

INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN RE
INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE
NEW YORK, CHICAGO & ST. LOUIS RAILROAD NEAR TIPTON,
IND., ON MARCH 12, 1928.

April 12, 1928.

To the Commission:

On March 12, 1928, there was a rear-end collision between two freight trains on the New York, Chicago & St. Louis Railroad near Tipton, Ind., resulting in the death of two employees.

Location and method of operation

This accident occurred on that part of the Lake Erie and Western District of the Peoria Division extending between Rankin Yard, Ill., and Tipton, Ind., a distance of 104.3 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 937 feet west of the west yard-limit board at Tipton Yard; approaching this point from the west the track is tangent for more than 2 miles, then there is a slight curve to the right 145 feet in length with a maximum curvature of $0^{\circ} 54' 30''$, followed by 1,048 feet of tangent to the point of accident, this tangent extending for a considerable distance beyond that point. The grade for eastbound trains is generally descending, being 0.133 per cent at the point of accident. The speed limit for freight trains is 40 miles per hour.

There was a dense fog at the time of the accident, which occurred at about 2.50 a. m.

Description

Eastbound freight train second No. 62 consisted of 59 cars and a caboose, hauled by engine 508, and was in charge of Conductor Maish and Engineman Cooper. At Frankfort, Ind., the last open office, 24.9 miles west of Tipton, the crew in charge of this train received a copy of train order No. 5 which in part provided that the second and third sections of train No. 62 were to wait at

Kempton, 9.9 miles from Tipton, until 2.30 a. m. for west-bound extra 522. Train second No. 62 left Frankfort at 1.46 a. m., met extra 522 at Kempton, and was entering Tipton Yard at a speed estimated to have been between 6 and 10 miles per hour when its rear end was struck by train third No. 62.

Eastbound freight train third No. 62 consisted of 58 cars and a caboose, hauled by engine 521, and was in charge of Conductor Allen and Enginemen Rees. This train left Frankfort at 2.02 a. m., 16 minutes behind the second section, having first received a copy of train order No. 5, previously mentioned, met extra 522 at Kempton, and was approaching Tipton Yard at a speed estimated to have been between 20 and 40 miles per hour when it collided with the rear end of train second No. 62.

The caboose of train second No. 62 was demolished and the three cars ahead of the caboose were derailed and damaged. Engine 521, together with its tender, was derailed to the south and came to rest on its right side at the bottom of an 8-foot embankment, parallel with the track, at a point 488 feet east of the point of accident, the first four cars in this train were also derailed. The employees killed were the conductor of train second No. 62 and a brakeman, who was deadheading, both of whom were riding in the caboose.

Summary of Evidence

Flagman Jung, of train second No. 62, stated that a light air-brake application was made as his train approached Tipton Yard, the brakes were then released and this was followed by another application of the air brakes. On going to the door of the caboose he saw a small light about 30 or 40 car-lengths distant, and he said he opened the door and threw off a lighted fusee at a point east of the curve. The speed of his train at this time was about 10 or 12 miles per hour. Flagman Jung remained on the rear platform, looking first at the sky and then off towards the south, and on hearing the engine of the following train working steam, a very light exhaust, he looked around and saw the engine closing up on the caboose, moving at a speed he estimated to have been between 35 and 40 miles per hour. Flagman Jung said that he then shouted a warning of danger, without having time to go inside the caboose, and jumped off just before the accident occurred. He estimated that he threw off the fusee at a point about 15 car-lengths west of the point of accident, and said he had not heard the following train whistle for road crossings in that vicinity. Flagman Jung further stated that he had flagged train third No. 62 at Frankfort, using two torpedoes and a lighted fusee for that purpose. At Hillisburg, 15.8 miles west of Tipton, at which point the second and third sections of train No. 62 had been ordered

to wait until 2.20 a. m., it was necessary for his train to wait about six minutes; Flagman Jung did not go back to flag at this point, nor did he put down torpedoes or throw off a lighted fusee, saying that he depended entirely on his hearing and on the wait order, together with the fact that the following train had been behind his train at Frankfort and that the crew therefore knew his train was immediately ahead of them. On departing from Hillisburg the conductor remarked that he was tired and was going to rest his legs, and the flagman did not pay any further attention to him. The speed of the train was reduced as it passed Kempton, and on going out on the rear platform of the caboose he saw extra 522 on the passing track. Flagman Jung said it was foggy at the point of accident, but it had not occurred to him to throw off a lighted fusee when the speed of his train was being reduced, as it approached Tipton Yard, for the reason that the following train had the same orders as his own train and he expected the engineman of that train to be looking out for his own train all of the time. He admitted that had he thrown off lighted fusees, as required by the rules, the accident probably would have been averted.

The statements of Engineman Cooper, Fireman Mink and Head Brakeman Brown, of train second No. 62, all of whom were riding on the engine, were to the effect that they were unaware of anything wrong prior to the accident, which occurred in a dense fog. Engineman Cooper said his vision was restricted to about five or six car-lengths, that he knew the first section of train No. 62 was ahead of him, although he did not know how far, and that for this reason he reduced the speed of his train while entering the yard in the fog; these employees estimated the speed of their train to have been from 6 to 10 miles per hour at the time of the accident. It also appeared from their statements that their train was not brought to a stop at Hillisburg, as was stated by Flagman Jung, but that it approached that point at a low rate of speed in order to use up the time given to the opposing train in the wait order.

