INTERSTATE CO. MERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN REINVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE ATCHISON, TOPEKA & SANTA FE RAILWAY AT WAYNOKA, OKLA., ON AUGUST 3, 1936.

September 17, 1926.

To the Commission:

On August 3, 1926, there was a rear-end collison between a freight train and a helper engine on the Atchison, Topeka & Santa Fe Railway at Waynoka, Okla., which resulted in the death of one employee and the injury of two employees.

Location and Lethod of operation

This accident occurred on the Second District of the Plains Division, extending between Canadian, Texas, and Waynoka, Okla., a distance of 109.6 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 on the main track, within yard limits, at a point 6,977.7 feet east of the west yard-limit board. Approaching the point of accident from the west the track is tangent for a distance of 1,773 feet, followed by a 1° curve to the left 2,250 feet in length, the accident occurring on this curve at a point 1,884.7 feet from its western end. The grade approaching this point is slightly descending, being 0.2 per cent at the point of accident. The point of accident could be seen by the fireman of an eastbound train, across the inside of the curve, a distance of 1,441 feet; the engineman's range of vision was about 700 feet.

The weather was clear at the ti of the accident, which occurred at 12 o'clock noon.

Description

Helper engine 1056, headed east, in charge of Engineman Johnson and Fireman Davenport, had helped a train westward to Curtis, 21.6 miles west of Waynoka, at that point it met eastbound light extra 1167. order to save time through block-signal territory the crews of these trains received instructions to double-head to Waynoka and they departed from Curtis, according to the train sheet at 11.21 a.m. At Belva, 10.3 miles west of Waynoka where a car was to be picked up, the crews decided to cut off the helper engine, in order to be able to reach Waynoka for westbound passenger train No. 1. Upon arriving at Waynoka, engine 1056 was stopped by a train occupying the passing track, the rear end of which did not clear the main track. On request of the crew of that train the helper engine coupled to its rear end and had just started to pull the capoose and seven cars back for the purpose of clearing the main track when the tender of the helper angine was struck by extra 1167.

Eastbound freight train extra 1167 consisted of engine 1167 and a caboose when it arrived at Curtis, and was in charge of Conductor Nedgeworth and Engineman Saar. After being double-headed from that point to belva with helper engine 1056, the helper engine was cut off and extra 1167, upon instructions, proceeded to pick up a car, which was placed back of the caboose. After a delay of three or four minutes in performing this work the train departed from Belva at 11.43 : ., and while traveling at a speed estimated to have Leon between 10 and 15 miles an hour it collided with helper engine 1056 at Waynoka.

Engine 1056 was shoved ahead a distance of approximately 69 feet, its tender was derailed and practically demolished, while the front end of engine 1167 was considerably damaged. None of the cars was derailed. The employee killed was the fireman of helper engine 1056.

Surmary of evidence

Engineman Johnson of helper engine 1056 stated that at Curtis he was instructed by the operator to double-head extra 1167 to Waynoka. He coupled to engine 1167 and moved to Belva, where they had instructions to pick up a car. He said no figured this work would not give

extra 1167 time to reach Waynoka and clear westbound train No. 1, and that the passing track at Heman, a station between these two points, would not hold this double-headed train in addition to the cars already occupying that track, so he cut loose from this extra and went to Waynoka, where he found local train No. 86 pulling into clear at the west passing-track switch.

Upon encountering the train ahead he stopped his engine on the main track at about 11.57 a.m., just behind the caboose of that train, which could not get entirely into clear. After standing there about two minutes the brakeman of train No. 86 asked him to couple to the rear of that train and move the caboose and seven cars in order to clear the Lain track for train No. 1 which was due to depart from Waynora at 12.10 p.m. Complying with the request he coupled to train No. 86 and had slacked back 3 or 4 feet and stopple, no then asked his fireman to look back to see if extra 1167 was approaching and was immediately informed that that train was about to strike the helper engine. He could not estimate the speed of the approaching train. He said it would have been necessary to pull the cut of cars back about two car-lengths, but did not intend to move until he know the location of extra 1167.

