

In re Investigation of accident which occurred on the Illinois Central Railroad near Effingham, Ill., on September 6, 1916.

On September 6, 1916, there was a head-end collision between two freight trains on the Illinois Central Railroad near Effingham, Ill., which resulted in the death of one employee. After investigation of this accident the Chief of the Division of Safety reports as follows:

This part of the Illinois Central Railroad is a single track line; trains are operated by time-table and train orders, the only block system in use affording protection for following movements. Approaching the point of accident from the south there is a curve of 7 degrees leading to the right, about 700 feet in length, a 3-degree curve to the left, 750 feet in length, followed by a 6-degree curve to the right and then 150 feet of tangent to the point of accident. Approaching from the north the track is tangent for about 1,500 feet. With the exception of short stretches of level track the grade is descending for northbound trains, varying from 1 to 2%. On account of hills covered with brush and trees, located just south of the point of accident, the vision of the engine crews of the two trains was obscured until they were within about 200 or 300 feet of each other.

Southbound extra 952 consisted of 27 cars and a caboose, in charge of Conductor Schoenberg and Engineman Dunlap. At Newton, 23.83 miles from Effingham, the crew in charge received, among others, a copy of train order No. 41, reading as follows:

"No. three fifty six 356 Eng. 917 meet extra 952 south at Effingham."

The train left Newton at 5.25 p.m., passed Dieterich, the last open telegraph office, 10.6 miles from Effingham, at 6.25 p.m., and at about 7.00 p.m. collided with train No. 356 at a point about three-quarters of a mile north of Effingham.

Northbound train No. 356 consisted of 35 cars and a caboose, hauled by locomotive 917, and was in charge of Conductor Harris and Engineman Clayton. It arrived at Effingham at about 6.20 p.m., at which point seven train orders were received, among them train order No. 38, reading as follows:

"Extra 952 south has right over No. three fifty six 356 Eng. 917 Newton to Wheeler."

The crew also received a copy of train order No. 41, which pro-

vided that train No. 356 would meet extra 952 at Effingham, this order having the effect of superseding train order No. 38. Train No. 356 left Effingham at 6.55 p.m., and collided with extra 952 while running at a speed of about 25 miles an hour.

Both locomotives were quite badly damaged, but remained upright, while several cars in train No. 356 were destroyed.

Conductor Harris, of train No. 356, stated that when his train arrived at Effingham at 6.25 p.m. he was in a hurry to reach his home in Palestine, 54 miles from Effingham, before he had been on duty 16 hours, in order to avoid being tied up at some point on the road, the 16-hour limit expiring at 10.45 p.m. Coal and water were taken at Effingham and two cars were set out. He stated that when he went for his orders he read them over as fast as he could, signed them and returned them to the operator for the purpose of having them made complete. He registered and then the operator gave him a message reading as follows:

"If necessary, reduce train so as to make Palestine for 303."

Train No. 303 is a southbound passenger train due to leave Palestine at 9.30 p.m. After getting this message he put the register check on it, instead of using blanks which are provided for the purpose. Conductor Harris stated that the only trains he was thinking about meeting were trains Nos. 967 and 992. He also said that if he read train order No. 41, and he was sure he did, he read it as providing for his train to meet train No. 992 instead of extra 952, and the register showed that train No. 992, as well as train No. 967, had arrived at Effingham several hours previously. After getting his orders complete he ran back to the locomotive, boarded it, and said: "Let's go." He then handed the orders to the engineman, who started the train. The engineman then read the orders to himself, also the register check, and then got up on the seatbox and remarked that extra 952 had the right to the track to Wheeler over their train. He stated that both he and the engineman were uncertain as to their orders and the engineman told him to get out the orders and make certain, and he read train order No. 38, which provided that extra 952 had rights over train No. 356 from Newton to Wheeler. At that moment Engineman Clayton applied the air brakes in emergency, and Conductor Harris stated that he looked ahead, saw the approaching train and jumped from the locomotive. Conductor Harris further stated that when he read over his orders in the telegraph office he read them very rapidly and did not know whether or not the operator was able to understand him, and the only explanation he had to offer for the occurrence of this ac-

cident was that he was in a hurry and overlooked extra 952.

Engineman Clayton stated that when ready to leave Kiffingham the conductor gave a proceed signal from the front of the locomotive, and he at once started to work steam. The conductor boarded the locomotive and handed to him a number of orders, and he shut off steam and got down on the deck of the locomotive to read the orders and examine the register check. He read the order to meet extra 952 at Kiffingham, while the register check showed that trains Nos. 987 and 992 had arrived. He stated that there was a complicated lot of orders, some of which had expired, and they were not as clear as they should have been, and he asked the conductor to read them back to him. He then asked the conductor about the meet with extra 952 at Kiffingham, and claimed that the conductor told him that extra 952 had been met at Edgewood. Engineman Clayton stated that he knew that he had met an extra at that point and that it was hauled by a locomotive of the "900" class, but did not see its number. Engineman Clayton also stated that he saw extra 952 when it was about 25 car lengths distant, at which time the speed of his train was between 20 and 25 miles an hour. He also said that he was sure he read the orders to the conductor, but that he did not give them to the fireman.

Head Brakeman Dimmitt, of train No. 356, stated that he was riding on the left side of the locomotive, that he did not see the orders and did not hear what the engineman said when he was reading them. He said that he usually read the orders when the engineman and conductor were through with them, but that in this case they were discussing the orders as the train proceeded. His first information that a train had been overlooked was when he saw the headlight of extra 952.

This accident was caused by the crew of train No. 356 failing to obey train order No. 41 requiring their train to meet extra 952 at Kiffingham, for which Conductor Harris and Engineman Clayton are responsible. Conductor Harris stated that he was in a hurry, that he read the orders to the operator in a hurried manner and did not know whether or not the operator could understand him, that he checked the register and told the engineman to start the train, entirely overlooking the fact that his train should wait at Kiffingham for extra 952. Conductor Harris is also at fault for his failure to have Engineman Clayton read the orders to him aloud before allowing the train to proceed. According to Engineman Clayton's statements, he inquired of the conductor concerning extra 952 after starting his train, and was told that it had passed their train at a preceding station, the conductor evidently having train No. 992

on his mind instead of extra 952. Regardless of this fact, however, the register did not show that extra 952 had arrived at Effingham, and had he read over his orders to the conductor before starting, the conductor's error undoubtedly would have been discovered.

Conductor Harris entered the service in 1903 as a brakeman, and in 1906 was promoted to conductor. Engineer Clayton entered the service as a fireman in 1902, and in 1905 was promoted to engineer. The records of both of these men were good.

Conductor Harris and Engineer Clayton left Palestine, en route to Centralia, at 5.55 a.m., and were off duty at Centralia for 3 hours and 15 minutes. The return trip from Centralia to Palestine was started at 1.45 p.m., so that at the time of accident these men had been on duty an aggregate of about 12 hours.