INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN RE INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE ST. LOUIS-SAN FRANCISCO RAILWAY AT WILSON, ARK., ON OCTOBER 15, 1929.

February 17, 1930.

To the Commission:

On October 15, 1929, there was a collision between a passenger train and a cut of cars on the St. Louis-San Francisco Railway at Wilson, Ark., which resulted in the injury of 18 passengers, 3 employees and 1 person carried under contract.

Location and method of operation

This accident occurred on the Chaffee Sub-Division of the River Division, which extends between Chaffee, Mo., and Turrell, Ark., a distance of 139.5 miles, and 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 within yard limits at a point 4,426.5 feet south of the station at Wilson and 122 feet south of the south passing track switch, approaching this point from the north the track is tangent for a distance of 3,401.3 feet and approaching from the south it is tangent for a distance of 5.2 miles, while the grade is practically level. The passing track is 4,013 feet in length and parallels the main track on the east, the north switch being 335.3 feet south of the station. The switch stand at the south end of the passing track is located on the east side of the main track and is equipped with a switch lamp with lenses 5 inches in diameter, which are located 7.5 feet above the head block.

The weather was clear and it was dark at the time of the accident, which occurred at about 7.05 p. m.

Description

Southbound freight train extra 4016 consisted of 33 cars and a caboose, hauled by engine 4016, and was in charge of Conductor Harris and Engineman Gettings. This train arrived at Wilson at 3.30 p. m., and after taking water it entered the north switch of the passing track, where it coupled to a cut of 36 cars standing on that track and shoved them ahead in order to clear the north switch

In making this movement the south end of this cut of cars was shoved out on the main track and while standing at that point the leading car was struck by train No 822

Northbound passenger train No. 822 consisted of one baggage car and two coaches, all of steel construction, hauled by engine 186, and was in charge of Conductor Wilson and Engineman Green. This train departed from Turrell, 18.7 miles south of Wilson, at 6 41 p m , 16 minutes late, and was approaching the station at Wilson when it collided with the cars ahead of extra 4016 while traveling at a speed estimated to have been between 10 and 20 miles per hour

None of the equipment was derailed, although the forward end of the first car ahead of extra 4016 was telescoped about 3 feet Engine 186 had its forward end quite badly damaged and the three cars in its train sustained slight damage. The employees injured were the engineman, baggageman, and train porter, of train No. 822,

Summary of evidence

Engineman Gettings, of extra 4016 stated that upon arrival at Wilson he found the train-order signal displayed, and after instructing the head brakeman to ascertain if they had any additional time on train No. 822, the engine was cut off and spotted at the water tank. While water was being taken, the brakeman returned and advised there were no orders pertaining to train No. 822 The engineman then gave the brakeman two fusees and instructed him to proceed along the cars standing on the passing track and see if they were all coupled, and if he found there was any room to shove these cars ahead, the brakeman was to give a signal for such a movement. The train then entered the passing track at the north switch and coupled to the cars, Engineman Gettings called for a signal and received a proceed signal from the head brakeman After moving a short distance, the brakeman's lantern disappeared from view, but upon calling for another signal, it was transmitted by the brakeman. The train continued to move slowly ahead and then the head brakeman's lantern again disappeared, the engineman called for signals the third time and the brakeman lighted a fusee and gave the same signal that had been previously given. Engineman Gettings then looked back and noticed that the caboose was clearing the main track, looked ahead again but did not see any light at the head end of the cut, looked back and then received a stop signal from the rear end The middle brakeman, had repeated the first of the signals given by the head brakeman, but did not give any more signals after that time. Not being able to see any lights at the head end after the train stopped, Engineman Gettings thought perhaps

