

INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN RE
INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE
GREAT NORTHERN RAILWAY AT WILLMAR, MINN , ON
NOVEMBER 15, 1929.

February 24, 1930.

To the Commission:

On November 15, 1929, there was a side collision between two passenger trains on the Great Northern Railway at Willmar, Minn , resulting in the death of one employee.

Location and method of operation

This accident occurred at junction of the Second and Third Subdivisions of the Willmar Division. The Second Subdivision extends between Breckenridge and Willmar, a distance of 112.67 miles, and in the vicinity of the point of accident is a double-track line over which trains are operated by time-table, train orders and an automatic block-signal system, while the Third Subdivision extends between Inlen, Minn , and Second Subdivision Junction , a distance of 112.29 miles, being 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 within yard limits, at the fouling point of the junction switch connecting these two subdivisions, 102 feet west of the head block tie of the turnout, this is a trailing point switch for eastbound trains and is located 2,467 feet west of the station at Willmar. Approaching the switch from the west on the Second Subdivision the track is tangent for a distance of 2,134 feet, while approaching from that direction on the Third Subdivision the track is tangent for several miles, followed by a 4° curve to the right for a distance of about 744 feet to the switch. The grade is practically level.

The switchstand, of the high type, equipped with red and green lenses, is located on the south side of the tracks, its normal position is lined for the Second Subdivision and when so lined a green indication is displayed. The Second Subdivision automatic block signals involved, of the three-indication, color-light type, are eastbound signals 103.8 and 102.8, located 5,756 and 449 feet, respectively west of the switch. Indications are red, yellow

and green, for stop, caution and proceed, respectively. The approach-lighting contact point is located about 2,600 feet in advance of each signal. On the Third Subdivision there is a stop board, located south of the track and 481 feet west of the switch, there is an insulated joint on the Third Subdivision 155 feet west of the switch and when an eastbound train passes this joint it automatically causes signal 102.8 to display a stop indication and signal 103.8 a caution indication.

The weather was clear at the time of the accident, which occurred at about 3.22 a. m.

Description

Eastbound Third Subdivision passenger train No. 52 consisted of one baggage car, one combination baggage and mail car, one coach, one parlor coach, and one sleeping car, in the order named, hauled by engine 932, and was in charge of Conductor Kendall and Engineman Rothwell. This train left Granite Falls, the last open office and 34.19 miles west of Second Subdivision Junction, at 2.20 a. m., according to the train sheet, 15 minutes late; approaching the junction switch a stop was made for the stop board, then the train proceeded at a low rate of speed and was not brought to a stop again until after the engine had passed the insulated joint and fouled the Second Subdivision main track. Immediately afterwards, while standing at that point, the left rear corner of the tender was struck by train No. 10.

Eastbound Second Subdivision passenger train No. 10 consisted of one express car, three baggage cars, one rail car, and two coaches, in the order named, hauled by engine 1429, and was in charge of Conductor Methway and Engineman Sandberg. This train passed Penhook, the last open office and 6.2 miles west of Third Subdivision Junction, at 3.16 a. m., according to the train sheet, 29 minutes late, passed signal 103.8, which was displaying a proceed indication, and as signal 102.8 was approached a proceed indication was also displayed, however, this indication changed to stop directly in front of the engine, and before train No. 10, could be brought to a stop it collided with train No. 52 while traveling at a speed estimated to have been about 10 miles per hour.

Engine 932, together with its tender came to rest on its right side, south of and parallel to the track, with the point of the pilot just clear of the west end of the head block tie of the junction switch. The first car

in train No. 52 had its forward truck derailed. Engine 1429 and the forward truck of its tender were derailed, the engine remained upright. None of the other equipment in either train was derailed. The employee killed was the enginemen of train No. 52.

