INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN RE INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE NASHVILLE, CHATTANOOGA & ST. LOUIS RAILWAY AT WESTPORT, TENN., ON AUGUST 15, 1927.

October 15, 1927.

To the Commission:

On August 15, 1927, there was a head-end collision between a Nashville, Chattanooga & St. Louis Railway passenger train and a Gulf, Mobile & Northern Railroad freight train on the tracks of the first-named railway at Westport, Tenn., which resulted in the death of 1 employee and the injury of 82 passengers, 5 employees, 3 persons traveling on free transportation, and 1 person carried under contract.

Location and method of operation

This accident occurred on that part of the Paducah and Memphis Division extending between Bruceton and Memphis, Tenn., a distance of 145.2 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. Freight trains of the Gulf, Mobile & Northern Railroad are operated over the tracks of the Nashville, Chattanooga & St. Louis Railway under a trackage agreement between Bruceton and Jackson, Tenn., a distance of 58 miles. The accident occurred at a point 2,095 feet south of Westport station; approaching this point from the north the track is tangent for a distance of 4,919 feet, the accident occurring on this tangent at a point 364 feet from its southern end. Approaching from the south there is 4,465 feet of tangent and a 1° 59' curve to the left 956 feet in length, followed by the tangent on which the accident occurred. The grade at the point of accident is 0.36 per cent ascending for southbound trains. There is a passing track paralleling the main track on the east, the south switch being located about 778 feet north of the point of accident.

The weather was clear at the time of the accident, which occurred at about 5.07 p.m.

Description

Southbound third-class Gulf, Mobile & Northern freight train No. 330 consisted of 16 cars and a caboose, hauled by G M.& N. engine 263, and was in charge of Conductor Milam and Engineman Wood. This train left Bruceton, 12.2 miles north of Westport, at 4.33 p.m., according to the train sheet, one hour and eight minutes late, passed Westport at 5 p m., without having received any train orders relative to train No. 103, and was brought to a stop by the conductor with the caboose approximately one car-length south of the south switch of the passing track at Westport. An attempt was then made to back into the passing track but before this could be accomplished the train was struck by train No. 103.

Northbound passenger train No. 103 consisted of one combination mail and baggage car, one baggage car, three coaches, one Pullman parlor car and four coaches, in the order named, hauled by engine 537, and was in charge of Conductor Vallandingham and Engineman Kane. This train departed from Yuma, 3 71 miles south of Westport, at 5.02 p.m., on time, and shortly afterwards it collided with southbound freight train No. 330 while traveling at a speed estimated to have been between 35 and 50 miles per hour.

Engine 263 was derailed and came to rest on its right side in a badly damaged condition. The tender was also derailed together with the forward truck of the first car in train No. 330, while the second car was partly telescoped. Engine 537 was practically demolished, the boiler being torn from its frame and hurled forward a distance of approxi ately 150 feet. The tender was badly damaged and came to rest on its right side, while the forward end of the first car was derailed to the right, the car coming to rest in an upright position diagonal with the track. The forward pair of wheels of the leading truck of the second car was also derailed, none of the other equipment in train No. 103 was derailed and it sustained only slight damage. The employee killed was the engineman of train No. 330.

Summary of evidence

Fireman Liddell, of train No. 330 stated that as his train approached the north passing-track switch he observed the train-order signal in the clear position and the engineman called its indication. The speed was re-

duced to about 10 or 15 miles per hour, enough so that it could have been stopped before it passed the switch, but shortly afterwards the engineman began working steam. Both Fireman Liddell and the head brakeman informed the engineman that they would have to get into clear for train No. 103, to which the engineman replied that he intended to pull by and back in. Engineman Wood was looking at his time-table between the north switch and the station, and as the train was passing the station, at about 5 p.m., traveling at a speed of about 20 miles per hour, the brakes were applied from the caboose, at which time he again informed the engineman that they would have to meet train No. 103; he did not, however, see any one at the station giving signals. The engineman continued to work steam, and also placed the brake valve in the release position, and after the train had been brought to a stop just south of the south switch the engineman kept moving the brake valve handle back and forth in an effort to release the brakes. Fireman Liddell saw the rear brakeman open the switch and then told the engineman to back up, but on account of difficulty in releasing the brakes the train could not be moved for about three minutes. In the meantime the engineman told the head brakeman to protect the train by flag and the head brakeman left the cab on the engineman's side with a red flag; shortly after he had done so the fireman heard the engineman call him back but he did not hear the conversation which took place between them. Fireman Liddell made no attempt to afford protection as he thought the head brakeman had went forward for that purpose, saying that he could not see the brakeman due to the latter's position on the opposite side of the engine.

