

In re Investigation of an Accident which occurred  
on the Central New England Railway near  
New Hartford, Conn., on December 22,  
1916.

January 31, 1917.

On December 22, 1916, there was a head-end collision between two freight trains on the Central New England Railway near New Hartford, Conn., which resulted in the death of 2 employees and the injury of 7 employees. After investigation of this accident the Chief of the Division of Safety submits the following report.

This part of the Central New England Railway is a single track line. The movement of trains is governed by time-table and train orders, which are transmitted by telegraph. Trains running in the same direction are permitted to follow each other in ten minutes from open telegraph offices. The accident occurred about 300 feet west of the eastern end of a curve of 8 degrees, about 950 feet in length, this curve leading to the right for eastbound trains. Approaching this curve from the west there is a sharp curve to the left, followed by 200 feet of tangent track. Approaching this curve from the east there is about 750 feet of tangent, a slight curve to the left about 300 feet in length, followed by about 600 feet of tangent. The grade is 1.24 per cent descending for eastbound trains, this grade extending a mile or more in each direction from the point of accident. At the time of the accident it was raining.

Eastbound second-class freight train No. 194 consisted at the time of the accident of 1 car and a caboose, hauled by locomotive 109, and was in charge of Conductor Snow and Engineman Sisson. At Boston Corners, N. Y., 46 miles from New Hartford, the crew in charge received a copy of train order No. 202, reading as follows:

"Engs. 126 and 125, coupled, run extra  
Walnut Street to Canton, and has right over  
No. 194, Walnut Street to Winsted."

Winsted is 6.65 miles west of New Hartford. This order was made complete to train No. 194 at 4.02 a. m. On arrival at Winsted, the crew of train No. 194 received a copy of train order No. 207, providing for a meet with extra 126-125, at Canton, 7.18 miles east of New Hartford, or 13.83 miles east of Winsted. This order read as follows:

"Extra 126 and 125, coupled, west, hold main track, meet No. 194, eng 109 at Canton."

This order was made complete to train No. 194 at 7.40 a. m., and the train departed at 7.42 a. m., and collided with extra 126-125 at a point about one mile west of New Hartford, while traveling at a speed estimated to have been 25 miles an hour.

Westbound extra 126-125 consisted of 4 cars and a caboose, hauled by locomotives 126 and 125, and was in charge of Conductor Bunce and Engi even Woodin and Steinberg. It left Walnut Street, Hartford, at 5.10 a. m., with running orders as contained in train order No. 202, quoted above. The crew also had a copy of train order No. 201, annulling westbound second class train No. 195. In reality extra 126-125 took the place of train No. 195, being run as an extra on account of being several hours late on the regular schedule of train No. 195. At Tariffville, 17.21 miles east of New Hartford, locomotive 126 was cut off and proceeded to Simsbury, the next station, 3.27 miles west of Tariffville, on account of the combined weight of the locomotives exceeding the capacity of bridges between the two stations. When locomotive 125 reached Simsbury water was taken at a tank just east of the station, and the engineman went into the office for the purpose of talking with the operator. Locomotive 125, which had arrived in the meantime, made up a train of 22 cars, 18 being picked up at this point, and the train left at 6.37 a. m. This train, however, was entered on the block records at Simsbury by Operator Downs as train No. 195, instead of being entered as extra 126-125, and was shown as having arrived at 5.50 a. m. and departed at 6.37 a. m., en route to Winsted. Operator Downs went off duty at 7.00 a. m., and when relieved by Operator Charles, the only train entered on the block sheet was train No. 195, which train Operator Downs had shown as having departed at 6.37 a. m. Not knowing that train No. 195 had been annulled, Operator Charles had no way of knowing that Operator Downs had confused the extra with the regular train and therefore accepted train order No. 207 for extra 126-125, the order being made complete at 7.41 a. m., or more than one hour after the extra had departed. The order was then made complete to train No. 194 at Winsted, the result being that extra 126-125 had departed over one hour previously with rights over train No. 194 to Winsted, while train No. 194 was in possession of train order No. 207, providing for a meet with extra 126-125 at Canton, both of these trains, therefore, having right under the orders held by them to the track between Canton and Winsted. Extra 126-125 passed Canton at about 6.58 a. m., New Hartford at 7.52 a. m., and at about 8.05 a. m. collided with train No. 194 while traveling at a speed estimated to have been about 15 or 20 miles an hour.

All three engines were quite badly damaged, as well as the car and caboose which made up train No. 194, and one car in extra 126-125 was destroyed. The employees killed were the fireman of train No. 194 and the fireman of locomotive 126.

