INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN RE INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE ILLINOIS CENTRAL RAILROAD AT MOUNDS, ILL., ON JANUARY 22, 1929.

April 24, 1929.

To the Commission:

On January 22, 1929, there was a side collision between a passenger train and a freight train on the Illinois Central Railroad at Mounds, Ill., which resulted in the death of two employees, and the injury of five passengers, five employees, one trespasser and one other person.

Location and method of operation

This accident occurred on that part of the Cairo Terminal District of the St. Louis Division extending between Mounds and Cairo Junction, Ill., a distance of 11.6 miles; in the vicinity of the point of accident this is a double-track line over which trains are operated by time-table, train orders and an automatic block-signal system. The accident occurred within yard limits, at the fouling point of what is known as the long lead, near the south end of the yard. This track parallels the main tracks on the west; it connects with the southbound main track and extends northward a distance of 2,954 feet to where it intersects a track leading to the various yard tracks. The switch at the south end of the long lead is of the Ramapo automatic spring type and is normally set for the main track; the switch stand is not equipped with a lamp. Approaching the point of accident from the north on the main line the track is tangent for a distance of 1,796 feet, followed by a 0° 30' curve to the left 893 feet in length, from which point the track is tangent to the point of accident, a distance of 2,432 feet, and for some distance beyond. The grade at the point of accident is 0.143 per cent ascending for southbound trains.

The only signal involved in the accident is signal 357-3, located 261 feet north of the main track switch of the long lead. This signal is of the color light type and displays green, yellow, and red, for proceed, caution, and stop, respectively. When a southbound train on the long lead reaches a point 173 feet north of the main track switch it encounters an insulated joint and automatically causes signal 357-3 to display a stop indication.

The weather was clear at the time of the accident, which occurred at about 10.51 p. m.

Description

Southbound freight train extra 1616 consisted of 29 cars and a caboose, hauled by engine 1616, and was in charge of Conductor Pippin and Engineman Wellington. This train departed from the yard at Mounds at about 10.35 p. m., proceeded through the long lead and was about to enter the southbound main track, traveling at a speed variously estimated to have been from 3 to 8 miles per hour, when the leading car in the train was struck by train No. 5.

Southbound passenger train No. 5 consisted of one combination baggage and club car, seven Pullman sleeping cars, one dining car, three Pullman sleeping cars and one observation car, all of steel construction and in the order named, hauled by engine 2416, and was in charge of Conductor Wisher and Engineman Oland. This train left Centralia, 93.9 miles north of Mounds, at 8.25 p.m., 19 minutes late, passed Mounds station at 10.49 p. m., 20 minutes late, and shortly afterwards it collided with the side of extra 1616 while traveling at a speed estimated to have been between 30 and 40 miles per hour.

Engine 1616 and the first and second cars of the freight train were derailed and came to rest in an upright position, although the first car went down an embankment west of the lead track. The tender cistern was torn from its frame and was thrown down the embankment on the same side of the track, while the tender frame remained coupled to the engine. The engine, tender, and the first three cars of the passenger train were derailed to the left, the engine and tender coming to rest on their left sides east of the northbound main track, with the forward end of the engine 280 feet beyond the point of collision. The first two cars were diagonally across the main tracks and were partly overturned while the third car remained upright in line with the track. Both engines and the forward car of train No. 5 were considerably damaged. The employees killed were the engineman and head brakeman of extra 1616.

Summary of evidence

Fireman Grasty, of extra 1616, stated that his train was ready to leave Mounds yard at 10.30 p. m., and that after passing the switch tender's shanty, which is located a short distance south of the north lead track switch, he put in a fire and then looked out the window and observed

a train approaching. He called to the engineman that some one was coming and the engineman answered by saying "what". At this time his own engine was south of signal 357-3 and the collision occurred a few seconds later; he estimated the speed of his train at the time of the accident at 6 to 8 miles per hour. Fireman Grasty said he read the train orders and clearance card received at Mounds, none of which pertained to train No. 5; he did not hear anything said about that train by the conductor or engineman at the time the conductor delivered the orders, neither was there anything said to him about it after departing from the yard. He noticed that the head brakeman and engineman were talking while passing through the lead track but did not hear the conversation. Fireman Grasty did not have a copy of the Cairo Terminal time-table and did not know at what time train No. 5 was due at Mounds as this was his first trip into Mounds since some time during the previous summer. He further stated that Engineman Wellington had been sick for a period of 14 days prior to the accident but had not complained of feeling ill on the day of the accident.

