INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN RE INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE CHICAGO AND ALTON RAILROAD NEAR LARRABEE, MO., ON JANUARY 23, 1927.

March 2, 1927.

To the Commission:

On January 23, 1927, there was a head-end collision between a passenger train and a freight train on the Chicago and Alton Railroad near Larrabee, Mo , which resulted in the death of 1 employee and the injury of 13 passengers and 2 employees.

Location and method of operation

This accident occurred on that part of the Western Division extending between Booth and Slater, Mo., a distance of 105.7 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 a manual block-signal system. The point of accident was about 2¼ miles west of Larrabee, approaching this point from either direction the track is tangent for more than 2 miles. The grade at the point of accident is nearly 1 per cent descending for eastbound trains.

There was a sleet storm prevailing at the time of the accident, which occurred at about 5 10 a.m.

Description

Westbound passenger train No. 9 consisted of one baggage car, one combination mail and smoking car, one chair car, two Pullman sleeping cars, and one combination sleeping and observation car, in the order nared, hauled by engine 626, and was in charge of Conductor Alexander and Engineman Elkost. This train left Larrabee at 4.59 a.m., according to the train sheet, 34 minutes late, and shortly afterward it collided with train second No. 84 while traveling at a speed estimated to have been between 30 and 40 miles an hour.

Eastbound freight train second No 84 consisted of 37 cars and a caboose, hauled by engine 815, and was in charge of Conductor Markwell and Engineman Taylor. This train arrived at Clark, 6.4 miles west of Larrabee, at 4.02 a.m., entered the passing track for the purpose of meeting trains Nos. 25 and 9, and received a clearance card authorizing it to proceed upon the arrival of those trains. According to the train sheet, train No. 25 passed Clark at 4 51 a.m., one hour and one minute late, while train second No. 84 departed from Clark at 4.52 a.m., without waiting for train No. 9 to arrive, and collided with that train while traveling at a reduced rate of speed.

Both engines came to rest in an upright position badly damaged, with their driving wheels derailed The baggage car in train No. 9, which was of wooden construction with steel sheathing, was telescoped its entire length, while the first five cars in the freight train were more or less badly damaged. The employee killed was the baggageman of train No. 9

Summary of evidence

Engineman Eikost, of train No 9, stated that after his train had taken coal at Larrabee he departed from that point at 5 03 a.m., under a clear block-signal indication. Shortly afterwards he observed the headlight of an opposing train, but thought it was standing at Clark and did not realize the train was approaching until it came over the crest of a hill a short distance west of the point of accident. He immediately closed the throttle, applied the air brakes in emergency and got down on the steps prepared to get off, but was not able to do so before the accident occurred. He said that by this time the speed of his train probably had been reduced to about 40 miles an hour. Engineman Eikost further stated that his view was not obstructed by the sleet or snow, but that the approaching headlight had a tendency to blind him and to prevent him from accurately determining its location.

Fireman Womack, of train No. 9, stated that the window on his side of the cab was open and that he was looking forward continuously after leaving Larrabee, except during two short intervals while he was engaged in shoveling coal, but he did not see the headlight of

the opposing train until it came over the crest of a hill a short distance ahead of his engine. The air brakes were applied in emergency, at which time the train was traveling at a speed of about 50 miles an hour, but he did not know to what extent the speed had been reduced before the collision occurred.

The statements of Conductor Alexander, of train No. 9, adduced nothing of importance as he was unaware of anything unusual until the emergency application of the brakes was made just before the occurrence of the accident.

Engineman Taylor, of train second No. 84, stated that as his train passed the telegraph office, located near the west passing-track switch, he received a clearance card which authorized his train to proceed after the arrival of trains Nos. 25 and 9, provided its orders and time-table rights permitted. The train was brought to a stop at about 4.10 a.m. with the engine near the eastern end of the passing track. He then inspected his engine, which required only a few minutes, returned to the engine cab and evidently fell asleep, although at the time train No. 25 passed his engine he was wide awake and did not realize then that he had been asleep. He was under the impression that both trains had passed, although he had only noticed one train, and immediately after train No. 25 had passed some one said "Let's go", whereupon the head brakeman opened the east passing-track switch and he pulled out onto the main track, shortly after which he received a proceed signal from the rear of his train. When his train reached the second rise in the track east of Clark he observed the headlight of the opposing train and he said he continued to watch it for about 15 minutes, being under the impression the train was standing on the main track at Larrabee. He did not realize that the train was approaching until it was a short distance ahead of his own train, and he immediately applied the brakes in emergency and jumped. Engineman Taylor could not account for his idea that both trains had passed while his train was standing on the passing track. Engineman Taylor further stated that the headlight on his engine was extinguished while standing on the passing track at Clark, but that it had been lighted and was burning brightly at the time of the accident. It was his belief that at the time the

headlight of the opposing train was in sight, while his own train was passing over the knolls between Clark and the point of accident, that that train was standing at Larrabee, and that it started from Larrabee after his own train had passed over the last knoll.

