INTERSTATE COMMERCE COMMISSION.

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN RE IN-VESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE SEABOARD AIR LINE RAILWAY AT HAGOOD, VA., ON FEB-RUARY 1, 1923.

February 13, 1923.

To the Commission:

On February 1, 1923, there was a rear-end collision between two passenger trains on the Seaboard Air Line Rail-way at Hagood, Va., which resulted in the death of one employee, and the injury of five passengers and one employee.

Location and method of operation.

This accident occurred on that part of the Virginia Division extending between Richmond, Va., and Norlina, N. C., a distance of 98.4 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 under which an absolute block is maintained for all trains Train order signals are used as block signals, and when a stop indication is displayed it is necessary to obtain a clearance card and also a block signal clearance. The point of accident was just north of the north passing-track switch at Hagood; approaching this point from the north, the track is tangent for a distance of 4,884 feet, followed by a 3-degree curve to the left, 1,153 feet in length, the accident occurring on this curve at a point about 400 feet from its southern end. The grade is level for a distance of 0.5 mile. The view of the point of accident from the fireman's side is practically unobstructed. The weather was cloudy at the time of the accident which occurred at 4.23 a.m.

Description.

Southbound passenger train No. 301 consisted of one express car, one combination car, one coach, one dining car, two Pullman sleeping cars, and one private car, hauled by engine 834, and was in charge of Conductor McCreight and Engineman Baumgardner. This train left Richmond at 1.35 a.m., on time, and on arrival at LaCrosse, 4.3 miles from Hagood, at 4.09 a.m., the crew in charge received among others a copy of train order No. 33, form 19, reading as follows:

"No. 1 Eng 209 will pass No. 301 Eng 834 at Hagood."

They also received a clearance card addressed to trains Nos. 1 and 301, and also to the operator, stating that there were train orders Nos. 33 and 27 on hand for the crew, together with a block signal clearance, similarly addressed, which stated that the block was clear on the arrival of train No. 6. As soon as train No. 6 arrived, train No. 301 departed, at 4.15 a.m., on time, and stopped at the north passing-track switch at Hagood at 4.23 a.m. The switch had been opened and the train had started to nead in on the passing track when its rear was struck by train No. 1.

Southbound passenger train No. 1 consisted of one express car, one combination car, one coach, one dining car, and six Fullman sleeping cars, hauled by engine 209, and was in charge of Conductor Lasater and Engineman Fields. This train left Richmond at 2.08 a.m., 54 minutes late, and when passing LaCrosse at 4.18 a.m., according to the train sheet, 49 minutes late, the crew received a copy of train orders Nos. 35 and 27, together with clearance card and block signal clearance addressed as previously noted, the clearance containing the same information as to the condition of the block as in the case of train No. 301. Train No. 6 was still on the passing track, and train No. 1 therefore continued toward Hagood, colliding with the rear end of train No. 301 at 4.25 a.m., while traveling at a speed estimated to have been about 35 or 40 miles an hour.

The boller of engine 209 was torn from its frame and after demolishing the rear end of the private car on the rear end of train No. 301 for a distance of about 25 feet, was thrown to the right and care to rest parallel with and clear of the track; the frame and all wheels were wedged under the private car. The first car in train No. 1 was turned over to the right, but was only slightly damaged, the forward truck of the second car was derailed, but the car sustained no damage, six other cars in the two trains were also damaged. The employee killed was the engineman of train No. 1.

Summary of evidence.

The baggagemaster of train No. 301 rode on the engine from LaCrosse to Hagood for the purpose of opening the passing-track switch so that the train could head in at that point. The statements of the various members of the crew were to the effect that their train arrived at the switch at 4.22 a.m., one minute ahead of its scheduled departing time, that the switch was opened without delay, and that the train had started to move through the switch at a low rate of speed when its rear end was struck by train No. 1. Flagman Collins, who had been riding in the rear car, said he was on the rear end of this car as the train approached the switch. He saw the reflection of the headlight of train No.

oided he had better go back, which he did, taking with him red and while lanterns, not writing to get out a fuse. He said he gave stop signals which were not acknowledged, and that he had gotten back only four or five car lengths when the accident occurred. Conductor McCreight said he would not have taken any additional precautions had there been no block system in use, although he did say that had ne thought train No. I would be let into the block he would have used a fusee. Other statements of the members of the crew indicated that they did not pay any particular attention to the manner in which the block signal clearance was addressed, being principally concerned with the statement that the block was clear on the arrival of train No. 6.

