

## INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY  
IN RE INVESTIGATION OF AN ACCIDENT WHICH  
OCCURRED ON THE CHICAGO, ST. PAUL, MINNEA-  
POLIS AND OMAHA RAILWAY NEAR CHIPPEWA  
FALLS, WIS., ON DECEMBER 30, 1926.

January 20, 1927.

To the Commission:

On December 30, 1926, there was a rear-end collision between a passenger train and a freight train on the Chicago, St. Paul, Minneapolis and Omaha Railway near Chippewa Falls, Wis., which resulted in the death of one employee and the injury of two passengers and two employees.

Location and method of operation

This accident occurred on that portion of the Eastern Division extending between Eau Claire, Wis., and Duluth, Minn., a distance of 157.6 miles. In the vicinity of the point of accident this is a single-track line over which trains are operated by time-table, train orders and a manual block-signal system. The accident occurred at a point 1.4 miles north of Chippewa Falls, within yard limits which extend from Norma, 1 mile north of the point of accident, to a point south of Chippewa Falls. Approaching the point of accident from the north there is a long tangent and a 4° curve to the right 2,468 feet in length, the south switch of Norma passing track being upon tangent track just south of the leaving end of this curve. This tangent is 480 feet in length and is followed by a 4° curve to the left 595 feet in length, 130 feet of tangent, and then another 4° curve to the left which is 907 feet in length, the accident occurring on the last-mentioned curve at a point about 300 feet from its northern end. The grade is 1.003 per cent descending for southbound trains, while slightly more than 1 mile south of the point of accident is the beginning of an ascending grade of more than 1 per cent, and in order to ascend this latter grade it is necessary for southbound tonnage freight trains to double their trains up the grade. On account of

numerous cuts, as well as dense woods on each side of the track, the range of vision of engine crews is very materially obscured approaching the point of accident.

The weather was clear at the time of the accident, which occurred at 1.23 or 1.24 a.m.

#### Description

Southbound freight train extra 414 consisted of 55 cars and a caboose, hauled by engine 414, and was in charge of Conductor Cartwright and Engineman McDonald. This train left Bloomer, the last open office, at 11.12 p. m., according to the train sheet, and entered the passing track at Norma, 12.3 miles south of Bloomer, at about 11.50 p. m. After meeting train No. 71 extra 414 pulled out on the main track at the south passing-track switch at about 12.25 a. m. according to the statements of the crew, and about one hour later its rear end was struck by train No. 310 while standing at a point about 1,300 feet south of the passing-track switch.

Southbound passenger train No. 310 consisted of one baggage car, one smoking car, one coach, and one Pullman sleeping car, all of steel construction, hauled by engine 386, and was in charge of Conductor Enockson and Engineman Bailey. This train passed Bloomer, according to the train sheet at 1.08 a. m., five minutes late, and as it passed that station the crew received a caution card which called attention to the fact that extra 414 departed from Bloomer at 11.12 p. m. and had not cleared the block, and directed them to proceed prepared to stop within their range of vision. Train No. 310 passed Norma approximately on time, according to the statements of the crew, having traveled a distance of 12.3 miles in about 13 minutes, and collided with the rear end of extra 414 while traveling at a speed estimated to have been between 15 and 25 miles per hour.

Engine 310 demolished the caboose of extra 414 and then mounted the loaded gondola immediately ahead of the caboose, coming to rest on this car in an upright position; with the exception of the tender, none of the other equipment in either train was derailed or damaged. The employee killed was the conductor of extra 414.

### Summary of evidence

Engineman McDonald, of extra 414, said he started to head out on the main track at 12.25 a. m., with sufficient time in which to double to Koll, a station 1.3 miles beyond Chippewa Falls. He brought his train to a stop at a point where he figured the caboose would be clear of the passing-track switch and waited a few minutes for the purpose of enabling the flagman to close the switch and overtake the train. He then began to move the train ahead slowly and continued until it reached a point where the caboose was visible from the fireman's side of the engine, at which time the fireman and also the head brakeman told him that a stop signal was being given from the caboose. He then again brought the train to a stop and the head brakeman told him that he had experienced difficulty in operating the switch when he opened it and that possibly the flagman had not been able to close the switch. After waiting 10 or 15 minutes he again started to proceed but received another stop signal and accordingly again brought the train to a stop. After another wait he proceeded and once more he received a stop signal. It was then about 12.50 a. m. and after talking over the matter with the fireman and head brakeman he began to be anxious about the possibility of delaying train No. 310 and told the head brakeman that they would cut the train and begin to double the grade from that point. The head brakeman started back to make the cut and at the same time to apply hand brakes so that the rear portion of the train would not move, and in the meantime Engineman McDonald watched the time closely and when it was 1.03 a. m. he remarked to the fireman that train No. 310 was then due out of Bloomer, and about two minutes afterwards he sounded the whistle signals for the flagman to protect the train. At this time the fireman said he saw a light at the caboose which at the time they supposed was the conductor's lantern, thinking that the flagman was back at the switch. Shortly afterwards the head brakeman made the cut behind the thirtieth car and on receiving a proceed signal from the head brakeman Engineman McDonald proceeded with the head end of the train at about 1.07 a. m. and did not return for the rear portion of the train until after the accident had occurred. The statements of Fireman Willis and Head Brakeman Stegeman practically corroborated those of Engineman McDonald. The head brakeman also stated that when he opened the passing-track switch

for the train to head out on the main track he experienced difficulty in seating the switch lever in its socket and he estimated that it took him about five minutes to line the switch properly.

