

In re Investigation of an accident which
occurred on the Illinois Central Rail-
road near Cherokee, Iowa, on
July 18, 1917.

August 17, 1917.

On July 18, 1917, there was a head-end collision between two passenger trains on the Illinois Central Railroad near Cherokee, Iowa, resulting in the death of one employee and the injury of thirty-seven passengers and five employees. As a result of an investigation of this accident, the Chief of the Division of Safety submits the following report:

The accident occurred on the Cherokee District of the Illinois Central Railroad, this district extending from Fort Dodge, Ia., to Sioux City, Ia., a distance of 135 miles. In the vicinity of the point of accident the railroad is a single track line operated by a telephone dispatching system, no form of block signals being used. The track in this vicinity is laid with 75-pound rails, 30 feet in length, with 19 ties to the rail length, some tie plates being used, and the ballast being of gravel, 20 inches in depth.

The accident occurred approximately three miles east of Cherokee and 1-1/2 miles east of Onawa Junction. The point of accident was on a 25-foot fill, at about the middle of a stretch of tangent track 3,400 feet in length, and on a grade of approximately one per cent, descending for westbound trains, the grade being nearly four miles in length and the point of accident being approximately 1,500 feet from the foot of the grade. From either direction approaching the tangent on which the collision occurred there are three-degree curves toward the south, the one to the east being 600 feet in length and the one to the west 750 feet in length. The view was obstructed by high banks on the north side of the track on both curves, the vision of an engine crew, approaching from either direction, being limited practically until the point of tangent was reached. At the time of the accident the weather was clear and the sun was shining.

The trains involved in this accident were westbound local passenger train No. 651, consisting of locomotive, baggage car and two coaches, en route from Fort Dodge to Sioux City, with Conductor Tyndal and Engineer Todd in charge; and eastbound passenger train No. 16, known as the Chicago Express, consisting of locomotive, postal car, baggage car, two coaches, and a parlor car, en route from Sioux City to

Chicago, with Conductor Nugent and Engineman O'Neil in charge. With the exception of the wooden baggage car in train No. 631, all the cars in these trains were of steel construction.

Train No. 631 left Fort Dodge at 6.07 a. m., seven minutes late, and at Aurelia, a station about six miles east of the point of accident, the following order, No. 15, was received:

No. sixteen (16) engine 1013 meet No. six thirty one (631) engine 1963 at Onawa Junction.

Onawa Junction is the regular meeting point for these two trains, and while an order similar to this was issued nearly every day, the purpose of the order on this date was to help train No. 631 which, being late, would have been unable to make the regular meeting point with train No. 16, a train superior by direction.

Train No. 631 left Aurelia at 6.14 a. m., nine minutes late, and collided with train No. 16 about one and one-half miles east of Onawa Junction at about 8.23 a. m. Engineman Todd stated that the train was running about 50 miles an hour when he first saw train No. 16, and at the time of the collision the speed had been reduced to about 15 or 16 miles per hour.

Train No. 16 left Sioux City at 6.15 a. m., on time, and arrived at Cherokee on time, at 8.10 a. m. Cherokee is a registering station for all trains, the office of the train dispatcher being located on the second floor of the station building. At Cherokee train orders are not delivered through the medium of an operator but are delivered direct to the conductor by the train dispatcher on duty. Upon arrival, Conductor Nugent registered his train, and Train Dispatcher Esse who was on duty at the time gave him a clearance card stating that there were no orders for his train. Train No. 16 left Cherokee at 8.15 a. m., and had reduced speed to about three or four miles per hour when the collision occurred.

The impact of the collision derailed the rear trucks of the tender in train No. 631; the water tank left the tender frame and telescoped the baggage car, destroying the superstructure of the baggage car for about ten feet at the head end, and it was in this car that the fatality occurred. The other equipment in the two trains sustained comparatively slight damage.

The investigation disclosed that on the date of the accident Dispatcher Esse, who was working the first trick from

8.00 a. m. to 4.00 p. m., arrived at the office at 7.55 a. m., and shortly afterwards accepted the regular transfer of orders not executed at the time of relief, this transfer having been previously prepared by Dispatcher O'Leary, the third trick man. The dispatcher's train order book shows that after Dispatcher O'Leary had entered the transfer and signed the same, which was prior to eight o'clock, he issued order No. 15, receiving the complete from Aurelia at 7.58 a. m.