Engineman Woodin, of locomotive 126, stated that his train was supposed to be train No. 195, but was so late on the schedule of that train leaving Hartford that it was being run as an extra. When his train reached Tariffville the headlight on his locomotive did not show up well and he filled it. He also found that the classification lights were out and he cleaned the glass of the right-hand marker and then relighted it. His locomotive was then cut off and proceeded to Sinsbury. Upon arrival at Sinsbury he found the train order board in the clear position and after taking water and oiling the locomotive he pulled ahead so that locomotive 125, which was then entering the eastern end of the yard, could take water. During all of this time his locomotive was just east of the station, and when he pulled ahead after taking water the front end was about one car length east of the window in the operator's office. He then went into the station and the operator asked him if he had come to help the train and he replied in the negative, saying that he was on the leading engine. Conductor Bunce then came in and asked him how many cars he could handle. He talked with the conductor about the train and then left the office, the train leaving Sinsbury soon afterwards. The first he knew of the collision was when it occurred; saying that he was on the outside of the curve and did not see train No. 194 approaching, and that both locomotives on his train were working steam at the time. He said the first he knew of train order No. 207, requiring his train to meet train No. 194 at Canton, was when a copy of it was shown to him by Engineman Sisson, of train No. 194, immediately after the accident. Engineman Woodin further stated that when talking with the operator at Sinsbury the latter made no inquiries as to the train he was on, and nothing was said which would indicate whether the operator understood that he was with an extra or with train No. 195, and he could not account for the fact that the operator apparently took his train for train No. 195. He was positive that the headlight, and the classification light on the right side of the locomotive, were burning while at Sinsbury and also while leaving there, and said that the operator could have told the train was an extra if he had looked at it.

Operator Downs, on duty at Sinsbury, at the time Extra 126-125 passed that point, stated that he did not have any order annulling train No. 195 and that to the best of his knowledge he had not seen anything of extra 126-125. He said that he saw the front end of the locomotive hauling the train,

but that he did not see any classification light indicating that it was an extra, and that the crew was the regular crew of train No. 195, and he, therefore, supposed that it was that train. He also said that the engineer came into the office and he asked him what train he was on and the engineer said they were train No. 195. He did not ask the engineer if he was going to help the train, saying that he knew that by seeing the two locomotives coupled together. The conductor came in afterwards, together with one or two brakemen, but he had no conversation with the conductor, except to give him his bills. When the train left the station he watched it to see that the rear end was attached to the train, but did not look at the indicator on the catcode, which would have shown him whether or not the train was an extra. He further stated that when the leading locomotive took water at its front end was near the office for several minutes, and he did not see any classification lights. After the departure of the train which he supposed was train No. 195, he reported its arrival and departure to the office at Poughkeepsie, at 6.41 a. m., as train No. 195. He then said that he had a telegram from the crew of train No. 195 covering a detention report and was told to go ahead, which he considered as good as an acknowledgment of his report covering the arrival and departure of train No. 195. When partly through the detention report some other operator broke in for train order and as soon as that order had been completed, the dispatcher sent him train order No. 204, which he copied as follows:

"Eng. 114, run extra, west, Winsted to  
Tariffville and take siding, meet extra 126  
and 125, coupled, west, at Canton."

After this he completed the sending of the detention report. Before train order No. 204 was placed nothing was said to him by the dispatcher about extra 126-125. This order was repeated at 6.53 a. m.; it was issued simultaneously to West Winsted, and as issued to that point read as follows:

"Eng. 114 run extra West Winsted to  
Tariffville and take siding. Meet extra 126  
and 125, coupled, west, at Canton. No. 195  
of Dec. 21st is annulled."

Operator Downs said he heard the operator at West Winsted repeat it, but did not notice that it contained the further provision that train No. 195 was annulled. When he was relieved by Operator Charles he had no conversation with him, except that relating to the transfer of the one order which he held, No. 204. Operator Downs stated that if he had had in his possession a copy of the train order annulling train No. 195 he would not have identified extra 126-125, coupled, as being train No. 195.

Operator Charles, who relieved Operator Downs at Simsbury, at 7.00 a. m., said that the only order turned over to him was train order No. 204. There was nothing in the order about annulling train No. 195, and he noticed that that train was shown on the block record as having arrived and departed. Train order No. 204 was the only information he had concerning extra 126-125, and inasmuch as no entry covering that train was on the block record he supposed that it had not passed his station. He stated that when the dispatcher called him to issue train order No. 207 he asked if extra 126-125 had arrived, and as the block record did not show that it had, he told the dispatcher that it had not come, and accepted the order. In his opinion, if the order annulling train No. 195 had been issued to the operator at Simsbury, the accident would not have occurred.

