

INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN RE INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE ATLANTIC COAST LINE RAILROAD NEAR MONCK'S CORNER, S. C., ON DECEMBER 24, 1925.

January 29, 1926.

To the Commission

On December 24, 1925, there was a head-end collision between two passenger trains on the Atlantic Coast Line Railroad near Moncks Corner, S. C., which resulted in the death of 4 employees, and the injury of 28 passengers, 7 persons carried under contract, 17 employees on duty and 2 employees off duty. The investigation of this accident was made in conjunction with representatives of the State Railway Commission of South Carolina

Location and method of operation

This accident occurred on that part of the Charleston District of the Second Division which extends between Florence and Charleston, S. C., a distance of 102 miles, this being a double-track line over which trains are operated by time-table, train orders transmitted by telephone, and an automatic block-signal system. The accident occurred on the southbound track at a point about 2 miles south of the station at Moncks Corner. Approaching this point from the north the track is tangent for several miles while the grade is practically level, approaching from the south there is a 2° curve to the right 752 feet in length followed by tangent track to the point of accident, a distance of 1,142 feet, while the grade is 0.5 per cent ascending for a distance of about 1,100 feet, 0.1 per cent descending for a distance of about 1,000 feet and then slightly ascending to the point of accident, an additional distance of about 300 feet.

The automatic block signals are not arranged to govern movements against the current of traffic. The signals involved governing movements with the traffic on the southbound track are signals 3651 and 3661, located 9,191 and 5,807 feet, respectively, north of the point of accident, signal 3671, the succeeding southbound signal, is located 1,586 feet south of the point of accident. These

signals are of the three-position, upper-quadrant type, displaying red, green, and white, for stop, caution, and proceed, respectively.

The station at Moncks Corner is located on the west side of the tracks and there is a house track between the station and the main tracks. The train-order signal is directly in front of the station and about 15 feet from the west rail of the southbound track. It is of the double-arm, two-position semaphore type, operating in the upper quadrant, the lamp on this signal mast is slightly more than 30 feet above the ground.

On this railroad when a day office is closed for the night no light is displayed on the train-order signal. The office at Moncks Corner is shown on the time-table as a day office only and had been so operated for a considerable period of time.

The weather was cold and frosty and day was beginning to break at the time of the accident, which occurred at 6.42 a. m.

Description

At about 10.45 p. m., December 23, the crew of a northbound freight train had discovered a broken arch bar on one of the cars in the train and in endeavoring to set off this car at Jones' Spur, opposite the point of accident, it became derailed at the switch, resulting in blocking the northbound track. During the balance of the night it was necessary to operate this portion of the railroad as single-track territory, train orders for northbound trains being issued at the last open office, North Wye Tower, 23.3 miles south of Moncks Corner, while train orders for southbound trains were issued either at North End, 16.8 miles north of Moncks Corner and the last open office, or at Lanes, the preceding open office, 23.6 miles north of Moncks Corner. There was a student operator on duty at Moncks Corner from 4.30 p. m. until 12.30 a. m., and at about midnight he was instructed to display the southbound train-order signal in the stop position and to remain on duty until otherwise instructed. Sometime afterwards the dispatcher sent him out to call the section foreman and at about 4 a. m. a southbound freight train arrived and on finding the train-order signal displayed and no operator in the office the conductor of this train called the agent to report at the office. When the agent came on duty he delivered an order to the crew of this train, which was extra 1699, and also delivered an order to the crew of a following freight train, No. 221, and then was told to remain on duty as it might be necessary to issue some more orders, in the meantime

the student operator had been relieved from further duty. At about 5.55 a. m. the second of the two southbound freight trains arrived at North Wye Tower, thus clearing the southbound main track between that point and Moncks Corner, and the dispatcher then issued train order No. 43 addressed on Form 31 to all trains south at Moncks Corner, and on Form 19 to train No. 76 at North Wye Tower. This train order read as follows

"No 76 has right over opposing trains
on southbound track North Wye Tower
to pass track at Moncks Corner."

This order was repeated by the agent at Moncks Corner at 5.59 a. m. and was made complete to the crew of train No. 76 at 6 a. m.

Northbound passenger train No. 76, known as the Havana Special, consisted of one club car, three Pullman sleeping cars, one dining car, and six Pullman sleeping cars, all of steel construction, hauled by engine 1538, and was in charge of Conductor Edgerton and Engineman Parrish. The crew in charge of this train received train order No. 43 at North Wye Tower and departed from that point on the southbound track at 6.10 a. m., 9 hours and 33 minutes late, and collided with train first No. 85 near Moncks Corner while traveling at a speed estimated to have been about 50 miles an hour.

