

## INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY  
IN RE INVESTIGATION OF AN ACCIDENT WHICH  
OCCURRED ON THE MISSOURI PACIFIC RAILROAD  
NEAR LEEPER, MO., ON NOVEMBER 9, 1926.

December 7, 1926.

To the Commission:

On November 9, 1926, there was a collision between a freight train and a work train on the Missouri Pacific Railroad near Leeper, Mo., which resulted in the death of one employee and the injury of two employees.

Location and method of operation

This accident occurred on that part of the De Soto District of the Missouri Division, extending between Poplar Bluff and Jefferson Barracks, Mo., a distance of 154.31 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 an automatic block-signal system. The accident occurred at a point 2,275 feet north of Leeper; approaching this point from the south the track is tangent for a distance of more than 1 mile followed by a compound curve to the right 2,234.4 feet in length, the accident occurring on this curve at a point 1,507 feet from its southern end, where the curvature was  $2^{\circ} 56'$ . Approaching from the north, beginning at Clearwater station, there are 1,424 feet of tangent, a  $4^{\circ} 9'$  curve to the left 826.5 feet in length, and then a  $6^{\circ} 15'$  curve to the right 936.3 feet in length, followed by the curve on which the accident occurred. The grade was slightly ascending for northbound trains, being 0.275 per cent at the point of accident. On account of an embankment on the inside of the curve on which the accident occurred the view of the point of collision from either direction is restricted to about 175 feet.

The automatic signals involved are northbound home signal 1330 located 1,573 feet south of the point of accident, and southbound distant signal 1331-D

located 2,036 feet north of the point of accident, while southbound home signal 1331 is located south of the point of accident directly opposite signal 1330. Signals 1330 and 1331 are of the three-position, upper-quadrant type, while signal 1331-D is of the two-position, upper-quadrant, type. Under the rules a train finding a signal in stop position in single-track territory is required to wait five minutes and then to proceed with caution. When a southbound train passes distant signal 1331-D it causes northbound signal 1330 to display a stop indication, while a northbound train leaving Leeper causes southbound home signal 1331 to display a stop indication and distant signal 1331-D to display a caution indication. The signals controlling southbound movements are also actuated when the main-track switch at the north end of the passing track at Leeper is opened.

The weather was cloudy at the time of the accident, which occurred at about 11.29 a.m.

#### Description

Northbound freight train No. 94 consisted of 17 cars and a caboose, hauled by engine 1277, and was in charge of Conductor Hartnett and Engineman Fletcher. At Poplar Bluff, 32.4 miles south of Leeper, the crew received, among others, a copy of train order No. 32, Form 19, reading in part as follows:

"Eng 2511 works extra 645 AM until 745PM  
between Piedmont and Mill Springs pro-  
tects against No 94 \*\*\*\* No 94 eng 1277  
wait at Leeper until 10 01 AM for work  
extra 2511 \*\*\*\*."

This train arrived at Leeper at 11.15 a.m., and after performing station work departed from the passing track at that point and encountered a stop indication at northbound signal 1330, which is 702 feet north of the switch. The train stopped at the signal, waited five minutes, then proceeded northward and shortly afterward it collided with work extra 2511 while traveling at a speed variously estimated to have been from 10 to 20 miles an hour.

Work extra 2511 consisted of one dump car, one ditcher, one dump car, and a caboose, in the order

named, handled by engine 2511, and was in charge of Conductor Dealing and Engineman Trauernicht. At the time of the accident the engine, headed south, was shoving the equipment southward with the caboose on the head end of the train. At Piedmont 6.3 miles north of Leeper, the crew had received a copy of train order No. 32, Form 31, previously referred to. After working at a point north of Clearwater until 11.20 a.m., it was decided to go to Clearwater to pick up their flagman, who had written instructions to hold train No. 94 at that point, and return to Piedmont for water. Failing to find the flagman at Clearwater the train continued southward, passed distant signal 1331-D, which was displaying a caution indication, and collided with train No. 94 while traveling at a speed variously estimated at from 4 to 10 miles an hour.

Engine 1277 came to rest in an upright position with the engine truck and first and second pairs of drivers derailed; the front end of the of the engine was considerably damaged. The caboose of the work train was telescoped about 24 feet, with the body of the dump car immediately behind it coming to rest in the caboose. The ditcher was derailed and came to rest leaning against the side of the embankment. The employee killed was a laborer who was riding in the caboose of the work train.

#### Summary of evidence

Engineman Fletcher, of train No. 94, stated that when his train was ready to depart from Leeper, Flagman St. John of work extra 2511 handed him written instructions addressed to his train to the effect that train No. 94 should be held at Clearwater, at which point extra 2511 should be called in. He said northbound signal 1330 was displaying a stop indication when his train left Leeper, that he stopped and waited at that point a period of five minutes and then proceeded northward. His train had attained a speed of from 12 to 15 miles an hour when he noticed extra 2511 approaching around the curve apparently about 200 feet distant, and he immediately shut off steam and applied the air brakes in emergency, but was unable to stop his train before the collision occurred, in fact he estimated that it moved ahead an additional distance of 50 or 60 feet after the collision occurred. Engineman Fletcher understood the signal indication received at signal 1330 required him to proceed to the next signal under control, expecting to find the

track obstructed, and considered that he was operating his train accordingly. The statements of Fireman Hensen and Head Brakeman Gibbons, of train No. 94, practically corroborated those of Engineman Fletcher.

