In re Investigation of an actions which covered on the Lauisville, Henderson & St. Louis Railway, near Backett, Ky., on May 29, 1917.

July 16, 1917.

On May 29, 1917, there was a heed-end cellision between a freight train and a light engine, near Backett, Ky., on the Louisville, Renderson & St. Louis Railway, which resulted in the death of three employees and the injury of one employee. After investigation of this accident the Chief of the Division of Safety reports as follows:

This railway is a bingle track line extending westword from Strawberry, Ky., to Henderson, Ky., a distance of 137.1 miles. Between Louisville and Strawberry, a distance of 5.9 miles, and between Henderson and Eveneville, Ind., 12.2 miles, the trains of this railway are operated over the tracks of the Louisville & Hashville Railroad. No block signal system is in use, train movements being governed by time-table and telegraphis train orders.

Approaching the point of collision from the east there is a 0.5 per cent, according grade, 1.5 miles in length, which extends to within 500 feet of the point of accident; at that place there begins a 0.4 per cent, descending grade, one mile in length. The collision occurred in what is known as Poscy's Sut, the sides of which extend 8 feet above the level of the rails; and 486 feet from the western and of a 3-degree 40-minute curve to the left for westbound trains, 1,420 feet in length; westward from this curve the track is tangent for 3-1/2 miles.

On the morning of May 29th, locamotive 25, in charge of Engineman Wilson and Fireman Folly, assisted in hauling extra 22 westward from Louisville to Henderson, 145 miles. At Henderson locamotive 25 was removed from the front end of the train and coupled to the rear, and then helped the train on to the Chio River bridge. It was then detached and returned to the telegraph office at Henderson, where the following train orders were received by the engineman:

Order No. 18: "let 168 Rag. 35 weit at Spotteville until Five 5.00 a. m. and at Beskett until Fve Ten 5.10 a. m. for Era. 23 Kest."

Order No. 84: "Eng. 25 run Nas. Senderson to Shope and has right over 2nd No. 168 Eng. 704 Eanderson to Ovensboro." Extra 25 left Henderson at 4.57 a. m., and sollided with train let No. 165 in Posey's Cut, 1.7 miles west of Baskett and 5.4 miles east of Henderson.

Westbound freight train let No. 163 consisted of 18 loaded cars. I empty car and a caboose, hauled by locomotive 53, and was in charge of Conductor Rice and Engineers Penner. It left Louisville at 8.40 p. m., May 28th, an route to Howell, Ind., and reached Owensboro at 3.55 a. m., May 29th, where some cars were set out and water was taken, and where the conductor received two Form 19 orders, Nos. 16 and 19, as follows:

- 16. "No. 146 Eng. 27 run ten 10 mins. late Conway to Shops."
- 19. "1st No. 165 Eng. 33 has right over No. 166 Engs. unknown Owensboro to Henderson."

He also received order No. 18, on Form-31, previously quoted, to which order he signed his own and his enginements name. The operator gave him two sets of copies of the orders, and he boarded the locomotive and handed the enginemen his set, the latter without reading them handing the orders to the firemen. Train let No. 165 left Owensboro at 5.45 a. m., 30 minutes late, picked up some cars at Conway, 0.8 mile distant, there being is loaded cars and a caboose in the train when leaving there. It passed Baskett at about 5.00 a. m., where train order No. 18 required that it wait until 5.10 a. m., and at about 5.00 a. m. it collided with eastbound extra 23.

Both locomotives were telescoped and two cars in train let No. 165 were practically destroyed. Both the enginemen and firemen of extra 25 were killed, as was the firemen of train let No. 165. At the time of accident the weather was olear.

The time-table of this railway contains the following speed restriction:

"Passenger trains will not exceed fifty (50) miles per hour and other trains thirty-five (35) miles per hour.

In addition, Bulletin No. 4139, issued May 1, 1917, provides as follows:

"All Trains Do not exceed ten (16) miles per hour over track in Posey's Cut."

Rule 210, of the book of rules of the Louisville &

Maskville Railroad, which is used by this railway, provides that before an operator delivers a form-51 order to members of a train erew, those to whom the order is addressed must first sign it. After the "complete" has been received from the dispatcher, a copy of the order is delivered to each person addressed, and each must then read his copy aloud to the operator. Conductors must show to their flagmen, and enginemen to their firemen, promptly, all orders received by them, and know that they are understood. Should the conductor fail to show or read the orders to the flagmen, or the enginemen fail to show or read the orders to the firemen, the flagmen or firemen must ask for the orders.

