

INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN RE
INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE
SOUTHERN RAILWAY NEAR ROCKMART, GA , ON DECEMBER
23, 1926.

January 11, 1927.

To the Commission:

On December 23, 1926, there was a head-end collision between two passenger trains on the Southern Railway near Rockmart, Ga., which resulted in the death of 11 passengers, 7 employees and 1 news agent, and the injury of 113 passengers, 4 employees of the railway and 6 Pullman employees. The investigation of this accident was made in conjunction with representatives of the Georgia Public Service Commission

Location and method of operation

This accident occurred on that part of the Atlanta Division extending between Atlanta, Ga., and Chattanooga, Tenn., a distance of 152.7 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. Northbound trains of the same class are superior by direction. The accident occurred at a point approximately 4,000 feet south of the station at Rockmart, approaching this point from the south there is a short tangent, a 3° curve to the right 532 feet in length, 1,002 feet of tangent and then a 3° curve to the left 834 feet in length, the accident occurring on the last-mentioned curve at a point 158 feet from its northern end. Approaching from the north there are 3,170 feet of tangent, followed by the curve on which the accident occurred. The grade for a considerable distance is 0.97 per cent descending for northbound trains.

The passing track is on the east side of the main track, the south passing-track switch is located on the short tangent between the two curves, and can not be seen by the engineman of a northbound train until he has practically reached the northern end of the 3° curve to the right, which is only 795 feet from the switch. This switch can be seen by the engineman of a southbound train for a considerable distance.

It was dark and raining at the time of the accident, which occurred between 6.40 and 6.45 p.m.

Description

Southbound passenger train No. 101 consisted of one club car, five Pullman sleeping cars, one dining car and two Pullman sleeping cars, all of steel construction, hauled by engine 1456, and was in charge of Conductor Randall and Engineman Corrie. At Dalton, Ga., the crew in charge received a copy of train order No. 92, Form 19, reading as follows

No. 101 one naught one Eng 1456 meet No 32
thirty two Eng 1326 at Saannon No 6 six Engs
1230 and 1205 coupled at Atlanta Jet
First No 2 two Eng 1219 at Rockmart and
second No 2 two Eng 1265 at Braswell No 32
thirty two No 6 six and First and second
No 2 two take siding.

Train No. 101 arrived at Rockmart at 6.35 p.m., at which point a clearance card was received stating that the block would be clear on the arrival of train first No. 2. After water was taken, train No. 101 proceeded southward on the main track at a low rate of speed, waiting for train first No. 2 to arrive and head in on the passing track at the south switch, and had been brought nearly to a stop at a point 883 feet north of the switch when it was struck by train first No. 2.

Northbound passenger train first No. 2 consisted of one combination car, one coach, one dining car, and seven Pullman sleeping cars, all of steel construction, hauled by engine 1219, and was in charge of Conductor Arwood and Engineman Keith. Before departing from Atlanta the crew received a copy of train order No. 92, previously quoted, written on Form 31. When it stopped at McPherson, 11.4 miles south of Rockmart, for the purpose of meeting an opposing train, Road Foreman of Engines Pearce, who had been riding in the combination car en route to his home at Rome, 21.9 miles north of Rockmart, boarded the engine and took charge of it, Engineman Keith going back to ride in the combination car. Train first No. 2 departed from McPherson at 6.23 p.m., 15 minutes late, passed Braswell, 6.4 miles from McPherson, at 6.35 p.m., 16 minutes late, passed the south passing-track switch at Rockmart and collided with train No. 101 while traveling at a speed believed to have been approximately 50 miles per hour.

Both engines were derailed, but they remained upright. Engine 1219 was badly damaged while the tender cistern was torn from its frame and thrown down the embankment on the inside of the curve. The combination car in train first No. 2 was telescoped at its head end nearly the length of the baggage compartment, while the coach immediately behind it telescoped the dining car, the third car in the train, about three-fourths of its length. Only the club car and the first

sleeping car in train No. 101 were derailed, both ends of the club car and the forward end of the sleeping car being badly damaged. The employees killed were the road foreman of engines, fireman, baggage-master, three dining car waiters and one cook, all of train first No. 2.