Conductor Pippin, of extra 1616, stated that he only averages about one trip each month to Mounds, most of his work being performed on another division. When his train was ready to depart from Mounds on the day of the accident he went to the telegraph office and procured the train orders and clearance card as well as a Cairo Terminal time-table, this being at about 10.10 p. m. He asked the operator what time train No. 5 was due and the operator replied at 10.39 p. m., and on looking at the time-table he noted that that time was correct; he did not remember hearing the operator mention the fact that train No. 5 would be late. He then checked the train register, but as train No. 5 was not then due a record of it could not be noted on the train register check. After this had been done he proceeded to the engine and delivered the orders, clearance card and register check to the engineman, and at the same time he informed the engineman that train No. 5 was due but had not gone, the engineman acknowledging that he understood and remarking that that train would be first; he did not see the head brakeman at the time the orders were delivered and did not know whether the brakeman heard the conversation. Conductor Pippin said his train started at 10.35 p. m., with all air brakes coupled up and in proper working order. When he entered the caboose he told the flagman that train No. 5 had not departed and instructed the flagman to look out for it, he then started working on his reports while the flagman stationed himself at the door on the left side of the caboose.

When the train entered the long lead the flagman called his attention to it but as the train was moving at a low rate of speed and as he was familiar with the length of the lead track he paid no attention to the movement of the train until train No. 5 passed his caboose, shortly after which his own train came to a stop. He immediately left the caboose and observed that the signal at the south end of the yard was displaying a stop indication, which lead him to believe that his train had moved just far enough to foul the signal and that it would be necessary to back up in order to permit train No. 5 to pass, not realizing at first that there had been an accident. He heard no whistle signals sounded by the passenger train as it approached the point of accident and estimated the speed of his own train at the time of the accident at 4 or 5 miles per hour. Conductor Pippin further stated that although he had not been informed that train No. 5 was running late he knew that it had not passed before his own train started from the yard. Conductor Pippin was certain that the engineman understood that train No. 5 had not departed and he felt confident that his train would be brought to a stop on the lead track before fouling the southbound main track, otherwise he would have taken steps to bring it to a stop.

Flagman Ezell, of extra 1618, stated that after his train departed he called the conductor's attention to the fact that train No. 5 was then six minutes late and the conductor replied that he was aware of it and that he had discussed the matter with the engineman. Flagman Ezell said that the doors of the caboose were closed when the train was passing through the yard and that the conductor was sitting at his desk while he himself was between the rear door and the stove preparing a lunch. When the train reached the crossover switches he looked out the rear door to ascertain that the train was heading through the long lead, and at that time its speed was about 3 miles per hour. He did not see or hear train No. 5 pass as he did not again look from the caboose until just about the time the accident occurred. It further appeared from the flagman's statements that before his train departed from the yard he placed the markers on the rear of the caboose, showing red indications to the rear, having in mind that if train No. 5 passed before his train reached the south end of the lead track a stop would not be made and the markers would be in proper position for the main line movement, but if that train had not gone and his own train was brought to a stop on the lead track it was his intention to change the markers to display green to the rear, which was the proper indication for the rear of a train on a siding at night to be passed by another train. He also said that this was his first trip to Mounds within the last six months.

Engineman Oland, of train No. 5, stated that his train departed from Centralia at 8.25 p. m. and that nothing unusual occurred between that point and Mounds, three or four stops were made and the speed reduced several times enroute, and he said the air brakes were found to be in first-class condition. His train passed the station at Mounds at 10.49 p. m., traveling at a speed of about 60 miles per hour, and shortly afterwards he noticed that the signal located about 1,000 feet north of the north lead track switch was displaying a clear indication. A light fog was encountered in the vicinity of the first curve north of the long lead but this did not interfere with distinguishing objects while passing through it. As soon as his engine emerged from this fog he observed the cupola light and a marker of a caboose, the latter light displaying red to the rear, this caboose was on the long lead track, about 300 feet ahead of him, and at that time he thought it was standing still. On account of the fact that this marker was displaying red he was of the impression that an efficiency test was being conducted and as a result he made a 10 or 15-pound brake-pipe reduction with the intention of bringing his train to a stop, and when passing the caboose he sounded a few short blasts of the whistle to apprise the crew of that train that their markers were improperly displayed. He then noticed that the signal at the south end of the long lead, signal 357-3, was displaying a green indication but upon reaching a point approximately 150 feet distant from that signal it changed to the stop position; the speed of his train then was 45 or 50 miles per hour and he immediately applied the brakes in emergency, and it was his idea that they appeared to take proper hold, as the brakes had not been released since the service reduction was made. Engineman Oland further stated that he did not apply the brakes in emergency at the time he observed the marker on the caboose showing red as it might have resulted in damage to the train, as well as the fact that it is not the practice to make an emergency application at every little irregularity, and the further fact that the signal at the south end of the lead track was displaying a clear indication which lead him to believe that an emergency application would not be necessary.

Fireman Dolan, of train No. 5, stated that his train passed Mounds station at a speed of about 60 miles per hour. Between that point and the point of accident he was on the engine deck fixing the fire preparatory to turning the engine over to another crew at Cairo Junction and his first intimation of anything wrong was when he heard a heavy service application of the air brakes and also heard the engineman say something about markers, his engine then being in the vicinity of the

north lead track switch. A short time later, or about at the time the brake-valve exhaust had stopped, the engineman remarked that they were going to hit, at the same time applying the brakes in emergency. Fireman Dolan said he was not in a position to observe signal indications at any time after passing Mounds station.