Dispatcher O'Leary stated that at the time the transfer was being made and after Dispatcher Esse made reference notations on the body of the transfer opposite the order numbers, he discussed with Dispatcher Esse the movement of some of the trains on the west end of the district, and he also called special attention to order No. 15. He also stated that Dispatcher Esse was within three or four feet of him when the order was issued, that he laid the manifold copies of the order down by the train sheet, and that when he left the office at about 8.02 a. m. he believed that Dispatcher Esse fully understood the situation.

The records show that before the accident occurred Dispatcher Esse had made entries in the order book of two other orders having been completed, on the same page and directly below the entry of order No. 15. Dispatcher Esse stated that he could not account in any way for his failure to see order No. 15 in the order book, nor for his failure to deliver that order to the conductor of train No. 16 when he came in to register his train, except that the matter must have simply slipped his mind. He stated that he did not arrive at the office that morning until nearly eight o'clock; being a new man, he was anxious to relieve Dispatcher O'Leary as quickly as possible, and he did not make a proper examination of the records. He said there was nothing unusual in connection with the transfer, and while he did not recall any discussion with Dispatcher O'Leary, relative to train movements or any particular orders, he did not blame any one except himself for the accident. He stated that he carefully checked over the transfer of orders and properly noted the same, but he failed to notice the entry of order No. 15 which immediately followed the transfer; he did not see order No. 15 until after the accident had occurred, and when he looked for it then he found it at the bottom of a bunch of orders.

This accident was caused by the failure of Dispatcher Esse, who was on duty at Cherokee, to deliver to train No. 16 order No. 15 which fixed the meeting point between that train and train No. 651 at Onawa Junction.

Rule No. 254 of the special rules for train dispatchers provides in part as follows:

Relieving dispatcher should report for duty fifteen minutes before the hour set for him to assume charge and thoroughly familiarize himself with outstanding orders and the position of trains, before commencing work.

Dispatcher who is to be relieved must make a written transfer in ink in his order-book of all outstanding orders, indicating such by their numbers only; and furnish the relieving dispatcher all other necessary information. Relieving dispatcher must carefully read such orders as are transferred to him, checking the number of each in the "transfer", and then sign such transfer.

Dispatcher Esse stated that the reason he was late in arriving at the office on the morning of the accident was because he was compelled to wait at a physician's office for medical attention to an infected hand. The evidence indicates that not more than seven minutes elapsed between the time Dispatcher Esse arrived and the time that Dispatcher O'Leary left the office; during that short interval the transfer was made, order No. 15 was issued, and the movement of certain trains was discussed. As the results show, Dispatcher Esse failed to "thoroughly familiarize himself with outstanding orders and the position of trains, before commencing work." Dispatcher Esse also failed to sign the transfer as required by the rule quoted in the foregoing.

Dispatcher O'Leary failed to comply with that portion of the rule requiring the dispatcher who is to be relieved to make written transfer of all outstanding orders. Had order No. 15 been included in the body of the transfer, it would no doubt have been more definitely and positively called to Dispatcher Esse's attention and the accident might have been averted.

These circumstances all point to the fact that in connection with the relief of Dispatcher O'Leary and the transfer of orders, matters vitally affecting the safety of trains under the supervision of these dispatchers were hurriedly gone over and proper consideration was not given to them.

After the departure of Dispatcher O'Leary, there was a period of eight minutes before the arrival of train No. 16 at Cherokee, during which time Dispatcher Esse merely noted complete for two orders which had previously been issued. As train No. 16 remained at Cherokee for a period of five minutes, Dispatcher Esse had about twenty minutes after his arrival at the office, and about thirteen minutes after the departure of Dispatcher O'Leary, before train No. 16

left Cherokee. In view of the fact that there were only thirteen orders outstanding, including order No. 15, this should have been ample time to enable him to become entirely familiar with the situation of trains in the district under his supervision, even if he had not done so before commencing work, as required by the rule.

Dispatcher Esce had had 22 years' experience with another railroad as operator, dispatcher, chief dispatcher and train master. He left that road September 15, 1916, and entered the service of the Illinois Central Railroad as operator and extra dispatcher on April 21, 1917. He had served three days as relief dispatcher at Cherokee prior to this time, and he also served as relief dispatcher at Fort Dodge from July 1 to July 15; he was working the fourth day as relief dispatcher at Cherokee at the time of the accident.

Dispatcher O'Leary had had thirty years' railroad experience, twenty years of which were as dispatcher, chief dispatcher and train master. He had been in the employ of the Illinois Central Railroad as a dispatcher for seven years.