Summary of evidence

Engineman Corrie, of train No. 101, said the operator at Rockmart handed on a clearance card stating that the block would be clear on the arrival of train first No. 2. On being informed by the fireman that that train was not in sight from the left side of the engine, Engineman Corrie pulled his train ahead for a short distance and stopped for water. He then proceeded slowly on the main track, at a speed of from 4 to 6 miles per hour, with the headlight burning brightly, and finally he saw the reflection of the headlight of the engine hauling train first No. 2, a few seconds before it came in sight through the cut on the curve south of the passing-track switch. Engineman Corrie said he watched the headlight closely and by the time it reached the tangent track approaching the switch he made up his mind that the train was not going to stop, he applied the air brakes on his own train, called to his fireman to get off, and then did so himself. He thought the speed of train first No. 2 must have been close to 60 miles per hour when the accident occurred, although he said he was not looking at it at that particular time, being engaged in getting out of the way, neither did he notice whether there was any fire flying from the brake shoes. Engineman Corrie further stated that he had heard a whistle signal of some kind sounded by the engineman of train first No. 2, but he was uncertain as to its nature, and shortly afterwards he heard him sound the usual whistle signal calling the attention of the crew of extra 5243, which was occupying the passing track, to the fact that signals were being displayed for a following section of train No. 2. He did not hear any other whistle signals, nor did he sound any signals on the whistle of his own engine. The statements of Fireman Baker were similar to those of Engineman Corrie.

Conductor Randall, of train No. 101, said the operator at Rockmart told him he had given the conductor's copy of the clearance card to the baggage master and he again boarded the train, which proceeded slowly toward the south switch. Finally he heard one long blast on the whistle sounded by the engineman of train first No. 2, and judging from the sound of the whistle and the roar of the train he concluded that it was approaching Rockmart at too high a rate of speed to be able to stop at the south switch, made a remark to this effect to the Pullman conductor, and started to get out of the car but the accident occurred before he could do so. Conductor Randall said he did not hear any other whistle signals. It also appeared from his statements that the air brakes on his own train were applied just before the accident occurred, but he was unable to say whether or not the train had been brought to a stop.

Baggage Master Copeland, of train No. 101, said he received the conductor's copy of the clearance card for his train at Rockmart and that the train was proceeding slowly toward the south switch when he heard the engine of train first No. 2 blowing signals at the end of extra 5343, the accident occurring very shortly afterwards, he did not hear any other whistle signals sounded. After the accident Mr. Copeland assisted in removing Road Foreman of Engines Pearce from his engine and he said the road foreman asked him how the accident occurred, when told that he had failed to take siding for train No. 101 he replied that Engineer Keith, Fireman Moss and every one concerned had told him that he was to hold the main track, and he then added that when he sounded the station whistle signal he asked Fireman Moss "Do hold the main track?" and he said the fireman replied in the affirmative. Baggage Master Copeland was unable to explain what the road foreman had in mind when he used the words "every one concerned."

Flagman Stancell, of train No. 101, said he was riding on the rear end of the observation car after leaving Rockmart station, that he was looking out on the engineer's side of the train, and that he saw the headlight of the engine hauling train first No. 2 when it passed through the cut on the curve south of the south switch. He heard the engine of train first No. 2 sound a station whistle signal, following which he sounded the usual signal calling attention to the fact that signals were being displayed for a following section. Flagman Stancell continued to watch the approaching train until the accident occurred, and judging from the results he estimated the speed of train first No. 2 to have been about 60 miles per hour.

Engineer Keith, of train first No. 2, said his fireman read the orders before the train departed from Atlanta. After stopping on the main track at McPherson to await the arrival of an opposing passenger train he got off and began to oil the engine. While on the ground on the left side of the engine he heard the whistle signal sounded recalling the flagman and supposed that the signal had been sounded by the fireman, but on boarding the engine he found Road Foreman of Engines Pearce sitting on the engineer's seat box. He asked the road foreman, who appeared to be in normal physical condition, what he was going to do and the latter told him he was going to run the engine as far as Pore, Engineer Keith replying that he would go back and ride in the train. Engineer Keith said the road foreman then asked him what orders he had and that he told the road foreman distinctly that they were to head in at Rockmart and meet train No. 101, which instructions he said were repeated aloud, in their entirety, by the road foreman, who then began to work steam. Engineer Keith immediately got off the engine and was helped aboard the combination car at the door of the baggage compartment by Conductor Arwood, who asked him if he had told the road foreman about the orders. After leaving McPherson the train was operated in a normal