Train Dispatcher Mulley, on duty from 6.30 a. m. until 2.30 p. m., stated that train No. 195 had been annulled by the dispatcher whom he relieved. This annulment was not sent to each open telegraph office. He could not say positively whether or not the operator at Simsbury had a copy of the annulment, but said his records indicated that he did not have it. Train order No. 204 was sent by him to West Winsted and Simsbury, and made complete at 8.55 a. m. This order was sent simultaneously to both offices. The order sent to West Winsted contained in addition the following clause: "No. 195 of December 21st is annulled." The order as received at Simsbury did not contain the clause relative to train No. 195 having been annulled, and Dispatcher Mulley said that variations of this nature occurred very often; that extra 126-125 was not concerned in the annulment of train No. 195, saying that very often after a certain point in the order is reached the dispatcher tells the operator that there is nothing more to go on the order, this resulting in a train order as issued to one train containing provisions which are not found in the order as issued to another train. Dispatcher Mulley said that he issued train order No. 207, providing for extra 126-125 and train No. 194 to meet at Canton, and that a minute or two later a middle order was placed at Canton. This order was received by the operator at Simsbury at 7.45 a. m. Dispatcher Mulley said that his train sheet showed train No. 194 as arriving at Winsted at 7.30 a. m. and departing at 7.42 a. m., this being the last record of that train. Extra 126-125 was shown as leaving Walnut Street at 5.10 a. m., Canton at 6.56 a. m., Pine Meadow at 7.48 a. m. and New Hartford at 7.52 a. m., no report being received from Simsbury. Before issuing train order No. 204 he asked the operator at Simsbury at 6.50 a. m. if extra 126-125 was there, and the operator told him that it was. Train orders Nos. 204 and 207 were then sent. The first he knew that extra 126-125 had left Simsbury was when it was reported by the operator at Canton at about 7.50 a. m. as having passed that point at 6.58 a. m. He then tried to

reach the operators at Pine Meadow and New Hartford, but did not get them until the extra had passed those stations.

The engine crew of locomotive 125, the second locomotive in the extra, did not know whether or not the classification lights were burning on the leading locomotive.

Head Brakeman Broder, of extra 126-125, stated that while at Sinsbury he noticed that the right hand classification signal and the headlight were burning and that two white flags were also displayed.

Flagman McGregor, of extra 126-125, stated that the indicator on the caboose was burning brightly and showed that the train was an extra. He also said that while switching at Sinsbury he had occasion to see the front end of the locomotive and he stated that the classification light on the right side was burning in proper order. He did not know about the condition of the light on the left side.

Engineman Sisson, of train No. 194, stated that at Winsted he received an order to meet extra 126-125, at Canton, and that his train left Winsted at about 7.43 or 7.45 a. m., and the locomotive was drifting around the curve on which the collision occurred when he first saw the extra about 60 feet away. He then said that he jumped from the locomotive without having time to apply the air brakes. He stated that he did not see any classification lights burning on the front end of the extra, but said that if they had been there he did not think he had time to notice them.

Operator Wilsey, on duty at Poughkeepsie from 11 p. m. until 7 a. m., stated that he did not receive any report as to the arrival and departure of train No. 195 at Sinsbury, and that the operator at that point therefore did not receive any acknowledgment of any such report. He said that he received a message signed by Conductor Bunce, relative to delays encountered at East Hartford before starting. This message did not mention the number of the train; it simply referred to the delays to "engines," and there was nothing in it which would have indicated that it was from the crew of train No. 195.

J. C. Gunsailles, operator and clerk at West Winsted, said that no record was kept at that point of the passage of trains. He thought that train No. 194 passed at about 6.45 a. m. He said that he received train order No. 204 between 6.45 and 7.00 a. m., and said that the words, "No. 195 of December 21st, is annulled," were given to him as a part of the order, and that the order was given to his station and also to Sinsbury at the same time, in its entirety, before either of them repeated. He knew that the operator at Sinsbury repeated the first part of the order, but did not know whether or not he repeated the part covering the annulment of train No. 195.

He also said that he heard the dispatcher ask the operator at Simsbury if the extra west had passed, to which question the operator replied in the negative. This was about 6.46 a. m.