something was wrong, so he got off and started forward, and when he reached a point about 35 or 40 car-lengths from the engine he noticed that some of the cars had been shoved out on the main track and that the brakeman was some distance beyond the cars, flagging with a red fusee, and at this time he thought these signals were intended for train No. 822 Being of the opinion that the cars had been shoved through the switch, resulting in damaging it, he returned to the engine and called the conductor three different times by means of the usual whistle signal As he did not see the conductor's lantern appear, he started back along the train and met the conductor about 10 car-lengths from the caboose He informed the conductor as to what had occurred and advised the conductor to go forward and supervise the backup movement to prevent derailing the cars. The conductor hesitated at first, not knowing whether the rear brakeman would know how to handle the situation regarding a possible backup movement and also about flagging against train No. 807, due in about one hour, but Engineman Gettings volunteered to go to the caboose and give the proper instructions, so that the conductor could go up to the head end. After this had been done, the engineman started ahead toward his engine and had reached a point about four or five car-lengths from the engine when the collision occurred. He did not see a backup signal at any time, but while he was back near the caboose he heard a backup signal acknowledged by the engine whistle, although this signal was not acted upon. Engineman Gettings further stated that before heading in on the passing track, he did not know how many cars were on that track, and the reason he gave the head brakeman the two fusees was for the purpose of flagging train No. 822 providing his train could not get into clear. He said it was an oversight on his part in failing to provide the brakeman with a red lantern and torpedoes, although at the time he felt that the fusees would be all that was required. When questioned as to why he did not continue southward and examine the switch at the time he went forward to determine what was wrong, he explained that he was in doubt as to the possibility of pulling the cars back without derailing them and thought it would be better to have the conductor inspect the switch and be on hand to direct the backup movement. He also said that the reason he did not continue beyond the cars at that time, and make certain that train No 822 was properly flagged, was that when he saw the brakeman giving stop signals with a fusee, he felt satisfied that the train was then approaching and thought these signals were sufficient warning.

Fireman Miller, of extra 4016, stated that he did not hear the instructions given to the brakeman by the engineman, as he was on the tender taking water at the time. While the train was moving through the siding, he crossed

over to the engineman's side of the cab and saw the head brakeman, who was riding on the side of a car, giving proceed signals with his lantern, after which the brakeman lighted a fusee and used it in giving the same signals. He said the engineman called for signals each time the brakeman's lantern went out of sight. He did not know that the cars had been shoved out on the main track until the engineman returned, after going ahead, and informed him of the fact, the engineman remarking that he was going back to get the conductor While the engineman was proceeding towards the caboose he sounded a backup signal, but received no signal from the rear of the train, although the swing brakeman, who was between the engine and the south passing-track switch, gave a backup signal, he did not accept this signal as the engineman had stated that he thought the switch had been run through and the points damaged

Head Brakeman Pendergrass, of extra 4016, who had had only three weeks' experience, said that when he returned from the office at Wilson, the engineman handed him two fusees and instructed him to go to the far end of the cars on the passing track and to stop them when they reached the clearance point He proceeded to the south end of these cars, which were then 12 or 15 car-lengths from the switch, and after the engine coupled to the other end, they were moved ahead in response to his proceed signal After the cars had moved a distance of two or three car-lengths, and while giving proceed signals, his lantern became extinguished, he attempted to relight the lantern, using all the matches in his possession, but without success, so he lighted a fusee and gave stop signals, first from the side of a car and then while standing on the ground facing northward or toward his engine, and at this time the leading car was three or four car-lengths north of the clearance point. The cars continued to move slowly ahead, however, and thinking that they might not be coupled, he boarded the second car from the head end, a gondola, and set a hand brake, but this also failed to stop the cars. Realizing that the cars would move beyond the south end of the passing track, he got off, ran ahead and opened the switch, and while the cars were still moving he ran southward to protect against train No. 822. He said the fusees in his possession were five-minute fusees and the one he had lighted to use in passing signals, burned out about two minutes after he left the cars. About three or four minutes later, he thought he saw the headlight of train No 822 approaching and so he lighted the second fusee, but it developed that he had been misled by automobile headlights on the highway which parallels the main track on the west, and when the train finally approached, this second fusee had also burned out, leaving him without lights or any other flagging equipment. He attempted to

warn the crew of the approaching train by standing in the middle of the track and waving his cap with one hand and his unlighted lantern with the other, continuing this performance until the train was so close that it was necessary to step off the track on the engineman's side, and when the engine passed him he continued his stop signals He did not know whether the engineman acknowledged his signals and did not think the speed was reduced before the engine passed him, which was at a point approximately 4 telegraph-pole lengths south of a bridge which is 1,700 feet from where the cars were standing on the main track. Brakeman Pendergrass said he knew that in addition to fusees, engines are supplied with red lanterns and torpedoes, but he did not provide himself with this additional equipment on account of the fact that he was on the ground at the time the engineman gave him the instructions, together with the fact that at the time he left the engine he did not think it would be necessary to flag train No. 822. It also appeared from his statements that he had cleaned his lantern that morning, but could not remember when he had filled it, he did not know why it went out, but said that after the accident he refilled it.

