

Inv-2170

INTERSTATE COMMERCE COMMISSION
WASHINGTON

REPORT OF THE DIRECTOR
BUREAU OF SAFETY

ACCIDENT ON THE
CHICAGO & NORTH WESTERN RAILWAY

DE SMET, S. D.

APRIL 25, 1937

INVESTIGATION NO. 2170

SUMMARY

Inv-2170

Railroad: Chicago & North Western
Date: April 25, 1937
Location: De Smet, S. D.
Kind of accident: Rear-end collision
Trains involved: Passenger : passenger
Train numbers: 504 : 412
Engine numbers: 1545 : 1539
Consist: 6 cars and 1 : 4 cars
gas-electric
motor car
Speed: Standing : 20 m.p.h.
Track: Tangent; 1.0 percent ascending grade.
Weather: Snowstorm
Time: 9:30 a.m.
Casualties: 1 killed and 3 injured.
Cause: Failure to provide adequate flag
protection.

June 11, 1937.

To the Commission:

On April 25, 1937, there was a rear-end collision between two passenger trains on the Chicago & North Western Railway near De Smet, S. D., which resulted in the death of one employee and the injury of six passengers, one employee and one Pullman porter.

Location and method of operation

This accident occurred on Subdivision 2 of the Dakota Division which extends between Tracy, Minn., and Huron, S. D., a distance of 136.3 miles. In the vicinity of the point of accident this is a single-track line over which trains are operated by timetable and train orders, and a manual block-signal system between 7:30 a.m. and 5:30 p.m., time spacing rules being in effect the remainder of the time. The accident occurred at a point 2.85 miles west of De Smet; approaching this point from the west the track is tangent for more than 4 miles, followed by a 0°30' curve to the right 1,100 feet in length, the accident occurring on the tangent track at a point about 200 feet from its eastern end. The grade for east-bound trains is generally ascending, being 1.0 percent at the point of accident.

In the vicinity of the point of accident the track runs through prairie land and in the immediate vicinity there are several cuts and fills. The cuts vary from 150 feet to 1,450 feet in length, and from 2 feet to 7 feet in depth; the accident occurred in a cut 1,450 feet in length, and about 7 feet in depth at its maximum.

There was a heavy snow falling and a strong northwest wind was blowing at the time of the accident, which occurred about 9:30 a.m.

Description

Train No. 504, an east-bound passenger train, consisted of 3 baggage cars, 1 combination baggage and mail car, 1 coach, 1 Pullman sleeping car, and 1 dead-head gas-electric motor car, in the order named, all of steel construction, hauled by engine 1545, and was in charge of Conductor Howard and Engineman Key; the dead-head motor car was in charge of Engineman Carpenter. This train departed from Huron, S. D., its initial terminal, 33.3 miles from De Smet, at 9:23 p.m., April 24, according to the train sheet, 48 minutes late,

departed from Cabour, 24.5 miles from De Smet, at 9:41 p.m., 49 minutes late, and proceeded to a point about 2.85 miles west of De Smet where it became stalled in snow in a cut, at about 10:35 p.m. The motor car was then cut off and attempted to back out of the cut, but had proceeded a distance of only about 50 feet when it became stalled, and it was standing at that point when it was struck by Train No. 412.

Train No. 412, an east-bound passenger train, consisted of 1 baggage car, 1 combination mail and baggage car, 1 coach and 1 Pullman sleeping car, in the order named, all of steel construction, hauled by engine 1589. This train departed from Huron, S. D., under authority of Form A Clearance, at 8:18 a.m., April 25 according to the train sheet, 13 minutes late, and struck the rear end of Train No. 504 while traveling at a speed estimated to have been about 20 miles per hour.

Motor car 9925 was badly damaged and the lead pair of wheels of the rear truck was derailed. The third, fifth and sixth cars in Train No. 504 were somewhat damaged. The pilot of engine 1589 was demolished and the front end of the smoke box was smashed. The first car in train No. 412 was slightly damaged. The employee killed was a conductor who was dead-heading in motor car 9925, and the employee injured was the engineman in charge of the motor car.