The statements of Traveling Engineer Woley, who was riding on the fireman's seat box approaching the point of accident, practically corroborated those of Engineman Oland, except that he was not in a position to see the signal at the south end of the lead track when it changed from green to red; the first thing he saw was an engine heading out across the frog of the switch. He estimated the speed of train No. 5 at the time it passed the caboose of extra 1616 at 50 miles per hour and at the time of the accident as being between 30 and 40 miles per hour. He understood that the rules made it obligatory upon the engineman to stop the train if possible before passing the caboose with the markers displaying red but felt satisfied that due to the block signal displaying a proceed indication the engineman did not think it was necessary to reduce speed any quicker than was actually the case. Mr. Woley further stated that he also was of the opinion that a test was being held and therefore did not say anything to the engineman about controlling the speed of the train, particularly in view of the indication displayed by the signals at the south end of the yard.

Stoker Inspector Thorpe, an employee of the Standard Stoker Company, stated that he was riding on the deck of the engine, on the right side, and when he heard the brake-valve exhaust he looked out and observed that the block signal was green but when the train reached a point about two engine-lengths from the signal it changed to red.

The statements of Baggageman Sloan, Conductor Wisher and Brakeman Baldwin, of train No. 5, furnished no additional facts of importance as they were unaware of anything unusual until they felt a heavy application of the brakes, which was followed shortly afterwards by the occurrence of the accident.

Telegraph Operator Sanders, on duty at Mounds yard office, stated that he delivered the train orders and clearance card to Conductor Pippin at 10.14 p. m., and at the same time the conductor obtained a time-table. Operator Sanders did not recall whether the conductor made any inquiry concerning train No. 5 but remembered that he saw the conductor looking at the train register.

Switchtender Provo, on duty at the crossover switches in the vicinity of the north lead track switch, stated that at about 10.44 p. m. he observed extra 1616 entering the long lead, and as he had just been in communication with the dispatcher, who informed him that train No. 5 would arrive in about five minutes, he walked over to the southbound main track with the intention of communicating this information to the engine crew of extra 1616 but was unable to do so on account of the fact that there was no one on the fireman's side of the engine, the fireman being engaged in putting in a fire. He then waited for the caboose to come by but as it passed he was unable to attract the attention of the train crew as all of the doors of the caboose were closed. He estimated the speed of the train at the time the engine passed him at 5 or 6 miles per hour and thought that the speed had been increased to 8 or 10 miles per hour when the caboose passed. Switchtender Provo also stated that three short blasts on the whistle were sounded before train No. 5 passed the caboose and when it was passing the freight train he saw fire flying from the wheels.

On the evening of January 26 a vision test was conducted in the vicinity of the point of accident. A caboose was placed on the long lead track at approximately the same point as that occupied by the caboose of extra 1616 at the time of the accident, with the markers displaying red indications. These markers could be seen for a distance of about 2,400 feet from the left side and about 1,680 feet from the right side of the engine of a southbound passenger train. This test also showed that the block signal lights were bright and could be seen for a considerable distance. At the time this test was conducted the weather was slightly hazy and the moon was shining.

Conclusions

This accident was caused by extra 1616 fouling the main track directly in front of train No. 5, an overdue superior train, for which Conductor Pippin and Engineman Wellington were responsible.

The rules provided that the general direction and government of a train is vested in the conductor; he must consult the engineman and be equally responsible with him for the safety and proper handling of the train, and must not allow other duties to interfere with the proper protection of his train. According to the evidence, Conductor Pippin obtained a terminal time-table when he received the orders at Mounds yard office and noted the scheduled arriving time of train No. 5. He also checked the train register, but as that train was not yet due

at the time this check was made he could not make any reference to it on the train register check which he delivered to the engineman, although he said that at the time he delivered the orders he called the engineman's attention to the fact that train No. 5 was then due but had not departed. He also discussed this matter with the flagman when he entered the caboose as the train was leaving the yard, but neither of these employees paid any further attention to the matter until train No. 5 passed their caboose while their own train was moving slowly through the long lead, the conductor being engaged with his reports and the flagman in preparing lunch. Conductor Rippin said there was no doubt in his mind but that Engineman Wellington throughly understood that train No. 5 had not passed Mounds and undoubtedly he was depending on the engineman to bring the train to a stop short of the fouling point. No definite reason can be assigned for the failure of Engineman Wellington to stop his train before it fouled the main track. It was stated that he had been off duty on account of illness for a period of about two weeks prior to the day of the accident, but it did not appear that he was in any way unfit for duty while on the trip on which this accident occurred.

The rules require that when a train is clear of the main track green marker lights will be displayed to the front, sides and rear. The testimony revealed that this rule was not complied with by the crew of extra 1616, the markers being placed on the caboose showing red indications to the rear before the train left the yard. The violation of the rule in this particular case, however, tended to lessen the extent of the damage, for as soon as the engineman of train No. 5 saw these markers he applied the brakes and the speed of his train had been reduced to some extent before extra 1616 fouled the circuit and caused signal 357-3 to assume the stop position.

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.

Respectfully submitted,

W. P. BORLAND,

Director.