Southbound passenger train first No. 85, known as the West Indian Limited, consisted of one baggage car, two coaches, one dining car, six Pullman sleeping cars, and one private car, all of steel construction, hauled by engine 1504, and was in charge of Conductor Lathrop and Engineman Cummings. This train left Lanes at 5.55 a. m., 1 hour and 10 minutes late, passed North End at 6.07 a. m., 1 hour and 8 minutes late, passed Moncks Corner at 6.40 a. m., 1 hour and 16 minutes late, without having received a copy of train order No. 43, and collided with train No. 76 while traveling at a speed estimated to have been about 15 miles an hour.

Both engines were practically demolished while the first car in train first No. 85 was badly damaged. The first car in train No. 76 was overturned while its forward end was telescoped a distance of about 15 feet by the tender of engine 1538, the three sleeping cars immediately in the rear of this car were derailed and more or less damaged. The employees killed were both enginemen and both firemen.

Summary of evidence

Agent McTeer, located at Moncks Corner, said

that at about 6 a. m. he received train order No. 43 addressed to all trains south, and that about 5 or 10 minutes before train first No. 85 arrived the dispatcher asked him for the second time if the train-order signal was burning properly, on this occasion telling him to go out and look at it. He said he did so, found the lamp to be burning all right, and so notified the dispatcher. Agent McTeer heard train first No. 85 approaching and started toward the door, expecting the train to stop. When he reached the door the train had reached the crossing near the station and he then realized that it was moving too rapidly to stop at the station. Agent McTeer said he had no fusees or lanterns in his hand but that he did what little he could to attract the engineman's attention. The cab windows were shut, however, and he did not see the engineman nor did he see any member of the train crew, and he then returned to his desk and notified the dispatcher that the train had passed without stopping. There is no general rule forbidding the sending of an order restricting the rights of a train at the point where it receives the order. Rule 219-a, however, provides that a meet order must not be sent for delivery to a train at the meeting point if it can be avoided; when it can not be avoided, special precautions must be taken by the dispatcher and the operator. It did not occur to Agent McTeer, however, that it was necessary to use special precautions on this occasion, since he had on two or three occasions noted that the train-order signal was displaying a stop indication and particularly since this indication had been observed by the crews of the two southbound freight trains.

Dispatcher Carn said that train **first** No. 85 had passed Lanes at the time he issued train order No. 43. It had not passed North End, however, and when asked why he did not put out the order at that point instead of at Moncks Corner, the station at which the rights of train first No. 85 were to be restricted, he said he considered it to be perfectly safe to place the order at Moncks Corner. He also claimed that it would have caused unnecessary delay to train first No. 85, also that he did not have sufficient time to put out the order for this train at North End. Neither of these statements, however, coincide with the facts of the case. Dispatcher Carn understood that under rule 219-a, previously referred to, special precautions should be taken in placing orders of this character and he said he had inquired of the agent on three different occasions as to the position of the train-order signal, on one occasion telling him to go out and look at it. He did not, however, instruct the agent to use fusees or torpedoes as an extra precaution, saying that it was the duty of the operator to use such signals without being instructed to do so, and also say-

ing that the stop indication of the train-order signal was a sufficient protection, since the switch to which the rights of train No. 76 extended was located more than 1 mile south of the station; he also said that he depended on the agent at Moncks Corner to handle the order properly. General Superintendent McCranie said that when it became necessary to open an office at hours during which it was ordinarily closed it was required that advance information be given to train and engine crews. Dispatcher Carn did not comply with these requirements when making Moncks Corner an open office, giving as a reason the fact that he expected the northbound track to be clear at any moment, which would have permitted him to close the office.

Student Operator Miller said that on his return to the office after having called the section foreman he found Agent McTeer on duty and was told he had been relieved. He further stated that he saw the train-order signal displaying a stop indication both before and after he had called the section foreman. Section Foreman Jinningham said he was called at about 4 a. m. and on leaving his home, located about 1/2 mile north of the station, he noticed that the train-order signal was in the stop position and immediately proceeded to the office to find out what the dispatcher wanted him to do. He was in the office on one of the occasions when the dispatcher inquired of the operator as to the position of the train-order signal and said that when he left the station with his men on a motor car about 10 minutes prior to the arrival of train first No. 85 the train-order signal was still displaying a stop indication. Watchman Goss, employed at a factory located about 300 yards north of the station, said he was within sight of the station when he heard a train approaching; a red signal was displayed but the train did not reduce speed. The operators on duty at North Wye Tower, North End and Lanes, stated that they heard the dispatcher inquire of Agent McTeer as to the position of the train-order signal and they had also heard the agent say it was burning properly.