Summary of evidence

Engineman Key, of Train No. 504, stated that the air brakes had been tested at Huron and worked satisfactorily en route and that he did not have any trouble with his train until he encountered the snow where his train became stalled. He whistled out a flag and saw the flagman start back with flagging equipment. He asked Conductor Howard to go back and have Engineman Carpenter start the motor car and try to help out, but they were unable to move the train. Conductor Howard then went to De Smet for help and at that time Engineman Key stated that he could not see the front end of his engine. A heavy, wet snow was falling and a strong wind was blowing, but the weather was not cold nor such as to endanger human life.

Fireman Reintsma, of Train No. 504, stated that about an hour after Conductor Howard left for De Smet, Flagman McIntyre came to the engine for coal and told him that he had placed 3 torpedoes on the track but nothing was said to Engineman Key regarding this visit of the flagman to the engine. The flagman then returned to the rear of the train and that was the last he saw him. Due to the storm he was unable to see the rear of his train.

Conductor Howard, of Train No. 504, stated that he talked with the conductor of Train No. 411 which arrived at Huron from the west just before his own train departed, and was told that the snow was bad and that it would be advisable to have his train double-headed, but this suggestion later slipped his mind. After his train became stalled near De Smet he told the flagman to go back to flag and that he was going to De Smet to get help. While he knew that the wires were down when he left Huron, he thought he might be able to communicate with Iroquis, the first block station to the rear, but on arriving at De Smet he found that all of the wires were dead. He remained in the station until about 5 a.m. and then started back toward his train, but due to the severity of the storm and snowdrifts from 2 to 3 feet deep, he was unable to proceed and returned to the station. About 8 a.m. Flagman McIntyre entered the station and when asked who was doing the flagging he stated Baggage man Venard was attending to that duty. Conductor Howard was still in the station when the mail clerk entered and informed him of the accident.

Flagman McIntyre, of Train No. 504, stated that when his train became stalled he lighted a red fusee and started back to flag, placing the fusee about 500 feet from his train; he proceeded back until he found a clear rail where he placed two torpedoes and then continued back to another clear rail where he placed two additional torpedoes, having gone back a total distance of approximately 1/4 mile. After being out about 30 minutes he returned to the train and the second time he went out he went back a distance of about 3/4 mile. During the night he returned to the train several times to warm himself as the moisture was freezing on his eyes and face. About 5:30 or 6:00 a.m. he and Baggage man Behrens, who was deadheading, left the train in an attempt to locate a farmhouse from which they could telephone to De Smet or Huron and also obtain food for the passengers. Flagman McIntyre arranged with Baggage man Venard to provide flag protection during his absence. While he knew that Baggage man Venard's 16-hour tour of duty would soon expire, he did not think that the length of time an employee was on duty in cases of emergency, was of great significance. As they were unable to locate the farmhouse, they continued on to De Smet and were at that point when the accident occurred.

Baggage man Venard, of Train No. 504, stated that after several attempts were made to move the train in either direction with the assistance of the motor car, the motor car was cut off for the purpose of backing to Manchester, but it had proceeded a distance of only about 50 feet when it also became stalled in the snow. Baggage man Venard relieved Flagman

McIntyre of his duties about 6:30 a.m., and on going to the rear of the train he informed Conductor Innes, who was dead-heading in the motor car, that his own 16 hours of service would expire about 7:40 a.m. Conductor Innes told him that he would take care of the flagging after that time. Baggage-man Venard then took his flagging equipment and went to a point about one car length back of his train from which point he could see a distance of about 4 telegraph poles to the west. About 7:30 a.m. he returned to the third car from the rear and saw Conductor Innes in the front end of the coach. He made a sign to the conductor and the conductor nodded, this being understood by Baggage-man Venard as an indication that the conductor would take charge. Baggage-man Venard then continued to the combination mail and baggage car and went to sleep; he was still sleeping when the accident occurred.

Engineman Carpenter, in charge of the motor car, stated that he and Conductor Innes took turns in going to the engine for coal, and he was getting ready to go to the engine when the accident occurred. Conductor Innes had left the motor car about 15 minutes prior to that time, but he did not know where he went, and at no time did he hear any conversation between Baggage-man Venard and Conductor Innes relative to providing flag protection at the time of the accident. Conductor Innes was in the passenger compartment of the motor car, and he was fatally injured.

