SUPPLEMENTAL REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN RE INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE LINE OF THE SOUTHERN RAILWAY NEAR CLEVELAND, TENN., ON SEPTEMBER 28, 1923.

November 4, 1924.

To the Commission:

A supplemental investigation has been made of a head-end collision between a passenger train and a freight train which occurred on September 28, 1923, on the Southern Railway near Cleveland, Tenn., resulting in the death of 1 employee, and the injury of 18 passengers and 10 employees.

Summary of report of November 6, 1923

The accident occurred on the Knoxville Division, a single- track line over which trains are operated by time-table, train orders, and a manual block signal system. The point of accident was within yard limits, about 1½ miles west of the passenger station. At a point approximately 4,500 feet west of the station is a switch designated in the time-table as Cleveland, Yard, at which inferior eastbound trains regularly take siding. The crew of westbound passenger train No. 41 received an order at Cleveland to wait at Cleveland Yard until 4.40 p.m. for eastbound train No. 84, they also received a clearance card stating that the block was clear on the arrival of train No. 84. Train No. 41 left Cleveland at 4.38 p.m., passed Cleveland Yard at 4.42 p.m., and collided with train No. 84 at a point about ¾ mile beyond Cleveland Yard. Only the conductor and engineman of train No. 41 had seen the order and clearance card and there was nothing to indicate that the engineman had read the clearance card or was acquainted with its contents, while the conductor delegated to a train porter the duty of ascertaining whether or not train No. 84 had arrived, and the porter, apparently in ignorance of the instructions in the clearance card, supposed that all his train had to do was to wait at Cleveland Yard until 4.40 p.m. The crew of train No. 84 had received a copy of the wait order but were delayed en route by a broken air hose and were operating their train into Cleveland Yard on short time without flag protection.

The report pointed out that the practice of permitting trains to pass a block station and proceed to an outlying switch, there to await the arrival of an opposing train, is usually for the purpose of saving the delay of a few minutes which would result were the train to wait at the entrance to the dock, that such a method of operation removes the

benefit of block-signal protection and leaves to the employees the proper observance of train orders; and that the officials should take immediate steps looking toward a proper observance and use of the block-signal system. The supplemental investigation was made for the purpose of ascertaining what had been done by the officials toward improving the operation of the block-signal system.

Facts developed by supplemental investigation

The supplemental investigation showed that no change had been made in the operation of the block system as a result of the occurrence of the accident; that no change was contemplated; and that it was a matter of common occurrence for trains to be permitted to pass a block station and proceed to an outlying switch when in possession of a clearance card instructing the crew to wait until an opposing train had arrived. This is in accordance with that part of rule 317 reading as follows:

> "A train must not be admitted to an occupied block except as provided in rule 332 or by train order or by Form 603 when authorized by dispatcher."

Rule 332 relates to the failure of communication or the presence of a work extra in the block, while Form 603 represents the clearance card.

Conclusions

The supplemental investigation showed that trains still are allowed to enter an occupied block when in possession of a clearance card.

The conditions existing at this point are similar in principle to those found to exist in connection with the investigation of an accident on the Chicago, Burlington & Quincy Railroad near Meadville, Mo., on January 4, 1923. In that case a train was allowed to depart from the block office, running on a passing track, with a clearance card authorizing it to enter on the main track at an outlying switch when certain opposing trains had arrived. The crew failed to identify one of those trains and the train departed, the result being a head-end collision which caused the death of four employees.

The practice of permitting trains to enter an occupied block or to proceed to an outlying switch on a passing track places them beyond the control of the block operator and the protection of the block system, and leaves entirely to the crew the observance of orders or other instructions affecting the safe movement of trains. The situation at

Cleveland is such that it is often a matter of difficulty for the crews of departing trains to know whether or not the opposing train has arrived and entered the yard. If, however, operating reasons should make it a matter of necessity to advance trains to outlying switches, further protective devices are needed to enable the block operator to retain control of the movement.

Respectfully submitted,

W. P. Borland,

Director.