Head Brakeman Keeton, of train No. 330, stated that as the train was approaching the north switch the engineman sounded the station whistle signal, at which time the conductor gave a stop signal from the caboose which the engineman answered with one short blast of the whistle. Expecting the train would head in at the north switch, the head brakeman proceeded along the running board to the pilot of the engine for the purpose of opening the switch. The speed had been reduced to about 10 miles per hour but before the engine reached the switch the speed was increased, and on realizing they were going to pass the switch he gave the engineman a signal to head in, but at this time the engineman was looking at his time-table. Brakeman Keeton said he then went back into the cab and asked the engineman if they were not going to meet train No. 103 at that point and at about this time the air brakes were applied from the caboose. Realizing they were getting close to the

time of train No. 103 he procured a red flag, already having four torpedoes in his possession, and as soon as the train came to a stop he got off the engine and started forward but the engineman called to him to look back and see what kind of signals were being given from the rear of the train, he inferred the engineman that a back-up movement was to be made, this conversation detaining him a few seconds. Upon reaching a point a few feet in front of the engine the engineman again called him back, which request he failed to comply with, but instead he turned around and gave the engineman a back-up signal. He then started running forward but had only reached a point about 200 or 250 feet from his train when he observed train No 103 approaching, about one telegraph-pole length from the southern end of the curve, and at once began waving his red flag. Brakeman Keeton further stated that it was impossible for him to have gone ahead a greater distance as his train had been stopped only one minute before the accident occurred, at about 5.05 p.m., although he said it was not as late as 5 p.m. when his train was approaching the north switch. He could give no reason why the engineman requested him to watch for signals instead of permitting him to protect his train promptly, as the train was on straight track and there was no reason why signals given from the rear end could not have been seen either by the engineman or by the fireman.

Conductor Milam, of train No. 330, stated that he was riding in the caboose as his train approached Westport and when the engineman sounded the station whistle signal he gave the engineman a stop signal which was acknowledged. As the train neared the north switch steam was shut off and the brakes applied and he supposed the train would head in at that point, but shortly afterwards the brakes were released and the engine began working steam. He then supposed that the train-order signal was set against them and that they would receive an order involving train No. 103. His first knowledge that the signal was not set against them was when he went to the rear platform of the caboose for the purpose of catching the expected order and at this time he observed the signal in the clear position, the train then was traveling between 25 and 30 miles per hour and the caboose was between the north switch and the station.

Thinking the engineman had overlooked train No. 103 he immediately re-entered the caboose and applied the air brakes by means of the conductor's emergency valve, closing the valve just before the train came to a stop, at 5 p.m., with the caboose about one car-length south of the south switch. Shortly after it had stopped he observed the head brakeman get off the engine with a flag and start forward, and at about the same time he instructed the rear brakeman to open the switch and then go back to protect the train. The switch was then opened and a signal was given the engineman to back up, which signal was answered by three short blasts of the engine whistle. An attempt was made to back the train but on account of the fact that the brakes were sticking an interval of about three minutes elapsed before the train could be started. Conductor Milam said that during that time he bled off the air from the two rear cars but that there were still some brakes which were sticking on the front end of the train, and that the train had been moved back only a short distance before it was struck by train No. 103; he immediately looked at his watch and it was then 5.05 p.m. Conductor Milam further stated that his train passed the north switch at about 4.59 p.m., which would have allowed ample time to get into clear at this point as train No. 103 is not scheduled to leave Westport until 5.08 p.m., and he was of the opinion that had the head brakeman gotten off and gone forward promptly there was time enough for him to have warned the crew of the opposing train in time to have avoided the accident. Conductor Milam also stated that he might have observed the train-order signal sooner than actually was the case, but as the engineman applied the brakes before reaching the north switch he was of the impression that it was the intention to head in at that point and paid no further attention to the matter until after the caboose had passed that point.

The statements of Brakeman Nelson, of train No. 330, practically corroborated those of Conductor Milam, adding that he got off before the train came to a stop, opened the south switch, gave a signal to back up, and then proceeded to the rear for the purpose of protecting the movement, reaching a point about three car-lengths south of the station before the occurrence of the accident, at this time the operator was inside the station.