manner and Engineman Keith said that finally he heard the road foreman sound the station signal, followed by what appeared to be an answer to a signal, presumably a meeting-point signal given by the conductor or some one back in the train, and very shortly afterwards he heard the road foreman whistle signals at the crew of extra 5243, these latter signals he thought were answered by the engineman of the freight train. At about the same time Engineman Keith noticed the train passing the south switch and for the first time he realized that there was something wrong, he said he started to get up for the purpose of opening the conductor's emergency valve but the accident occurred before this could be done. Engineman Keith estimated the speed of the train at the time of the accident to have been about 45 or 50 miles per hour, and said that to the best of his knowledge the air brakes, which had been working properly at all times, were not applied by the road foreman before the accident occurred.

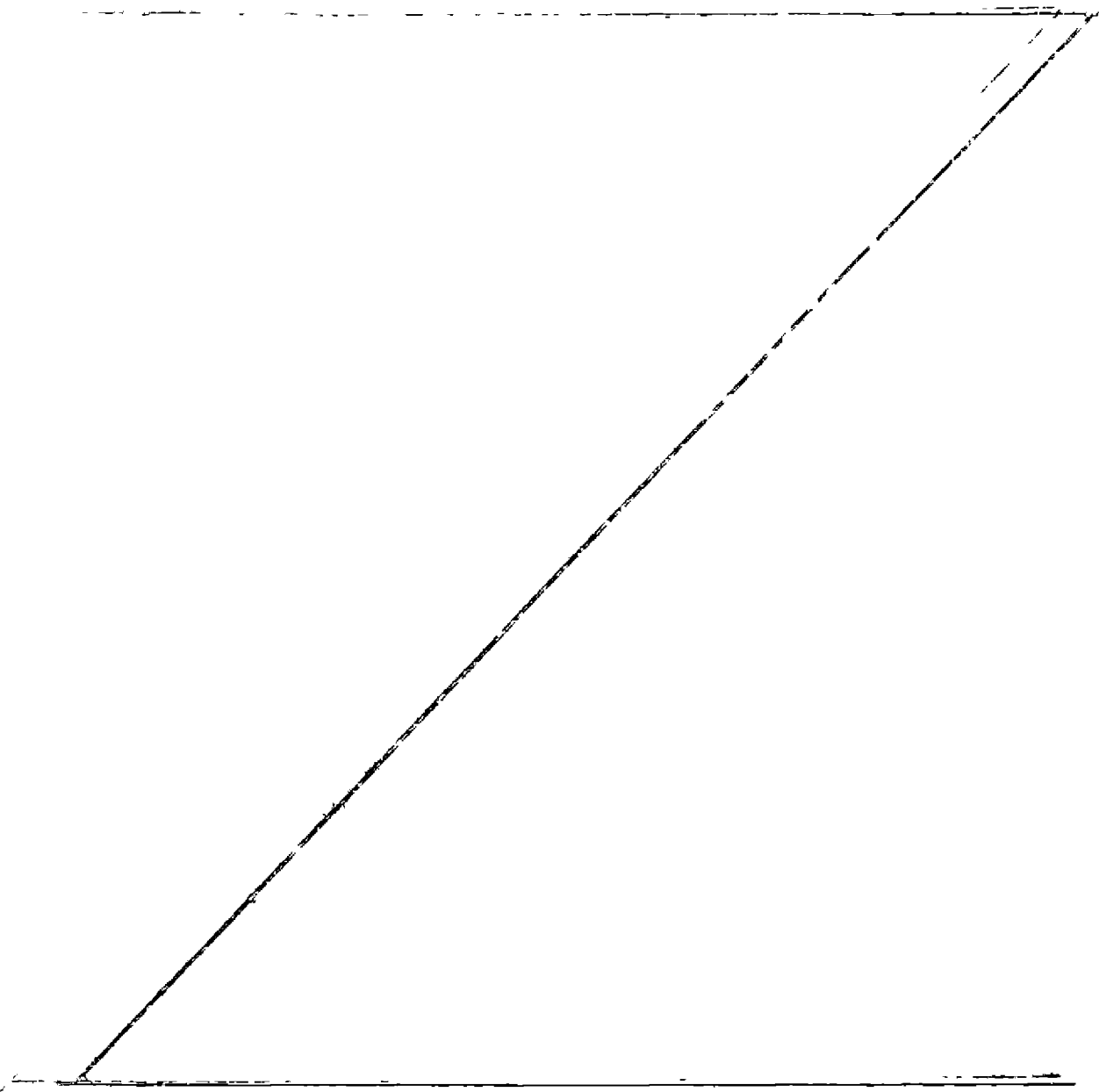
Engineman Keith further stated that he understood the road foreman had made a statement when being removed from the wreckage to the effect that he had been told his train was to hold the main track at Rockmart, but he did not feel that the road foreman would have made such a statement under ordinary circumstances and he said he was absolutely positive that the road foreman understood the situation thoroughly when relieving him at McPherson or he would not have left the engine in his charge. When questioned in connection with the subject of road foreman relieving enginemen while en route, Engineman Keith indicated that it was done occasionally and that it was customary under such circumstances for an engineman so relieved to go back and ride in the train. It was not the practice, however, at least with Road Foreman of Engines Pearce, to turn over to him the outstanding train orders, and Engineman Keith did not think such a practice involved a violation of that part of rule 220 of the Rules of the Operating Department reading as follows:

When a conductor or engineman, or both, is relieved before the completion of a trip, all train orders and instructions held must be delivered to the relieving conductor or engineman. Such orders or instructions must be compared by the conductor and engineman before proceeding.

Engineman Keith's position in substance with respect to the application of this rule was that it applied to enginemen as such and not to an official who might relieve an engineman, that if the road foreman did not understand the situation thoroughly then it was incumbent on him to ask the regular engineman to let him see the orders, and that in this particular case the road foreman started the train immediately after asking what orders he held.

Conductor Arwood, of train first No. 2, said that when his train reached McPherson, Road Foreman of Engines Pearce, who had been riding in the combination car apparently asleep, went forward to the engine and on looking out as the train started the conductor saw Engineman Keith climbing in the door of the baggage compartment, it being customary for an engineman to ride in the train when relieved by a road foreman. Conductor Arwood assisted the engineman into the car and then asked him if he had had an understanding with the road foreman that they would take siding and meet train No. 101 at Rockmart, to which the engineman replied in the affirmative. Conductor Arwood had finished collecting transportation, with the assistance of the flagman, at about the time the train passed Braswell and he then started to walk ahead from about the third car from the rear of the train. Shortly afterwards he heard the train pass over a trestle, apparently just south of Rockmart, and at about the same time he heard the road foreman sound one long blast on the whistle and apply the air brakes. The brakes were released within a very few seconds, however, and the speed of the train began to increase. Presently he heard the road foreman sound a station whistle signal and then there were two short blasts on the whistle, apparently in answer to a meeting-point signal which Conductor Arwood supposed had been sounded by the baggage master, this being followed in a few seconds by the shock of the collision, he did not hear the road foreman whistle signals at the crew of the freight train. Conductor Arwood was not positive but said he thought the air brakes were applied in emergency a fraction of a second before the collision occurred. He was then in the car immediately behind the dining car and on going forward to the combination car he found the baggage master of his train still in a conscious condition and asked him if he sounded the meeting-point signal to the road foreman, and he quoted the baggage master as saying that he had sounded the signal and that the road foreman answered it. Conductor Arwood said he had not talked with the road foreman during the time the latter was riding in the combination car, but he did state that the road foreman seemed to be in normal physical condition. Conductor Arwood further stated that the reason he did not sound the meeting-point signal personally was because he had told the baggage master before leaving Atlanta to watch the meeting points and to give the necessary signals, as he would be busy collecting transportation, and he said that he also gave his orders to the baggage master. Conductor Arwood thought that under the rules the duty of sounding meeting-point signals could be performed, when the conductor was otherwise engaged, either by the baggage master or the flagman, and said this practice was followed to some extent. Conductor Arwood also said that had he known the road foreman was going to relieve the engineman it would have been his duty to see that they exchanged orders or else had an understanding as to trains to be met, and he considered that he had had this understanding in this particular case by reason of the conversation

he had with Engineman Keith when the latter returned to the baggage car. Conductor Arwood made two estimates as to the speed of his train at the time of the accident, first saying it was 25 or 30 miles per hour and afterwards saying it was 35 or 40 miles per hour. Conductor Arwood did not know anything about the statement the road foreman or engines was said to have made immediately after the occurrence of the accident, to the effect that he did not know his train was to take siding, until he heard the statement made in the investigation.