Summary of evidence

Fireman Marlow, of train No. 52, stated that he was sitting on the seat box and leaning out of the window, maintaining a lookout approaching the switch, and that as Engineman Rothwell made an air brake application in order to make the stop for the stop board that he called the enginemen's attention to the approach of train No. 10, the enginemen acknowledging the warning. No trouble was experienced in making the stop at the stop board, after which his train immediately started ahead again, just moving, and the fireman called the enginemen's attention to the approaching train a second time, the fireman noticed that his engine was getting close to the switch and called the enginemen's attention to the approaching train a third time, expecting all the while that his own train would be brought to a stop clear of the other track. However, his train was not brought to a stop until it fouled the switch. The headlight of the approaching engine was shining directly in his face, and realizing that a collision was imminent Fireman Marlow jumped off from the enginemen's side just about the time that his train stopped, immediately following which the collision occurred. Fireman Marlow stated that Engineman Rothwell did not acknowledge his last two warnings of the approach of train No. 10, the enginemen kept applying and releasing the air brakes, something he had never seen the enginemen do before, nor did he know why it was being done. Fireman Marlow could advance no reason for the failure of the enginemen to handle the train in his usual careful manner at the switch, he had talked frequently with the enginemen en route on this trip and he appeared normal in every respect. The air brakes worked properly in making the various stops en route, and Fireman Marlow did all that he could to get the enginemen to bring the train to a stop before fouling the switch. The head brakeman had not come forward in order to throw the switch at the time the accident occurred; after the occurrence of the accident it was still lined for the Second Subdivision main track, with the switch lamp burning.

At the time of the accident Conductor Kendall, of train No. 52, was in the vestibule between the third and fourth cars, Head Brakeman Butler had just stepped off the third car, in order to go forward to throw the switch,

and Flagman Deamison was on the rear end of the train. Their statements were to the effect that their train made a stop for the stop board, and then as customary moved ahead at a low rate of speed toward the clearance point; they thought the train would again be brought to a stop in the clear as usual, and none of them was aware of anything wrong prior to the accident.

Engineman Sandberg, of train No. 10, stated that the speed of his train was about 50 miles per hour on passing signal 103.8, which was displaying a proceed indication. Approaching signal 102.8, which at first was also displaying a proceed indication, the speed had been reduced to about 20 miles per hour, by means of about a 10-pound brake pipe reduction, the engineman released the brakes and permitted the train to drift, when about one car length from signal 102.8 its indication changed to stop. Engineman Sandberg immediately placed the brake valve handle in the emergency position and opened the sanders; he estimated the speed of his train to have been about 10 miles per hour at the time of the collision. The air brakes were tested and worked properly, but he did not think that full emergency effect was obtained owing to the previous service air brake application. Engineman Sandberg first saw train No. 52 after he had passed signal 102.8 and after he had applied the air brakes in emergency, at which time that train appeared to be moving slowly toward the switch, he thought that the engine was fouling the switch then, but did not know whether or not that train was moving. Statements of Fireman Borovick were similar to those of Engineman Sandberg.

Conclusions

This accident was caused by train No. 52 fouling the junction switch directly in front of train No. 10, for which Engineman Rothwell is responsible.

The investigation developed that train No. 52 made the stop for the stop board and then, as was customary, immediately started ahead again at a low rate of speed, but instead of again coming to a stop in the clear it passed the insulated joints, causing the indication displayed by signal 102.8 to change from proceed to stop directly in front of train No. 10, and that train No. 52 did not come to a stop until it had fouled the switch, immediately after which it was struck by train No. 10, which train could not be brought to a stop in time to avert the collision. Prior to the accident Engineman Rothwell appeared to be normal in

every respect and in full possession of his faculties, Fireman Marlow called his attention to the approach of train No. 10 three different times. The air brakes worked properly en route, the switch was lined for the Second Subdivision main track, with the switch lamp burning. Engineman Rothwell was the regular engineman on this train and had been on this run for over 10 years. Why he failed to bring his train to a stop the second time clear of the switch is not known, as he was killed in the accident.

Engineman Rothwell had been in the service of this railway for 34 years, 4 years as firemen and the rest as engineman, he had a good record. At the time of the accident he had been on duty 10 hours, prior to which he had been off duty 28 hours and 45 minutes. None of the other employees involved had been on duty in violation of any of the provisions of the hours of service law.

Respectfully submitted,

W. P. BORLAND,

Director.