Conductor Rice, of train 1st No. 163, stated that his train resched Owensboro at 5.30 or 3.35 a. m.; that the engineman and the rest of the orew then engaged in setting out cars and taking water; and that he himself went to the telegraph office, got orders Nos. 16 and 19, on Form 19, and order No. 18 on F rm 31. He stated that, in order to save time, he did not have the engineers come to the office to sign order No. 16, but personally signed the enginements name, in addition to his own. He said that the operator then gave him two sets of the orders, one for himself and the other for the enginemen; that he boarded the locamotive end, without unfolding or examining it, gave the engineers one set of the orders; that he stood back of the suginemen from Owensboro to Con ay, where there were cars to be plaked up, and opened his orders and read them. He thought he read them aloud, and for that reason believed that the engineman was acquainted with their contents. Conductor Rice stated that the engineers, without looking at his orders, handed them to the firemen, who read them, although he did not know whether or not order No. 18 was among them, as he did not pay any attention when the fireman opened them. He further stated that, when he got off the engine at Conway the firemen still had the orders, so far as he knew. His train departed from Convey ismediately after the arrival of eastbound train No. 148. Conductor Rice also stated that he knew that order No. 18 required that his train wait at Baskett until 5.10 a. m., but that he was busy with his reports, did not mention enything about the orders to his flagmen and the head brakeman, who were riding in the caboose, and overlooked the orders until the collision occurred, about 5.05 a. m.; the speed of his train was about 18 miles an hour at the time. Conductor Rice stated that he has not made a bebit of receiving orders without reading them or having them read to him, but did it in this instance in order to save time; he also said that it is not the ouston for the engineers to band orders to the firemen without reading them.

Enginemen Penner, of trein 1st No. 165, was injured in the collision, and was unable to be present at the investigation, but a statement was made and signed by him, and filed by Trainmaster Hensley, part of which is as follows:

"I left Owensboro on train No. 163, morning of May 20, 1917. It seems we had three orders; Conductor Rice handed me the orders but I didn't read them, but passed them to the firemen to read. When he passed them back, two or three minutes later, I got only two orders. I read them and they gave so the right of track to Henderson. He must have lost the third order, although I am not sure the third order was handed me by Conductor Rice. At the wreck Conductor Rice seid that it was an extra cast and that we were to wait at backett until 5.10 for them. I think it was 5.07 a. m. when we struck. It was 4.55 when we passed Spottsville; we slowed through Spottsville, and I think it was about 12 minutes after I looked at my watch until the wreak."

Head Brakemen Morierity, of train let No. 163, stated that he was in the telegraph office at Ovensbore when the operator gave the conductor his orders; he did not hear the operator read the orders to the conductor, but did hear him say that there was a "weit" order, a "time" order on eastbound train No. 146, and a "right of track" order on eastbound train No. 166. Brakemen Morierity stated that he boarded the losomotive at Owensbore and rode on it to Conway: he was in the oab while the conductor reed to the enginemen order No. 16, but he then crossed over the firemen's side and heard no more of what was said by the conductor and enginemen concerning the orders. He else stated that he did not ask the conductor to read the orders to him, and the latter said nothing about them; and that he did not know that it was intended that his train should walt at Baskett until 5.10 a. w. for extra 23. Brakeman Morierity stated that he did not ask to see the orders, or to have them read to him, because he was busily talking about the work to be done at Conway, where cars were to be picked up, sithough after leaving Conway there was opportunity to read the orders, if he had desired to do so.

Flagman Wilson, of train lat No. 163, stated that the conductor usually showed him all orders, but in this instance failed to do so after getting the orders at Owensboro, and he did not see the orders or have anything said to him about them until efter the collision. He thought the speed of his train was about 20 miles an hour at the time of the collision.