Fireman Felts, of train No. 1, said the engineman had made an application of the air brakes approaching Hagood after vnich Fireman Felts saw a flagman running toward him and he called to the engineman, who made another slight reduction. At about the same time Fireman Felts saw the rear end of train No. 301 and told the engineman, who at once placed the brake valve in emergency position, he thought the two trains were then about five car lengths apart, and estimated the speed of his train to have been 35 or 40 miles an hour. Fireman Felts further stated that he received the orders at LaCrosse, read them, and passed them to the engineman without looking at their addresses, and he said the engineman did not say anything about them. Fireman Felts stated that when passing Skelton, 9.3 miles from Hagood, Engineman Fields looked at his time-table and remarked that train No. 301 should be at LaCrosse and would probably be into clear for them at that point. He expressed the opinion that Engineman Fields thought his train as farther from the switch than was actually the case.

Conductor Lasater, of train No. 1, said the block signal clearance stated that the block was clear on the arrival of train No. 6, that train No. 6 was on the passing track, and that his oin train therefore proceeded, at 4.19 a.m., and as it approached Hagood ne felt an application of the air brakes, just before the collision occurred, which he said was at 4.24 a.m. Conductor Lasater noticed that the block signal clearance was addressed to both trains, but did not pay any particular attention to it, looking at that part which stated that the block was clear on the arrival of train No. 8, and he also said he did not understand that he should watch the schedules of other trains where an absolute block is in use, and he had not noticed that his train was on the time of train No. 301. It did not occur to him that the operator could not give a clear block to both trains on the arrival of train No. 6, neither did he know whether he had a right to accept a block signal clearance, addressed to two trains, stating that the block was clear.

Chandler, located at LaCrosse, reported train No. 301 as entering the block at 4.22 a.m. Operator Rutherford said he was outside at the time, watching the train as it was about to pull in on the passing track, and while standing there say the headlight of a train rounding the curve. It then occurred to him that the operator at LaCrosse had allowed train No. I to enter the block without obtaining a clear block for train No. I has soon as the collision had occurred he vent inside the office, asked Operator Chandler if he had allowed train No. I to enter the block, and on being told "Yes, at 4.18," told him of the occurrence of the accident after which he reported the accident to the dispatcher.

Operator Chandler, on duty at LaCrosse, said that when train No. 301 arrived, he handed on the orders to the engine and train crews by hoop, and, as he only had two hoops, he ran up the track so pick up the hoops as they were thrown off, returned to the office and prepared the orders which he had for train No. 1; he had written the necessary number of train orders for both trains at one writing, so at this time what he had to do has to write our clearance cards and block signal clearances for delivery to the train and engine crews, and to fix ther together with the train orders, in the hoops for delivery. By the time this had been done he heard train No. 1 approaching, and entirely overlooking the necessity for obtaining the block for it, he took the orders out and handed them to the crea Operator gnandler thought his confusion might have been due to having three trains on hand at about the same time. 11th orders to deliver to tio of them, it also appeared that just previous to delivering the train orders he had been selling a few tickets to passengers intending to ride on train No. 6, had checked some baggage, and had his mind on a truck load of mail which was to go on train No. 6. Operator Chandler explained the addresses on the block signal clearances by saying that in writing them out he addressed them to the same trains as shown on train order No. 35, although as a matter of fact this order was not addressed to the operator, and it also named train 301 first. It further appeared that Operator Chandler had been off duty 16 hours before going on duty at 11 p.m., on the night of the accident, and that during this period off duty he had had only two or three hours' sleep on account of having attended the funerals of two relatives, he stated, however, that he did not feel tired or in any way unable to attend to his duties.

Conclusions.

This accident was caused by Operator Chandler issuing a block signal clearance to train No. 1 when the block was occupied.

The error on the part of Operator Chandler resulted from his failure to obtain the block for train No. 1 before permitting it to proceed. Train No. 1 therefore entered an occupied block, the crew, however, holding a clearance indicating that the block was clear. The statements of Operator Chandler indicate that he was in a hurry and did not want to delay train No. 1, that he had other duties on his mind, and entirely overlooked the necessity of obtaining the block for train No. 1.

The crew of train No. 1 was also at fault for accepting a block signal clearance which was addressed to trains Nos. 301 and 1, stating that the block was clear on the arrival of train No. 6, when the block obviously could not be clear for both trains upon the arrival of train No. 6, furthermore, had the crew of train No. 1 checked the schedule of train No. 301, which they were to pass at the next station, they should have discovered that their train was entering the block five minutes before train No. 301 was scheduled at Hagood, the next block station, and therefore that the block signal clearance had been improperly issued.

Had train No. 301 been protected by flag or fusee while the move from main track to siding was being made, this accident undoubtedly would have been prevented.

Operator Chandler had been employed since January 1, 1923, previous to which he had had several years' experience with other railways. At the time of the accident the operator had been on duty 5 hours and 23 minutes, after 16 hours off duty. The crevs of the two trains had been on duty from about 3 hours to about 42 hours, after off duty periods ranging from 18 to 45 hours.

Respectfully submitted,

IJ. P. BORLAND,

Director