Swing Brakeman Crader, of extra 4016, who made his first trip under pay on the day before the accident, stated that he coupled the engine to the cars standing on the passing track and then walked southward to a point about midway between the engine and the south end of the cut. He noticed the head brakeman give two proceed signals with his lantern, which he relayed to the engineman He also saw the head brakeman standing on the main track waving a fusee, but did not know whether he was giving signals to the crew, as this was the first time he had ever seen signals given with a fusee It appeared to him that the head brakeman was waving the fusee in line with the track, instead of across it, and from the way these signals were being given he thought they were intended for a highway crossing As soon as the cars came to a stop, he ran to a point about six car-lengths from the leading car, from which point he could see that the cars were out on the main track. After giving a backup signal, he returned to the engine and informed the fireman that the train would have to be backed up and the fireman whistled a backup signal, but there was no signal given from the rear of the train.

Conductor Harris, of extra 4016, who had been made a conductor only two days prior to the accident, stated that when his train arrived at Wilson, he walked to the head end of the train and the engineman advised him as to what arrangements had been made with the brakemen to handle the cut of cars on the passing track. The conductor remained at the north switch and the train cleared the main track at 6 45 p m , after which he closed the switch and

gave a stop signal, and then went to the telegraph office to get bills and train orders While these movements were being made, the flagman was in the vicinity of the caboose The conductor returned to the caboose about 10 minutes later, left the bills, and then started walking towards the head end of the train, and when he had reached a point about 10 car-lengths from the caboose he met his engineman, who informed him that some of the cars had been shoved out on the main track, the engineman asking him to proceed to the south switch and ascertain whether the switch was all right before a backup movement was started Conductor Harris hurried southward and had reached a point about 10 car-lengths from the south end of the cars when the collision occurred He was of the opinion, at the time the arrangements were made to clear the main track for train No. 822, that his train was being given the proper supervision, in view of the fact that the engineman had instructed the two brakemen at the head end of the train as to how to handle the situation, and since the rear brakeman did not know what movement was to be made, he thought it was necessary to remain at the north switch and close it, and then to get the bills and orders, so that as soon as train No. 822 arrived his own train could proceed to Bassett ahead of train No. 807 without delaying the latter train.

Flagman Rhodes, of extra 4013, who had had about three months' experience, said he was the one who closed the switch after the caboose had cleared the main track. He then started ahead, but met Engineman Gettings and was told by the engineman that the latter thought some cars had been shoved out on the main track at the south switch, that the head brakeman had gone out to flag train No. 822,, and that he was to return to the rear end of the train and look out for train No 807.

Engineman Green, of train No 822, stated that the customary air brake test was made before leaving Memphis and that several stops were made en route without difficulty The train approached Wilson at a speed of about 60 miles per hour and when it reached a point in the vicinity of the bridge, he observed some one, without lights, in the center of the track jumping up and down and waving his arms, about a pole-length ahead of the engine Realizing there was something irregular, he started making a service application of the brakes, but continued moving the brake-valve handle around into the emergency position. The brakes responded promptly and had reduced the speed to about 10 or 12 miles per hour by the time the accident occurred Engineman Green did not see the indication displayed by the switch lamp at the south passing-track switch until about the time he noticed the man standing on the track, and he also stated that although the headlight of

his engine was burning properly, it was impossible, at that time of the evening, to have seen the man on the track at a distance of 800 feet

Fireman Kizer, of train No 822, stated that upon reaching a point a short distance south of the bridge, he noticed a man standing on the engineman's side of the track about an engine-length ahead of the train flagging with his arms, he thought the engineman saw this person at about the same time, as the engineman applied the brakes as soon as he came into view. Shortly afterwards he noticed the cars obstructing the main track and called them to the attention of the engineman. He estimated the speed of the train at the time the brakes were applied at 50 or 55 miles per hour, but this speed had been reduced to 15 or 20 miles per hour by the time the accident occurred Fireman Kizer also stated that the time of day prevented him from seeing the switch light at the south passing-track switch any sooner than he did, which was about the time that he saw the cars on the main track, although under ordinary conditions this light could be seen for a distance of about 1¾ miles.