Operator Rice, at Owensboro, stated that when Conductor Rice, of train lat Nol 165, same into the telegraph office, he took order No. 18, but it in the window and Conductor Rice signed it, writing his own and the enginements name. Order No. 18 was then made complete and he delivered to the conductor two copies of each of two Form-19 orders and of order No. 18; one set of these orders, containing order No. 18; one set of these orders, containing order No. 16, was for the enginemen and was folded once through the middle, the other set being for the conductor. Operator Rice stated that rule 210 required that Form-31 orders be compared by the operators with those who sigh them; and that when he delivered the orders to the conductor he read to him, from his own copy, the most vital portions. He stated that it is the practice at Owensboro for a conductor to sigh the name of his enginemen to orders, then taking the orders to the enginemen.

Trainmenter Heneley stated that, according to the switch tower operator at Henderson, eastbound locomotive 25 departed from that place at 4.57 s.m. The distance between Henderson and Beakett is 7.1 miles, and, according to train order No. 18, westbound train lat No. 165 was to wait at Backett until 5.10 s.m., thus leaving 15 minutes for locomotive 25 to run to Backett. The speed limit for other than passenger trains is 35 miles an hour, and the speed through Posey's Cut, a distance of about 2.500 feet, is restricted to 10 miles an hour. To comply with these restrictions, about 14 minutes would have had to be consumed by locomotive 25 in making the run between Henderson and Backett. Trainmenter Hensley stated that, judging from conditions found at the scene of accident, the speed of locomotive 25 must have been at least 45 miles an hour when the collision occurred.

Concerning Form-51 train orders, Trainmaster Hensley stated that he knew that it was the practice at times for the conductor to sign both his own and the auginemen's name therato, and he admitted that he by his silence had sanctioned that practice.

Regarding the employees involved, Trainmeter Hensley stated that he knew all of them personally, had ridden with them on different occasions, and considered them above the average as to reliability.

Train Dispatcher Myers, at Louisville, stated that train order No. 18, on Form 31, was made occapiete at Henderson at 4.55 c. m., at which time the enginemen of extra 55 signed it, thus providing only 15 minutes in which to go to Baskett; that, in order to comply with all speed restrictions, between 12 and 15 minutes would be consumed in the run from Henderson

to Backett; that locomotive 23 should have had 19 or 20 minutes, to cover that distance and clear a train; and that there was no open telegraph office between Owensboro and Henderson at the time train order No. 18 was made complete. Dispatcher Myers stated, however, that if he had known positively that extra 23 was going to leave as soon as order No. 18 was received, he would not cave issued it, but would have issued a "meet" order.

This accident was caused by the failure of the arew of train 1st No. 165 to comply with the requirements of order No. 18 and wait at Baskett until t.10 c. m. for extra 25. The investigation disclosed that there existed a very lax method of handling train orders. Bule 210 plainly requires that Form-51 train orders wall be signed by those to whom they are eddressed; and that each person, after receiling his copy of the order, must read it sloud to the operator. Order No. 18 was addressed to the conductor and enginemen of train lat No. 163; the conductor, however, was the only one who signed it, at Owensboro, he signing the enginements and his own name. Conductor Rice stated that because of work on his reports, he overlooked the order requiring his train to wait at Baskett until 5.10 a. m., and did not think of it until efter the accident occurred. When the conductor delivered to the engineman his set of copies of the orders at Owensboro, the enginemen, without resding them, turned them over to his fireman, and claims that order No. 18 was not exong those handed back to him by the firemen. Such disregard of so important a rule as No. 210, as was displayed by the crew of train 1st Ho. 165 in this instance, cannot fail sooner or leter to result in socidents of this character.

However, much as the conductor and enginemen of train lat No. 165 are at fault for their careless magner of handling train orders, especially in receiving them, no esself share of the responsibility for such laxity must be borne by those who are charged with the operation of this railway. The trainmester edmitted that he knew that conductors signed the names of their enginemen to orders, and that silently he permitted this practice, —an especially dengarous one on roads such as this, where there is no block signed system in use and where train orders serve as the only active of the approach of extra trains.

Conductor Rice entered the service of this rullway as a brakeman April 30, 1905, and was promoted to conductor March 20, 1910. Engineers Penner was promoted to engineers December 19, 1910. Both had good records.

At the time of the assident the entire crew of train let No. 163 had been on duty 8 hours and 55 minutes, and the crew of extra 23 had been on duty 13 hours. The shortest period off duty of any of the employees involved, prior to starting on this trip, was 14 hours and 50 minutes.