Flagman McElhanev, of train first No. 2, said that after assisting the conductor in collecting transportation he started back toward the rear of the train, and when in the second car from the rear he heard the road foreman sound a station whistle signal and apply the air brakes, which were afterwards released. He next heard the road foreman answer some signal which apparently had been given him, the accident occurring very shortly afterwards, at which time the speed of the train was 35 or 40 miles per hour.

Train Porter Robinson, of train first No. 2, said that as the train approached Rockmart he heard the road foreman sound a station whistle signal and that he then heard the baggage-master sound the meeting-point whistle signal, he did not hear this signal acknowledged by the road foreman but he did hear him whistle signals at the crew of extra 5245. In the meantime Train Porter Robinson had picked up his lantern and started through the car in order to be ready to get off and open the passing-track switch and it was while he was so engaged that the accident happened. He estimated the speed of his train at the time of the accident to have been about 50 miles per hour and said that the accident occurred without the air brakes having been applied.

Engineman Turner, of southbound freight train extra 5243, which was occupying the passing track at the time of the accident, said he had received instructions to back up far enough to allow train first No. 2 to head in at the south passing-track switch. He looked back to watch for a back-up signal but was unable to see it on account of the fact that he was looking directly into the rays of the headlight of the engine hauling train No. 101, which was then moving slowly southward on the main track. In the meantime he had heard the road foreman of train first No. 2 sound one long blast on the whistle before the train came in sight, and he said that as the train was approaching the south switch the road foreman sounded the signal calling attention to the fact that there was a following section. Engineman Turner said he did not answer this signal, but instead he sounded one long blast on the whistle of his own engine as a stop signal, realizing that an accident was about to occur, but he said he did not see any fire flying from the brake shoes under the approaching train. He estimated the speed of train first No. 2 to have been at least 40 miles per hour. After the accident Engineman Turner assisted in removing the road foreman from his engine, but the only thing he heard his say was that he was burning to death. Engineman Turner's statements were substantially corroborated by those of Assistant Road Foreman of Engines Probst, who was on engine 5243 working on the stoker.

Conductor Sorrells, of extra 5243, said he was about three coach-lengths behind the rear end of train No. 101 when he saw the headlight of train first No. 2 coming around the curve south of the south switch, and he then ran across the main track to the west side so as to be in a position to watch the approach of the train, he realized that it was traveling too fast to stop at the switch but was unable to estimate its speed. Conductor Sorrells also said he heard the road foreman sound a station whistle signal and apparently answer a meeting-point signal, his own engineer then sounded a stop signal and he thought it was after this signal had been sounded that the road foreman whistled signals at the crew of the freight train. Conductor Sorrells assisted in removing the road foreman from his engine and he said the road foreman asked how the accident happened and was told that he should have taken siding for train No. 101. The road foreman then started to ask other questions but Conductor Sorrells said he told him to stop talking and let them help him off the engine. He did not hear the road foreman say anything to indicate that he thought his train was to hold the main track when meeting train No. 101. Conductor Sorrells also talked with the baggagemaster of train first No. 2, but only to ask him how badly he was hurt; he did not hear the baggagemaster say anything about giving the road foreman a meeting-point signal.

Statements were obtained from doctors and nurses at the hospital in Rome where Road Foreman of Engines Pearce was taken after the accident, and where he remained until this death on the day following the accident, but these statements did not develop anything definite to indicate how he came to pass the south switch without stopping; in fact, the most important statement was that by Dr. Shaw, who said the road foreman made a remark to the effect that there was no excuse for the occurrence of the accident.

Road Foreman of Engines Pruitt, assigned to the Atlanta Division south of Atlanta, said it was not his practice to relieve an engineer while en route unless because of illness or for some unusual reason, that he could relieve an engineer occasionally before leaving a terminal, but under such circumstances he did not allow the engineer to leave the engine and ride in the train, and he always took possession of whatever orders the engineer might have received.

The dining car in which the majority of the fatalities occurred was built by the Pullman Company in 1917. An examination of the plans covering the end construction of this car and also of the two cars immediately preceding it in train first No. 2 failed to disclose

that there was any reason from a construction standpoint why this particular car should have been telescoped, in fact, the end construction of the dining car provided a little more strength than that possessed by the car by which it was telescoped.