Operator Fenn at Canton stated that it was 7.47 a. m. when he was called upon to take train order No. 207, the order issued to him being the middle order. He said that he went on duty at 7.15 a. m. and that about 6.58 a. m. a train had passed his station, and from the information he received he thought it was a westbound double-header. When he reported the passage of train No. 2 he was going to report the westbound double-header, but the dispatcher started in with the order. After this order was made complete he again started to tell him about the double-header, but the dispatcher issued an order to Winsted and after he finished issuing this order he told the dispatcher about the double-header passing at 6.58 a. m. He said that the dispatcher at once called Simsbury and asked if they were there and the operator at that point said, "Not yet." He did not know what trains were being referred to, but supposed that they were referring to an extra. He thought he heard the operator at Simsbury reply twice, "not yet," to the dispatcher and thought he was referring to the same trains each time.

Operator Wadman, located at Winsted, stated that train No. 194 was at his station when he received train order No. 207. He had a copy of the annulment of train No. 195 and knew that extra 126-125 had rights over train No. 194 to Winsted until he received train order No. 207. He did not know about train order No. 204, the only orders he had handled referring to these two trains being Nos. 206 and 207.

The direct cause of this accident was the failure of Operator Downs at Simsbury to identify extra 126-125, and properly enter it upon his block sheet.

The evidence indicates that at least one of the classification lanterns on the front of the leading locomotive was burning and that the indicator on the caboose was properly displayed. Had Operator Downs properly performed his duties he would have seen these indicators and have known that the train was not train No. 195.

General Rules 202 and 210, with respect to train orders, read in part as follows:

"202. Each train order must be given in the same words to all persons or trains addressed."

"210. When a '31' train order has been transmitted, operators must (unless otherwise directed) repeat it at once from the manifold copy in the succession in which the several offices have been addressed, and then write the time of the repetition on the order. Each operator receiving the order should observe whether the others repeat correctly."

In this instance neither of these rules was obeyed by Operator Downs. Had he copied order No. 204, as issued, or had he listened to the operator at West Wasted repeat the order, as required by the rules, he would have discovered his error in identifying the train as No. 195.

Contributing to the cause of this accident was the failure of Train Dispatcher Mulley to require that order No. 204 be in the same words to all trains addressed, in accordance with rule No. 202. Had this rule been complied with Operator Downs at Siasbury would have been compelled to repeat that part of the order containing the annulment of train No. 195 and probably would have discovered his error in identifying the train.

Whether or not Operator Downs reported the arrival and departure of train No. 195 is a question which can not be definitely determined. Dispatcher Mulley and Operator Downs were at their posts of duty at the time it is claimed that the train was reported, and both state that no report was received by them, and, further, the dispatcher's train sheet shows no indication of such report having been received, while Operator Downs' block sheet clearly bears evidence of having been altered. It is claimed by Operator Downs that the reporting of train No. 195 and the sending of the message were a part of one operation. If this were true, upon receipt of Operator Wilsey's acknowledgment of the message a question should have arisen in Operator Downs' mind as to the receipt of the "OS" report by the train dispatcher, in view of the fact that the message was acknowledged by the message operator and not by the train dispatcher.

Operator Downs entered the service of the New York, New Haven & Hartford Railroad as extra operator on December 6, 1916, and on the day of the accident had been working at Siasbury about one week. Prior to entering the service of the New Haven, Operator Downs had been employed as operator on the Central Railroad of New Jersey from February, 1902, until May, 1916, at which time he resigned to engage in the electrical business.

At the time Operator Downs was employed he was not examined on the operating rules of the New York, New Haven & Hartford or Central New England Railroads. He was, however,



provided with a book of rules to study and was to fill out the examination blanks later.

Dispatcher Mulley entered the service as an agent in 1897, and in December, 1899, was made operator and clerk in the trainmaster's office; in June, 1904, made clerk in the superintendent's office, and in November, 1905, made chief clerk; in March, 1907, he was made traindispatcher; in May 1907, he was suspended for 30 days for an error in issuing train orders. In March, 1909, he was demoted for failure to notify an extra concerning a special train. He was reinstated on June 1, 1909, the demotion being modified by 60 days' suspension.

At the time extra 123-125 left Sinsbury, Operator Downs had been on duty about 7 1/2 hours. Dispatcher Mulley went on duty at 6.30 a. m., and had been on duty but a few minutes at the time he issued train order No. 204.

The conditions disclosed by the investigation of this accident forcibly direct attention to the inherent weaknesses of the time-table and train order system of train operation. Such a system depends entirely upon the human element and presents many opportunities where errors or mistakes on the part of employees, or their failure to perform their duties, may not be detected in time to avert an accident. In this instance an experienced train dispatcher failed to comply with the rule governing the issuing of train orders, and a spare operator in the service less than three weeks, and who had neither been examined nor instructed upon the rules of the company, failed properly to identify a train, and under the system of operation in effect no means were provided for detecting such failures. It is believed that had these trains been protected by an adequate block signal system this accident would not have occurred.