The engineman of extra 1699 said the signal was in the stop position when his train arrived, but he was unable to recall whether the light was burning brightly or dimly, it also appeared that he had been given a message stating that he would receive orders at Moncks Corner. The engineman of train No. 221, which was closely following extra 1699, said a stop indication was displayed but that the light was burning dimly; the engineman of train second No. 85, which reached Moncks Corner about 25 minutes after train first No. 85 had passed, also said that the light was burning dimly. In the case of the second

section of train No. 85, however, it is to be noted that the operator said he took the extra precautions intended by the rule, putting down torpedoes and also displaying a lighted fusee.

Conductor Lathrope, of train first No. 85, said he was walking through a car near the rear of his train as it passed Moncks Corner and although he had not been notified that the station at that point was being operated as an open office he said he looked out and saw a train-order signal displaying a white indication, but he did not know whether this was the northbound or the southbound signal. Conductor Lathrope further stated that the air brakes were applied shortly after passing the station, and again just before the accident occurred, by which time the speed had been reduced to about 15 miles an hour. His statements, with the exception of that part relating to the train-order signal, were substantially corroborated by those of the other members of his train crew.

The members of the crew of train No. 76 were unable to give any information concerning the accident except to say that their train was being operated at a speed of about 50 miles an hour when the air brakes were applied in emergency, the collision occurring almost immediately afterwards.

Signal Maintainer Folk said that on the second day prior to the accident he had cleaned, filled and trimmed the lamp in the train-order signal and that he left it in good condition.

Conclusions

This accident was caused by the failure of the crew of train first No. 85 to receive a train order which gave train No. 76 rights over all opposing trains on the southbound track.

Dispatcher Carn is primarily responsible for the occurrence of this accident on account of his failure to notify all concerned that the station at Moncks Corner was being operated as an open office. He said he expected the northbound track to be clear at any moment, which would have permitted him to close the office. It was not his primary duty to anticipate when the office could be closed, but rather to notify all trains involved that the office was open in order that the crews might be on the lookout and be governed by the indications of the train-order signals. Had the engineman and conductor of train first No. 85 been notified that this office was being temporarily operated as an open office, undoubtedly they would have been paying close

attention to the indication of the southbound train-order signal and would have operated their train in accordance with its indication.

Dispatcher Carn is also at fault for placing the order at the point where the restrictions on the rights of train first No. 85 took effect. In spite of his statements to the contrary, there appeared to have been no particular reason why this order could not have been placed at North End instead of at Moncks Corner, inasmuch as train first No. 85 did not pass North End according to the train sheet until 6.07 a. m., approximately 8 minutes after the order had been repeated by the agent at Moncks Corner. The practice of issuing train orders to a train at the point where its rights are to be restricted has been the underlying cause of many serious accidents and should never be allowed except in case of extreme necessity, in which event the rule requiring the use of special precautions should be rigidly obeyed. Dispatcher Carn is further at fault for his failure to instruct Agent McTeer to take special precautions in this particular case; while he considered Agent McTeer to be a more experienced man than the student operator, his repeated inquiries of the agent as to the position of the train-order signal would seem to indicate that he was none too sure. If necessary he should have instructed the agent as to what steps to take instead of adopting the attitude that the agent should know what to do without being instructed.

Agent McTeer had been employed as a clerk for several years and as an agent for a period of two months. He said he was somewhat familiar with the handling of train orders and that he had been examined on the rules. While he could not in any way be considered as an experienced operator, the fact that he realized what constituted the extra precautions necessary to insure stopping a train seems apparent from his action in placing torpedoes and fuses on the track for the purpose of stopping the second section of train No. 85. Had such precautions been taken prior to the passage of train first No. 85, that train undoubtedly would have been brought to a stop.

While no definite reason can be assigned for the failure of Engineman Cummings, of train first No. 85, to observe and obey the stop indication of the train-order signal, the fact remains that so far as he was concerned the office at Moncks Corner was closed and in view of the further fact that train-order signal lights are not required to be kept burning when an office is closed, it is entirely probable that he did not even look at the signal. There was some evidence to the effect that

the signal was burning dimly, and if this were the case then there was even greater opportunity for him to pass it without noticing that it was in the stop position, particularly in view of the fact that he was operating a high-speed train. The two trains which had preceded him had stopped at the signal; both of these trains, however, were freight trains moving against the current of traffic from North End to Moncks Corner, at which latter point they were to cross over to the southbound track and one of them at least had a message to the effect that orders would be received at Moncks Corner.

With the exception of the agent at Moncks Corner the employees involved were men who were experienced in the positions they were occupying at the time of the accident. The crew of train No. 76 had been on duty about $6\frac{1}{2}$ hours and the crew of train first No. 85 about $3\frac{1}{2}$ hours, previous to which all of these employees had been off duty 12 hours or more. Dispatcher Carn had been on duty about $6\frac{1}{2}$ hours after 24 hours off duty, while Agent McTeer had been on duty $2\frac{1}{2}$ hours after 11 hours off duty.

Respectfully submitted,

W. P. Borland

Director.