Engineman Rees, of train third No. 62, stated that his train was flagged and brought to a stop behind the second section of the train at Frankfort. After the second section had departed his own train took water and picked up cars, also receiving a copy of train order No. 5 previously mentioned. Train third No. 62 then met extra 522 at Kempton, and encountered dense fog between that point and Tipton, and Engineman Rees said that at Goldsmith, 5.7 miles west of Tipton, he eased off on the throttle and practically allowed the train to drift to Tipton. He estimated the speed of his train to have been between 20 and 25 miles per hour as it approached the west yard-limit board

at Tipton, and when about 30 car-lengths from this yard-limit board he started to make an air-brake application, preparatory to entering the yard. At about this time he saw the markers of a caboose suddenly appear through the fog, apparently not more than three car-lengths distant, and he at once made an emergency application of the air brakes and started back in to the tender, the accident occurring immediately afterwards. After the engine came to rest Engineman Rees got out of the tender, ran out to the road that parallels the track at this point, and then noticed a burning fusee about at the point where the accident occurred. Engineman Rees stated, however, that he had not been flagged either by hand signal, fusee or otherwise, and that if he had been properly flagged the accident would not have occurred. He expressed the opinion that he would have had his train under control on entering the yard had it not been for the accident, although he acknowledged that he would not have had it under complete control on passing the yard-limit board. He admitted that he was fully aware of the fact that there was a train immediately ahead of his own train but said that he expected some protection would be afforded the rear end of that train, as no flag signal was encountered he thought that the train ahead was in the yard, while according to instructions he said he had received at Frankfort, from the conductor, his own train was not to enter the yard but was to continue on the main track.

Fireman Newton, of train third No. 62, stated that at Goldsmith the fog was so dense that his vision was restricted to about two car-lengths, he estimated the speed of his train to have been 40 miles per hour when passing Goldsmith and said that the throttle was partly closed after passing that point but that the speed of the train had not been reduced materially when the markers of the caboose ahead suddenly appeared through the fog, all three of the men on the engine seeing the markers at about the same time. The fireman jumped when the engine was about 10 feet from the caboose and he said that as he did so there was a man standing on the rear platform of the caboose with a lighted fusee in his hand, this being the only rear-end protection afforded for the train. Fireman Newton further stated that he had full knowledge that the preceding train was only a short distance ahead of his own train and that he began to feel uneasy as his train approached the yard-limit board in a dense fog at a speed of about 35 miles per hour, which he did not consider a safe speed, and that he was just about to say something to the engineman when the latter started to apply the air brakes, at about the time the caboose was seen.

Head Brakeman Olson, of train third No. 62, estimated the speed to have been about 40 miles per hour passing through Goldsmith and the same at a public road crossing located 6,600 feet west of the point of accident, where the engineman shut off steam and allowed the train to drift. The head brakeman estimated that the speed had decreased to between 20 and 25 miles per hour and said the engineman had just started to apply the air brakes when they saw the markers of the caboose, about five car-lengths distant, and at the same time the head brakeman also saw the flagman on the rear platform of the caboose light a fusee and throw it off, no other rear-end protection being afforded. The statements of the engineman, fireman and head brakeman indicated that the headlight on their engine was burning properly and that the air brakes were in working order.

Conductor Allen and Flagman Wright were riding in the caboose of the third section and were unaware of anything wrong prior to the accident. Their estimates as to the speed of their train ranged from 30 to 35 miles per hour when it was passing Goldsmith and from 20 to 30 miles per hour at the time of the accident. Conductor Allen said that in view of the weather conditions he did not think it safe to have approached the yard at a speed of more than 10 miles per hour. He further stated that he had said nothing to the engineman about pulling down the main track at Tipton.

Conclusions

This accident was caused by the failure of Conductor Maish and Flagman Jung, of train second No. 62, properly to protect their train by flag, a contributing cause was the failure of Engineman Rees, of train third No. 62, to approach yard limits under proper control in view of the existing weather conditions.

Under the rules it is required that when a train is moving under circumstances in which it may be overtaken by another train, either at night or during the day when the view is obscured, the flagman must throw off lighted fusees at proper intervals. There was some conflict in the testimony as to what rear-end protection, if any, was actually afforded by Flagman Jung; according to his own statements he did not throw off a fusee until just before the accident occurred, while the statements of the employees on the engine of the following train indicated that he lighted a fusee when the two trains were less than 100 feet apart. Flagman Jung said he did not throw off a fusee when the speed of his train was being reduced because of the fact that the following train had the same orders as his own train and he expected the engineman of that train to be looking out for the second section all of the time. He

admitted that had he thrown off lighted fusees, as required, the accident probably would not have occurred. The reason for the failure of Conductor Maish to see that proper protection was afforded is not known, as he was killed in the accident, he was in position to see that his train was being properly protected, had he been paying attention to the matter, and for his failure he is equally responsible with Flagman Jung.

Engineman Rees was fully aware that the preceding train was only a short distance ahead of his own train, yet he acknowledged that he would not have had his train under complete control on passing the yard-limit board, in fact, considering the evidence as a whole, there is no doubt that train third No. 62 was approaching Tipton at a probable speed of 30 miles per hour, in a fog so dense as to restrict vision to a few car-lengths. Had he properly controlled the speed of his train approaching the yard limits, as seems to have been the case with the engineman of the preceding train, it is probable the accident would have been averted, in spite of the negligence of Flagman Jung.

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.

All of the employees involved were experienced men. At the time of the accident the crew of train second No. 62 had been on duty less than $8\frac{1}{4}$ hours and the crew of train third No. 62 less than $5\frac{1}{4}$ hours, prior to which both crews had been off duty 8 hours or more.

Respectfully submitted,

W. P. BORLAND,

Director.