Flagman Staysa, of extra 414, said that he and Conductor Cartwright had supposed that their train would remain at Norma for train No. 310 but when it began to pull out of the passing track he did not look at his watch nor did he know whether or not the conductor knew what time it was; the conductor was lying down when the train departed. Flagman Staysa got off the caboose when it passed the switch and he said he had difficulty in closing the switch, consuming about 10 minutes' time in doing so. He then started for the caboose which had stopped at a point about 12 or 15 car-lengths south of the switch and had just reached it when the train started and he said that when he boarded the caboose the conductor was still lying down but was not asleep. As soon as the caboose had reached a point from which he could see the engine he gave a proceed signal, which signal was mistaken for a stop signal and the train was stopped accordingly. He then gave another proceed signal but the train did not start immediately. Finally it started ahead again and he then gave the proceed signal, which once more was mistaken for a stop signal. Flagman Staysa then thought that the engineman intended to double to Koll from this point and started ahead to assist in the movement, at which time the conductor was still lying down in the caboose. He said the conductor had told him that they would double the grade and that he was under the impression when he left the caboose that the conductor would take care of the duty of protecting the train by flag although there had not been any definite understanding between them on this point. After Flagman Staysa had walked ahead about 15 car-lengths he heard the engineman whistle out a flag and he immediately returned to the caboose, but he said that on account of the fact that the snow was up to his hips it took him about 15 minutes to reach the head end of the caboose. He then looked at his watch and saw that it was 1.22 a. m. The conductor was asleep and Flagman Staysa said he walked through the caboose picking up his flagging equipment and had reached the rear door when he saw train No. 310 approaching; he immediately called a warning to the conductor and jumped just before the collision occurred.

Flagman Staysa further stated that he did not think of train No. 310 from the time his train left Bloomer, which was about 11.12 p. m., until he heard the engineman whistle out a flag, and he admitted that this was the reason no flag protection was provided.

Engineman Bailey, of train No. 310, said that when passing Bloomer at 1.05 or 1.06 a. m. he reduced speed for the purpose of picking up the caution card, which informed him that extra 414 had entered the block at 11.12 p. m. He reduced the speed at Norma to about 15 miles per hour and allowed the train to drift from that point, and he said that the speed had increased to about 25 miles per hour when the fireman suddenly called a warning and he applied the air brakes in emergency. He thought the speed had been reduced to about 15 miles per hour at the time the accident occurred. Engineman Bailey further stated that from his position on the outside of the curve he did not see the caboose until it was about one car-length distant and he estimated that his train was about five car-lengths distant from the caboose when the fireman called to him. The statements of Engineman Bailey were substantially corroborated by Fireman Jorgenson; the fireman estimated that the caboose was about six-car-lengths distant when he first saw it.

The statements of Conductor Enockson, Head Brakeman Lee and Flagman Pepin, of train No. 310, indicated that their train passed Norma at a speed of 25 or 30 miles per hour and that the first knowledge they had of anything wrong was when they felt an emergency application of the air brakes a few seconds before the collision occurred. Conductor Enockson said his train passed Norma on time and collided with extra 414 at about 1.23 or 1.24 a. m., while Flagman Pepin fixed the time of the accident at about 1.25 a. m.

Roadmaster Stockwell said he had examined the south passing-track switch at Norma on December 9, at which time it fitted properly and was easy to operate, while when he inspected it again on the day following the accident he found it to be in perfect condition. Roadmaster Carlson also inspected the switch on the day following the accident, accompanied by Roadmaster Stockwell, and he said the

whether any flag protection was being provided.

The distance between Bloomer and Norma is 12.3 miles and the statements of the crew of train No. 310 indicated that their train was on time when it passed Norma, at which point it is due at 1.21 a. m. The train sheet shows that this train passed Bloomer at 1.08 a. m., which would indicate that the train traveled the distance between the two points at an average speed of nearly 60 miles per hour. Engineman ~~Boyle~~, however, said his train passed Bloomer at 1.05 or 1.06 a. m., instead of 1.08 a. m. In either event it is clearly evident that train No. 310 was operated at a high rate of speed between Bloomer and Norma, particularly in view of the fact that the crew had received a caution card which notified them that extra 414 was still in the block and which directed them to run with caution prepared to stop within their range of vision. After passing Norma train No. 310 was on a descending grade of 1 per cent, in territory where the view was very materially obscured, and was approaching the point at which it was customary for tonnage freight trains to stop in order to double the ascending grade to Koll, the next station beyond Chippewa Falls. Undoubtedly the accident would not have occurred had any attempt been made to provide flag protection, but at the same time it is not believed that Engineman ~~Boyle~~ is entirely blameless under the circumstances outlined above in operating his train even at the rate of speed which the evidence indicated was the case after passing Norma. Had the requirements of the caution card been a little more strictly observed by Engineman ~~Boyle~~ it is probable that this accident would not have occurred.

Had an adequate automatic block-signal system been in use this accident probably would not have occurred; an adequate automatic train-control device would have prevented it.

The employees involved were experienced men and 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.