Signal Supervisor Hinds said automatic block-signals and train control apparatus were being installed between Koon and Atlanta, and between Austell and Colton, stations near Atlanta and Chattahoochee, respectively, and that if the plans had been carried out the signal and train control systems would have been placed in service prior to the date on which this accident occurred. Due to delays encountered, however, the section between Koon and Atlanta had not quite been completed and placed in service at the time of the accident, while none of the signals north of Atlanta had been placed in service. Practically all of the engines, however, had been equipped with the train control apparatus.

Conclusions

This accident was caused either by the failure of Road Foreman of Engines Pearce and Engineman Keith, of train first No. 2, to have a thorough understanding as to the contents of train order No. 92, which required their train to take siding at Rockmart for train No. 101, or by the failure of Road Foreman of Engines Pearce to remember the contents of the order.

Under ordinary circumstances train No. 101 would have been required to take siding for train first No. 2, which was superior by direction. This superiority, however, had been reversed by train order No. 92, and Engineman Keith said that when he was relieved by the road foreman at McPherson, 11.4 miles south of Rockmart, he was very careful to inform the road foreman that they were to meet train No. 101 at Rockmart and that they were to take siding for that purpose. The various whistle signals sounded by Road Foreman of Engines Pearce as his train approached Rockmart indicated that he had not become physically incapacitated and that he was fully conscious of his location, but on the other hand the high rate of speed at which his train was traveling as it rounded the curve a short distance south of the passing-track switch, coupled with the fact that the air brakes were not applied, if at all, until a few seconds before the accident occurred, makes it clearly apparent that he had no intention of stopping at the passing-track switch, but rather that he fully expected to have a clear track.

This latter idea is supported by the statement he was said to have made when being removed from the cab of his engine immediately after the occurrence of the accident, to the effect that he had been told his train was to hold the main track. No formal statement was obtained from the road foreman prior to his death, but whether he was not clear as the requirements of the order, or had forgotten it, the fact remains that he was at fault, for he had exercised his authority as the superior officer of Engineman Keith by relieving the latter of the operation of the engine and it was incumbent on him to know absolutely what orders were outstanding affecting the movement of the train.

The last paragraph of rule 220, previously quoted, requires train orders to be delivered to the relieving engineman or conductor, and the orders must be compared before the train proceeds. So far as this particular accident is concerned this provision might just as well have been omitted from the book of rules, for none of those involved observed it. Engineman Keith retained the orders in his possession while Conductor Arwood was not present when the road foreman took charge of the engine. Engineman Keith took the position that the rule did not apply in this case because of the fact that the person who relieved him was an official and not an engineman. This position is not well founded, if any official of a railroad relieves the regular engineman he then automatically becomes the engineman of the train and is bound by all the rules governing the operation of the train, the proper handling of train orders, etc., as fully as though he were the regularly assigned engineman. The necessity for a strict observance of that part of rule 220 herein referred to is even more obvious when, as in this instance, the engineman who is relieved by a superior officer leaves the engine and goes back to ride in one of the cars in the train. And in this connection it might be pointed out that in allowing Engineman Keith to leave the engine Road Foreman of Engines Pearce violated instructions which had been issued by the superintendent under date of April 19, 1926, these instructions, however, were addressed only to the road foreman of engines.

Under the rules, enginemen are required to show their orders to their firemen, and firemen are required, when necessary, to call the attention of enginemen to the instructions in the orders. Engineman Keith said he showed the orders to Fireman Moss before the train departed from

Atlanta and that after the fireman had finished reading them he asked the fireman to give his understanding of them. If Fireman Moss, who was an experienced employee and had passed the mechanical examination for promotion to engineer, was familiar with the contents of the orders, as it was his duty to be, then he should have directed the road foreman's attention to them when it became apparent that the latter was not going to stop the train before passing the south switch. Any attempt to explain his failure to do so, however, would be mere conjecture.