Conductor Wedgeworth, of extra 1167, stated that when approaching Waynoka he went from the caboose to the engine, the engineman asked him where they should head in and he told the engineman they had plenty of time to go to the west passing-track switch. Conductor Wedgeworth then left the cab through the front window on the left side of the engine and was on the running board, going to the front of the engine in order to be ready to line the passing-track switch, when he noticed engine 1056. He said he immediately gave, and continued to give, violent stop signals until he jumped from he engine just before the collision occurred. He saw the fireran turn towards the engineman and was certain that the engineman understood and would act accordingly, otherwise he would have returned to the cab and made an effort to stop his train. He satimated the speed of his train at 10 miles an hour when the collision occurred, and was also positive that ergino 1056 was moving backward when he first noticed it and is still moving when he jumped

from his engine. He later conferred with his fireman and the fireman told him that he understood what the signals meant and transmitted them to the engineman, but did not look to see as to whether or not the engineman received them. Conductor Wedgeworth further stated that the fireman admitted he should have used all possible means to stop the train and if necessary should have crossed over to the engineman's side and have applied the brakes.

Engineman Saar, of extra 1167, stated that although he had been temporarily transferred to the Plains Division on July 22, 1926, and had made only four or five round trips, yet he was familiar with conditions at Waynoka. His train passed the west yard-limit board at Waynoka, at which point he shut off steam moving at a speed of about 18 or 20 miles an hour, while the conductor came from the caboose and went out on the running board of the engine on the left side. On reaching a point about the middle of the curve on which the accident occurred he looked at his match and noted the time as 11.59 a.m. He then looked at the fireman, saw him looking ahead, and presumed that everything was all right, as he considered that both the c nauctor and fireman, experienced men who could be depended upon, could see if the track was clear. Shortly afterward he looked out and noticed the tender of engine 1056 about two car-lengths ahead, backing up, and he immediately applied the air brakes and reversed the engine. Engineman Saar stated that the fireman made no attempt to signal him that the track was occupied until after he had observed the helper engine ahead of him. He thought his train was running under control, but admitted that he should have been running more carefully around this curve.

Fireman Walker, of extra 1167, stated that he was riding on the left side of his engine approaching Waynoka, being on the alert for engine 1056 which he knew was ahead of his train. The speed of his train was about 25 miles an hour, but on entering the yard limits the speed was reduced to some extent, it was, however, running about 20 miles an hour when he first noticed the helper engine. He said that as soon as he could see around the curve he told the engineman there was an engine ahead but that he could not tell on which track it was located, and shortly afterwards the con-

ductor began giving stop signals. The engineman made no attempt to reduce the speed until the fireman again called to him and started to get off, at which time the engineman applied the brakes and then reversed the engine, just before the collision occurred. Fireman Walker stated that his engine was about 15 or 20 carlengths from engine 1056 when he first noticed the latter engine, but later said this distance might have been greater He first stated that he yelled to the engineman, but finally admitted that he just spoke to him. Fireman Walker entered the service of this road as a fireman on July 23, 1926, but had had previous experience as a fireman.

The statements of Brakemen Woodfin and Allran of extra 1167 were to the effect that they were riding in the caboose just prior to the collision. Both saw engine 1056 ahead of them and noticed the conductor giving violent stop signals, but neither attempted to stop the "train by means of the emergency brake valve located in the caboose as they were of the opinion that their train would be stopped before the accident occurred. Brakeman Woodfin estimated the speed of the train at 15 miles an hour and Brakeman Allman estimated it at 10 or 12 miles an hour at the time of collision.

Conclusions

This accident was caused primarily by the failure of Engineman Saar, of extra 1167, to operate his train under proper control within yard limits.

Under the rules all except first-class trains are required to move within yard limits prepared to stop unless the rain track is seen or known to be clear. The evidence is to the effect that, although Engineman Saar's view was restricted on account of the curvature of the track, he was aware that train No. 86, as well as extra 1056, was ahead of his train, and he should have approached Waynoka at a speed which would have made a collision of this character impossible. The vision tests made after the courrence of this accident indicated that Engineman Star could have seen engine 1056 for a distance of 691 feet, in has he been moving under proper control and on the clear a would have had ample space in which to stop his train.

Fireman Walker had an unobstructed view of the point of accident for a distance of 1441 feet, and in addition he saw the violant stop signals being given by the conductor, who was riding on the left running board of engine 1167, yet it appeared he did not make much of an effort to be certain that Engineman Saar knew the existing danger until it was too late to stop. While the fireman's actions in no may excuse Engineman Saar, it is probable that had he tried to do so he could have aroused Engineman Saar to the danger aread in time to have prevented the accident.

With the exception of Brakeman Woodfin, of extra 1167, all of the employees involved were experienced men and 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.