Engineman Kane, of train No. 103, stated that his first knowledge of anything wrong was when the fireman, who had just completed putting in a fire, looked out on the inside of the curve and shouted a warning of danger. The speed of his train then was about 45 or 50 miles per hour and he immediately applied the air brakes in emergency and opened the sanders, but he did not think there

was time enough for the speed to be reduced to any great extent. He estimated the time of the accident at about 5.07 p.m.

Fireman Wilkins, of train No. 103, stated that he first observed train No. 330 just as soon as it was possible to do so, his range of vision being obscured by a tree located on the inside of the curve. He immediately called to the engineman and then got down on the steps preparatory to getting off. He did not see any fusee nor did his train explode any torpedoes, but he said he noticed some one leave the engine and start towards the right of way fence.

The statements of Conductor Vallandingham and Brakeman Boren, of train No. 103, added nothing of importance as they were unaware of anything unusual until the brakes were applied in emergency as their train was rounding the curve south of the point of accident.

Agent Kirksey, stationed at Westport, stated that he had no orders for either of the trains involved and that the train-order signal was in the proceed position. As train No. 330 was approaching he heard one long blast of the engine whistle and reported its arrival to the dispatcher. He then went outside and as the train approached the north switch of the passing track he noticed that steam was shut off, but shortly afterwards the engine began to work steam and it was still working when it passed the station, traveling at a speed of about 25 miles per hour. Agent Kirksey said he gave the engineman a hand signal indicating he was to take siding, which was acknowledged by the engineman by a hand signal indicating it was his intention to pull by and back in on the siding. It was then about 5 p.m. and as train No. 103 was not due out of Yuma until 5.02 p.m. Agent Kirksey thought there was ample time to make the intended movement. The air brakes were applied just after the caboose passed the station, but the engine appeared to work steam until the train came to a stop. He did not see either the conductor or the rear brakeman on the rear platform of the caboose as it passed him, but after the train stopped he saw both of them on the ground signalling the engineman to back up. The train stood at this point fully four minutes before it moved, and then three attempts were made to back the train, which appeared to him to have been efforts to take up the slack, before it was finally started. The caboose had reached a point on the passing track about clear of the main track when he heard train No. 103 whistle for the station, followed very closely by the

occurrence of the accident. Agent Kirksey was certain that he did not see a flagman proceed in either direction after train No. 330 had been brought to a stop, being particularly alert for movements of this kind in view of the existing situation, nor did he hear a whistle signal for flag protection. After the accident the engineman of train No. 330 was brought to the station and upon inquiry the engineman said that he thought he had plenty of time in which to back his train into clear. At the request of the engineman his watch was removed from his pocket and it was found to have stopped at 5.08.

Conclusions

This accident was caused by the failure of Engineman Wood, of train No. 330, to head his train in at the north switch of the passing track at Westport to meet an opposing superior train; a contributing cause was the failure of Head Brakeman Keeton properly to protect the head end of his train by flag.

The rules require that at meeting points inferior trains must clear the main track at least five minutes before the leaving time of superior trains, and they also require that inferior trains must, when practicable, pull in at the nearest switch. The reason for the failure of Engineman Wood to head his train in at the north switch of the passing track could not be ascertained. It seemed apperent, however, that he was aware his train was to meet train No. 103 at that point, for not only did the conductor say he gave the engineman a stop signal, but he was informed by both the fireman and the head brakeman that train No. 103 was to be met at that point, while the agent said the engineman gave him a hand signal indicating that he was going to pull by and back in on the passing track. What benefit could have been derived from a movement of this kind is problematical as there was nothing in the way of cars on the passing track, the length of his own train, or adverse grade conditions, which would have warranted this movement.

The evidence was conflicting as to how long train No. 330 had been standing after it was brought to a stop south of the south switch and as to what protection, if any, was afforded while it was standing at this point. Without discussing the matter in detail, it seems clear that train No. 330 must have stopped not later than 5.02 p.m., possibly at 5.01 p.m., and that Head Brakeman Keeton

had time enough, even after allowing for his conversation with the engineman, to have gone a considerable distance around the curve before train No. 103 approached, in fact, had he gone out a distance of 1,320 feet he would have reached the beginning of a tangent which is 4,465 feet in length and would have been visible both to the engineman and to the fireman of train No. 103. Under these circumstances it is believed that had Head Brakeman Keeton utilized the time at his disposal it is probable that the accident would have been averted.

Had an adequate automatic block-signal system been in use, this accident probably would not have occurred, an adequate automatic train 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.

Respectfully submitted,

W. P. BORLAND,

Director.