Conductor Arwood, of train first No. 2, had finished collecting transportation and was walking through the cars toward the lead end of the train at the time of the accident. While he knew the approximate location of his train as it approached Rockmart he did not know its location exactly and was not in position to bring the train to a stop by means of the conductor's valve when it became apparent that the speed was not being reduced preparatory to stopping at the south switch. So in similar situations are of frequent occurrence and the net result is that the safe operation of the train depends upon one man, the engineer. Unfortunately, however, as is well illustrated in the present case, the results of a mistake by this one man are apt to be so serious as to make it a matter of necessity that there be some one back in the train in position to take action in the event there is a failure on the part of the engineer to obey orders. This duty, nominally at least, belongs to the conductor, but when the situation on any particular train reaches a point which makes the conductor little more than a ticket collector, then it would appear that some provision should be made to correct the situation by the use of ticket collectors or train auditors rather than by having the conductor depend on the baggage master, the flagman, or the train porter. Conductor Arwood, however, said his duty to collect transportation was not interfering with his duty to attend to the safe operation of his train; this being the case, he should have made it his business to ascertain the exact location of his train and had he done so he might have been in position to apply the air brakes in time to avert the accident.

The statements of the various employees indicated that they had not been examined on the rules since the present book of rules took effect in August, 1923, and the conductor and engineer on at least of train first No. 2 did not have a correct understanding of rules involved in this accident, Conductor Arwood thought it was a rule that baggagemasters and flagmen could sound the meeting-point signal when the conductor was otherwise engaged, while Engineer Keith thought that when an engineer was relieved by a superior officer it was not necessary to comply with the rule requiring train orders to be turned over to the officer relieving him. There is nothing in the rules to support the ideas of either of these employees, which were founded apparently more upon custom than upon rule. It is so obvious that train and engine-service employees should have a thorough and correct understanding of the operating rules that there is no need of discussing the matter in detail here, it is sufficient to point out the situation as outlined above and to suggest that steps be taken to see that all persons whose duties are affected by the rules shall be examined sufficiently often to insure that they know the rules and understand them correctly.

While the mental and physical qualifications of Road Foreman of Engines Pearce are in no way involved in this accident, yet it is a question whether it is good practice to allow a road foreman of engines, or any other official, to relieve an engineer except in case of emergency. In order that engineers may be properly qualified for their duties it is customary to give them periodic examinations on the operating rules and more or less frequent examinations as to vision, color sense and hearing, while many railroads are adopting the idea of thorough physical examinations when their engineers attain a certain age in life in order to guard against the possibility of an engineer becoming suddenly incapacitated while at the throttle of his engine, in addition to these precautions, efforts are made to see that they are given an opportunity for adequate rest between trips. On most railroads, however, as with the railway on which this accident occurred, it is true that none of these various precautions is observed with respect to road foremen of engines, apparently it is assumed that as officials they will keep posted on the operating rules, and that their vision, color sense and hearing, as well as their general physical condition, will in no way become impaired. If

one of these subordinate officials, or any other official, is to be allowed to relieve an engineman at will, then there is no good reason why he should not be required and be known to be as well qualified in every respect as the engineman whose place he is occupying, for it is obvious that a failure upon his part is just as dangerous as a failure upon the part of the regularly qualified and assigned engineman.

In order to provide for a safer and more efficient operation of its trains over this line the management was installing an automatic block-signal system coupled with a system of automatic train control, although in deciding to include the use of automatic train control in this territory the management was doing something which it had not been required to do under either of the Commission's orders on this subject. At the time of the accident the signal and train control systems had been installed between mile posts 9 and 135, within which territory this accident occurred, and according to the progress reports, all that remained to be done was the work of painting and testing. As originally planned, both the block and train control systems would have been in use prior to the date of this accident but delays arose which the company could not prevent, and the unfortunate part of the situation is that this is a type of accident which probably would not have occurred had an automatic block-signal system been in use and which would have been prevented by an adequate automatic train control system.

Road Foreman of Engines Pearce, who was 47 years of age, was employed by the Southern Railway as an experienced engineman in 1912 and was road foreman of engines on the dynamometer car from 1916 to 1921, when he was given the position of road foreman of engines on the Atlanta Division, which position he was occupying at the time of the accident. All of the other employees involved were also experienced men. At the time of the accident the crew of train first No. 2 had been on duty slightly more than 2 hours after from 16 to 28 hours off duty. The crew of train No. 101 had been on duty between 12 and 13 hours, from 3 to 4 hours of which had been consumed in laying over between runs, previous to this period of duty they had been off duty from 19 to 32 hours.

Respectfully submitted,

W. P. BORLAND,
Director.