Fireman Henderson, of train second No. 84, read and understood the clearance card received at Clark and then fell asleep while his train was standing on the passing track, being awakened by the passing of train No. 25. After that time he had no further conversation with the engineman and he did not remember of having made any statement about proceeding. He said he saw the headlight of an opposing train when his own train was at a point about one-half mile from the point of accident, but he thought the opposing train was standing at Larrabee; he then started shoveling coal and had just returned to his seat box when he observed the approaching train immediately ahead of his engine.

Head Brakeman Anson, of train second No. 84, stated that as his train passed the telegraph office at Clark he received the clearance card from the operator and that he read and understood its contents. Brakeman Anson also went to sleep in the cab of the engine and did not awaken until train No. 25 passed. He then heard some one, he thought it was the fireman, say "Let's go" and without conferring with any one he proceeded to open the switch. After the rear of his train had passed the switch he closed it, gave a proceed signal on the engineman's side of the train and entered the caboose. Brakeman Anson said the conductor, who was riding on the rear of the caboose as he entered it, inquired as to whether train No. 9 had gone and he replied that he had been asleep but supposed that it had, judging from the remark he overheard before leaving the engine cab. He did not know that the engineman and fireman also had been asleep while his train was standing at Clark.

Conductor Markwell, of train second No. 84, went to sleep in the caboose, he awoke about 4.45 a.m., went outside of the caboose and saw the headlight of an approaching train which he recognized as train No. 25 at the time it passed him. Immediately afterward his train pulled out of the passing track without his knowing whether or not train No. 9 had gone. As the caboose passed the switch Head Brakeman Anson closed it and he told Brakeman Anson that he had been asleep and asked if train No. 9 had passed to which the brakeman replied that it had. He then asked the brakeman if the crew at the

head end of the train had been asleep and the brakeman replied that he had, but that Fireman Henderson had remained awake. Conductor Markwell was aware of the telephone located near the east passing-track switch and said that he intended to communicate with the operator at Clark to learn the location of train No. 9, but failed to do so on account of the emphatic statement of Brakeman Anson that train No. 9 had passed.

Flagman Davenport, of train second No. 84, stated that as his train was approaching Clark he felt sleepy and lay down in the caboose, in which position he remained until the accident occurred. The passing of train No 25 aroused him and he was aware that his train was leaving the passing track, he also heard the conductor and head brakeman talking with each other but did not know what they were discussing.

Conclusions

This accident was caused by train second No. 84 heading out on the main track before the arrival of train No. 9, an overdue superior train, due to the fact that the entire crew fell asleep and thought train No. 9 had passed.

The evidence is conflicting as to whether or not the remark "Let's go" was made by some member of the crew in the engine cab of train second No. 84 before the train left Clark. Regardless of whether or not any statement was made about proceeding, the fact remains that the engine crew, and also the train crew, had been asleep and had heard only one train pass them, while they were fully aware that two trains were to be met at Clark, as indicated by the clearance card in their possession. No excuse can be offered for their action in assuming that both trains had passed, particularly in view of the fact that ample facilities were available for communicating with the operator and thus obtaining accurate information.

Each engineman saw the headlight of the opposing train when it was several miles distant but failed to realize that the trains were approaching each other and consequently made no effort to stop until the distance between them was too short to prevent the accident. This is a situation which has arisen on several occasions, and it was discussed in the report covering the investigation

of the accident which occurred on the Chicago, Milwaukee and St.Paul Railway near Sacred Heart, Minn., on November 15, 1925, in which the following statement was made:

> "With respect to the ability of enginemen to determine the location of an opposing headlight, it was found that it was impossible to do this, there being no apparent change in the location of the headlight, or any increase in the intensity of the light, from the time it first appeared, more than 4 miles distant, until it was close enough to reflect on the rails at a distance of less than 1 mile; even this reflection however could not be seen by an engineman if his own headlight were burning, neither would it be visible if each of the opposing engines was running on a slightly ascending grade."

If an adequate automatic block-signal system had been in use on this line, this accident probably would not have occurred; an adequate automatic stop or train control device would have prevented it.

The employees involved were experienced men and 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. It appeared, however, that before going out on the trip on which the accident occurred several members of the crew of train second No. 84 had not obtained adequate sleep, the conductor and flagman having slept only about 2½ hours while the head brakeman had not had as much sleep as the conductor and flagman, these three employees had been off duty 8 hours and 20 minutes, while the engine crew had been off duty nearly 15 hours. In the case of some of the members of this crew it appeared that the reason for their failure to obtain adequate rest was the fact that they had not anticipated being called back on duty as soon as actually was the case.

Respectfully submitted,

W. P. BORLAND,

Director.