his train at 5 or 6 miles per hour at the time they started back to flag. He also thought they had done all that was required of them for the protection of their train, a fusee thrown off west of the embankment which restricted the view might have prevented the accident but when his train was passing that point he did not anticipate any difficulty with the brakes.

Head Brakeman Sharpe, of train No. 2, stated that he was riding in the rear car and that the speed was about 20 miles per hour when the train started to ascend the grade east of Breeds. While going up the hill the train slowed down to about 6 or 7 miles per hour, which was more than usual, and as he could hear a noise indicating that a brake was sticking he got off the train, ran forward and boarded the first car ahead of the combination car. He then proceeded over the train to the 7th car from the rear, this being the car on which the brakes were sticking. He started bleeding the reservoir and was still engaged in this work when he heard the conductor shout, he looked back and for the first time saw the approaching engine. He estimated the speed of his train at the time of the accident at 5 miles per hour.

Engineman Amick of extra 54, stated that before he received his orders at Bushnell he observed train No. 2 depart from that point. His engine made three stops between Bushnell and the point of accident. No fusees were encountered en route nor did he see the markers of train No. 2 at any time until just before the occurrence of the accident. His engine was traveling at a speed of between 30 and 35 miles per hour as it was rounding the curve on which the accident occurred, with the cab window open on his side of the engine, but he did not see the markers of train No. 2 until he was about eight car-lengths from them which condition he attributed to the restricted view in that locality together with steam blowing up in front of the cab and interfering with his vision, at about the same time he also noticed some one on the north side of the track waving stop signals from a point about one coach-length from the rear of the train. Engineman Amick

at once reversed the engine, without shutting off steam, applied the brakes in emergency and opened the sanders, the brakes did not seem to hold properly, which he thought was due to the cold weather, the temperature being below zero at the time. The flagman's signals were not acknowledged, as he did not have time in which to do so. He estimated the speed of his engine at 18 or 20 miles per hour at the time of the accident. Engineman Amick further stated that at the time of the collision the flagman was about even with his engine cab, while after the accident he noticed the conductor of train No. 2 at the foot of the fill about opposite the rear of the tender. It also appeared from Engineman Amick's statements that while his engine was moving at a rapid rate of speed at a point where the view was restricted yet it was not exceeding the speed limit, which is 35 miles per hour, and he said he was depending on the crew of train No. 2 to provide protection.

Fireman Taylor, of engine 54, stated that he knew train No. 2 was ahead of his engine and that he was on the alert at all times and was riding on his seat box as his engine approached the point of accident, but on account of his position on the outside of the curve he did not see the markers until just before the collision occurred. He did not see any lighted fusees en route neither did he see anybody flagging while his train was approaching the point of accident. Fireman Taylor also said that the engineman did not shut off steam but did reverse the engine, which he thought was done at a point only 6 or 8 feet from the rear of train No. 2, and he did not think the brakes were applied prior to the accident. It was the fireman's opinion that his engine had been operated at a uniform speed of 15 or 20 miles per hour between Bushnell and the point of accident.

Master Mechanic McPake stated that he inspected engine 54 at the scene of the accident but failed to find steam escaping to such an extent that the view was restricted. Trainmaster Burkhalter rode on engine 54 from the point of accident to Peoria, the engine being operated under its own power, and from his observations there was no leakage of steam from any part of the engine that would obscure the vision of the engineman or fireman.

Conclusions

This accident was caused by failure to provide proper flag protection, for which Conductor Lionberger and Flagman Landon, of train No 2, are responsible

The rules provide that when a train is moving under circumstances in which it may be overtaken the flagman must take such action as may be necessary to insure full protection, by night, or by day, when the view is obscured lighted fuses must be thrown off at proper intervals. Both Conductor Lionberger and Flagman Landon knew that engine 54 would follow their train from Bushnell to Peoria and, according to their statements, three fuses were thrown off at different points before the arrival of the train at Breeds but none was thrown off after leaving that point because they did not think it necessary in view of the fact that their train was maintaining the usual rate of speed until it started to reduce speed rapidly as result of the brakes sticking on one of the cars. The statements of the engineman and fireman of their own train, however, indicated that the train began to slow down some distance west of the point of accident, and there is also the statement of the head brakeman that he got off the rear car, ran ahead and boarded the third car from the rear, and then went forward over the train until he reached the seventh car from the rear, he began bleeding this car and was so engaged when he first realized that an accident was imminent. There seems little doubt that the speed has been reduced gradually, and at a sufficient distance from the actual point of accident to have required the conductor or flagman to throw off a lighted fuse. This was particularly necessary in view of the fact that the view was materially obscured.

The employees involved were experienced men, except Fireman Taylor of engine 54, who entered the service August 14, 1928, at the time of the accident none of them had been on duty in violation of any of the provisions of the hours of service law.

Respectfully submitted,

W. P. BORLAND

Director.