Flagman St. John, of extra 2511, who was riding on engine 1277 at the time of the collision, stated that his conductor gave him the written flagging instructions when just north of Clearwater, which is about 1 mile from Leeper, and told him to stop train No. 94 far enough south of the switch at Clearwater to allow the work extra to pull by and back into clear. Flagman St. John walked southward to Leeper, and while train No. 94 was on the passing track at that point he boarded the engine and handed the instructions to the engineman, who read and then signed them. He noticed signal 1330 in the stop position and said that after train No. 94 had waited at that point for about five minutes it proceeded and was traveling between 12 and 20 miles an hour at the time of the collision. Flagman St. John understood the signal indication permitted them to proceed with caution, and stated he thought train No. 94 was moving at rather a high rate of speed under the existing conditions but did not call the engineman's attention to this fact. He was under the impression that extra 2511 would not be moved south of Clearwater against train No. 94.

Conductor Hartnett, of train No. 94, noticed when his train stopped near the northbound signal that it was displaying a stop indication. He did not know until after the collision, however, that the flagman from work extra 2511 had been at Leeper and had no knowledge of the instructions given his engineman by the flagman. He estimated the speed of his train at about 15 miles an hour at the time of the collision. The statements of Brakeman Pipkin and Starkey, who were riding in the caboose of train No. 94 at the time of the collision, produced no additional facts of importance.

Conductor Dearing, of work extra 2511, who was riding on the forward end of the caboose, stated that he had issued written instructions to his flagman to hold train No. 94 at Clearwater. About 11.30 a.m., on account of the ditcher being out of water, it was decided to move southward for the purpose of picking up the flagman and then to return to Piedmont for water. When approaching southbound distant signal 1331-D he noticed it go to the caution position, which indicated to him that a train was then occupying the block. A short time after passing this signal, while traveling

at a speed of 3 or 4 miles an hour, he saw train No. 94 approaching around the curve on which the accident occurred and said he applied the air brakes in emergency by means of the emergency valve on the end of the caboose. He said he had expected to find the flagman just south of Clearwater, and admitted that he should not have moved beyond that point as he had no flag protection, realizing at the same time that he was moving against a superior train which was then overdue.

Engineman Trauernicht, of extra 2511, stated that he had read and understood train order No. 32, and also had an understanding with his conductor that his train would be protected against train No. 94, but he did not see the instructions given to the flagman nor did he know at what point the flagman was stationed; he was under the impression however, that the flagman had gone to Leeper and would hold train No. 94 at that point. When Conductor Dearing told him it would be necessary to proceed southward in order to pick up the flagman, so as not to delay train 94, Engineman Trauernicht did not question the conductor as to the flagman's location, but started his train upon receiving a signal from the conductor. Upon arriving at a point about 10 car-lengths north of the southbound distant signal he saw it change from clear to caution position, and said he knew there must have been another train in the block at that time, but still presumed that the conductor had issued ample flagging instructions to protect the movement. Shortly after passing the distant signal he saw train No. 94 approaching and at the same time noticed his conductor giving violent stop signals, at which time he applied the air brakes in emergency, and he said he had almost brought his train to a stop when the collision occurred; he did not think the conductor applied the brakes from the caboose, unless he made an effort to do so after giving the stop signal.

The statements of Fireman Norris were in substance practically the same as those of Engineman Trauernicht; the fireman estimated the speed of the train just before the collision at about 10 miles per hour.

#### Conclusions

This accident was caused by work extra 2511 moving against an opposing superior train without flag protection, for which Conductor Dearing is primarily responsible.

ble, a contributing cause was the failure of the engineman of train No. 94 to operate his train under proper control under a permissive signal indication.

While Conductor Dearing issued flagging instructions to train No. 94 he did not instruct the flagman at what point he was to station himself, nor did he notify the engineman what instructions had been issued for the protection of his train, the engineman operating the train with the impression that it was protected as far as Leeper. The instructions issued permitted train No. 94 to proceed north to Clearwater, while Conductor Dearing permitted his train to be operated southward beyond that point, being fully aware that he had no protection for such a movement, particularly when making the movement against this superior train which was then more than two hours overdue.

Engineman Fletcher, of train No. 94, was operating his train on a sharp curve, with the view very materially restricted, at a speed which he admitted was between 12 and 15 miles per hour. Had he operated his train strictly in accordance with the Rules, moving fully under control, the accident might have been prevented, or at least he would have been able to reduce the speed of his train so that the results would have been less serious.

All of the employees involved were experienced men; 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.