The statements of Conductor Wilson and Brakeman Marshall, of train No 822, were to the effect that the brakes were properly tested at Memphis, and that their first intimation of anything wrong was when they felt a heavy application of the brakes which appeared to be an emergency application, while the train was approaching the passing track at Wilson They estimated the speed of their train at this time to have been from 40 to 55 miles per hour, and at the time of the accident at 18 or 20 miles per hour. Immediately after the accident, Brakeman Marshall went back to flag and met the head brakeman of extra 4016, who was hurriedly walking northward, between the train and the bridge south of the passing track

Statements of Assistant Superintendent Sims indicated that on account of an unusual amount of business, it had been necessary to call back into service all available men and even after calling on other divisions of the railway, as well as other railroads in the vicinity, it had been impossible to obtain a sufficient number of trainmen It also appeared that on this division, within the past 30 days, 26 experienced trainmen and 30 inexperienced trainmen had been employed in addition to those called back into service On the morning of October 14 no regular freight crews were available at Chaffee for train No. 835, a second-class merchandise train, and it was necessary to make up a crew from the extra board, this being the train crew involved in the accident here under investigation.

Conclusions

This accident was caused by cars having been pushed out on the main track, on the time of an overdue first-class train, without proper flag protection

The evidence is to the effect that there was a cut of 56 cars standing on the passing track at Wilson, and when extra 4016 entered that track to meet northbound train No. 822 it was necessary to move these cars ahead in order to clear the main track at the north switch This movement was started by proceed signals given by Head Brakeman Pendergrass, and in continuing these signals his lantern was extinguished. Being unable to relight it, he lighted a fusee and gave signals, which were intended for stop signals, but the middle brakeman did not know what they were, while the engineman thought they were proceed signals. The result was that some of the cars were pushed out on the main track a distance of nearly 200 feet and the head brakeman then continued southward to flag train No. 822. A short time later he observed a light in the distance, mistook it for train No. 822, used his second and last fusee, and when train No. 822 finally came in sight the head brakeman had nothing left in the way of flagging equipment, consequently he did what he could to flag the train by waving his arms while standing in the center of the track, but was unable to warn the crew of that train in time to prevent the accident

The rules provide that a flagman's equipment at night shall consist of a red light, a white light, torpedoes and fusees. Brakeman Pendergrass did not provide himself with the additional equipment before he left the engine, simply taking what the engineman gave him, while Engineman Gettings was of the opinion, at the time he handed the two fusees to the brakeman, that these would be sufficient to flag train No 822 providing there was insufficient room on the siding for his train to clear the main track Had Brakeman Pendergrass been furnished with the proper flagging equipment, there is no doubt he would have been able to prevent the accident.

The testimony is conflicting as to the signals given with the fusee by Brakeman Pendergrass at the time the cars were being moved ahead. He maintained that some of these signals were given while he was on the ground facing the engine, but Engineman Gettings and Fireman Miller contended that the signals were given in the same manner as those previously given with the brakeman's lantern, while Brakeman Crader said that the signals appeared to be given in line with the track as if flagging a crossing, although

he had never seen signals given with a fusee and did not know what they meant.

Consideration of all the circumstances attending this accident indicates quite clearly that the fundamental difficulty rested with the inexperience of the train crew. Of the four men composing the train crew, the conductor was the only member who was an experienced man, and he had been made a conductor only two days previously. In view of the lack of experience of all three of his brakemen, it would seem that Conductor Harris should have arranged to give personal supervision to the movement which was being attempted, instead of leaving it to the engineman to operate his engine, see that his rear end was into clear, and at the same time supervise the work of two inexperienced brakemen, one of whom was 50 car-lengths distant.

At the time of the accident none of the 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.