Engineman Shephard, of Train No. 412, stated that the snowstorm was bad on leaving Huron, but he did not experience any trouble and his train made the usual speed until he encountered snow in a cut about 1/4 mile west of the point of accident, which somewhat reduced the speed of his train. He then used more steam and the train had attained a speed of approximately 20 miles per hour when his engine struck motor car 9925. He reached for the throttle and then received a second jar. Before reaching the cuts west of the point of accident his vision ahead was restricted to the front end of his engine and on entering the cuts he could not see even that distance. On approaching the point of accident he did not hear any torpedoes, nor did he see a flagman or any fusees.

Fireman Hoffman of Train No. 412, stated that as his train proceeded eastward the storm became worse and upon striking two snow drifts shortly before the accident he thought the train was going to stall. He did not hear any torpedoes explode and he estimated the speed of his train to have been about 15 miles per hour at the time of the accident. Conductor

Hittle estimated the speed of his train to have been about 20 miles per hour at the time of the accident.

Flagman Shanahan, of Train No. 412, stated that he went back to flag immediately after the accident, and he noticed a torpedo on the rail about 1/2 mile from the point of accident; the engine had apparently slid over it, as it had not been exploded. Flagman Shanahan stated that the storm was severe; it was below freezing and his face was covered with ice as he walked back to Manchester and it took him about 2 hours 45 minutes to walk 6 miles.

Dispatcher Kelley, at Huron, stated that when he went on duty about 6:30 a.m., April 25, there were no wires east of Huron. He talked with the dispatcher whom he relieved and had no reason to believe that Train No. 504 had not proceeded in the normal manner. He cleared Train No. 412 about 7:55 a.m. and inadvertently issued a clearance card, form A, reading "block clear", instead of issuing a caution order for Train No. 412 from Huron to Tracy, giving as the reason for his error the fact that his attention was interrupted by a stockman inquiring about a car of horses. He further stated that on Sundays there are no open stations between Huron and Tracy, but an operator is called to meet trains No. 411 and 412 at Brookings.

Discussion

The investigation disclosed that when Train No. 504 became stalled in the snow about 10:35 p.m., the flagman went back with his flagging equipment and placed torpedoes on the rail at two points; he returned to the train to get warm several times during the night. About 6:30 a.m. he left the train to try to locate a telephone, and to obtain food for the passengers, having arranged with Baggageman Venard to provide rear end protection, even though he knew that the baggageman's 16 hours of service would soon be completed. Baggageman Venard arranged with Conductor Innes, who was dealheading on the motor car, to relieve him when his 16 hours were up, and then took a position near the rear end of the train where he remained until about 7:30 a.m. when he returned to the coach and received a signal from Conductor Innes which he interpreted as meaning that the conductor would relieve him. Conductor Innes was fatally injured and no statement could be obtained from him, but apparently he made no attempt to provide flag protection; whether or not he thoroughly understood what was expected of him is not known. The protection given the rear end of Train No. 504 was of a most perfunctory nature and during much of the time it was entirely

lacking. It was the paramount duty of the flagman to protect the rear end of his train and there was no good reason for him to leave the train in view of the conductor having gone to De Smet for the purpose of communicating with the dispatcher. The conductor, however, was unable to communicate with any one, due to all of the wires being down and on account of the storm and deep snowdrifts he was unable to return to his train.

Rule 317a of the operating rules provides that for a following movement a permissive train order must be used to admit a passenger train to a block that is not clear if communication can be had with the train dispatcher.

Dispatcher Kelley stated that he inadvertently issued a clearance card, form A, showing a clear block for Train No. 412 from Huron to Tracy, giving the reason for his error that his attention was distracted by a stockman who was inquiring about a car of stock.

The visibility was such, however, that it is doubtful whether the accident would have been averted if the train had been operated under a permissive train order. Engineman Shephard, of Train No. 412, stated that on approaching the cuts west of the point of accident his vision extended only to the front end of the engine and on entering the cuts he could not see even that distance. He did not hear any torpedoes explode, although it seems evident that torpedoes were put down by the flagman of Train No. 504 since the flagman of Train No. 412 found an unexploded torpedo on the rail as he went back to flag.

Conclusion

This accident was caused by failure to provide adequate flag protection for Train No. 504.

Respectfully submitted,

W. J. PATTERSON,

Director.