

In Re. Investigation of an accident which  
occurred on the International & Great  
Northern Railway near Lillian,  
Texas, on Sept. 8, 1916.

October 20, 1916.

On September 8, 1916, there was a head-end collision between an extra freight train and a work extra on the International & Great Northern Railway near Lillian, Texas, which resulted in the death of 3 employees and injury to 5 employees. After investigation of this accident the Chief of the Division of Safety reports as follows:

The Fort Worth sub-division of the Fort Worth Division, on which this accident occurred, is a single-track line extending from Fort Worth, Texas, to Mart, Texas, a distance of 113.8 miles. Train movements over this line are governed by time-table and train orders, no block signal system being in use. The speed of trains is governed by a bulletin signed by Trainmaster Goforth, which was posted in the bulletin book at the dispatcher's office at Mart about May 1, 1916. This bulleting restricts the maximum speed of freight trains not handling loaded tank cars to 24 miles an hour, and of trains handling loaded tank cars to 20 miles an hour. Rule 87, of the Transportation Department, reads as follows:

"An inferior train must keep out of the way of opposing superior trains and failing to clear the main track by the time required by rule must be protected by Rule 99.

"Extra trains must clear the time of regular trains five minutes unless otherwise provided, and will be governed by train orders with respect to opposing extra trains."

Rule 99, referred to in the rule just quoted, reads:

"When a train stops or is delayed, under circumstances in which it may be overtaken by another train, the flagman must go back immediately with stop signals a sufficient distance to insure full protection. When recalled, he may return to his train, first placing two torpedoes on the rail when the conditions require it.

"The front of a train must be protected in the same way, when necessary, by the brakeman."

Southbound freight train extra 201, consisting of 32 loaded cars, 2 empty cars and a saboose, hauled by locomotive 201, was in charge of Conductor Eberling and Engineman

Riley. This train left Ft. Worth at 6:00 a.m., the crew having received a copy of train order No. 5, reading as follows:

"Eng. 223 work 6:30 a.m. until 10 p.m. between Venus and Everman protecting against third class trains, and two Extras 227 and 201 South, and after 11:45 a.m. protect against Extra 217 North, not protecting against other Extras. Extra 201 South wait at Retta until 7:10 a.m., Lillian until 7:40 a.m., for work Extra 223. Extra 227 South and all trains due at Lillian previous to 6:30 a.m. have passed."

Extra 201 passed Everman, 9.3 miles south of Fort Worth, at 6:50 a.m., and stopped at Retta, 6.5 miles south of Everman, at 7:05 a.m., to await the expiration of train order No. 5. The train departed from Retta at 7:10 a.m., and at a time variously indicated as being between 7:12 and 7:13 a.m., it collided with work extra 223, at a point 3.4 miles south of Retta and 3,465 feet north of Lillian.

Work extra 223, headed southward, consisted of locomotive 223, a Dozier car, or dirt spreader, and a caboose, and was in charge of Conductor Clark and Engineer Stead. This train tied up at Lillian during the night of September 7th and resumed work at 6:30 a.m., Sept. 8th, at which time the crew received a copy of train order No. 5, previously quoted. It left Lillian at 7:35 a.m., having for its destination a steam shovel working at a point 480 feet north of the point of collision. This train was backing northward when it collided with extra 201.

Approaching the point of collision from Lillian, the track is straight for a distance of 2,905 feet, followed by a 3-degree curve to the left 1,634 feet in length, the accident occurring 532 feet north of the southern end of this curve. The grade at the point of accident is .3 per cent. descending for northbound trains. The collision occurred at the southern end of a cut 1,100 feet long, the maximum depth of which is 15 feet on the inside of the curve. The steam shovel, which was on the inside of the curve, was emitting dense smoke, and, in addition to the west bank of the cut, tended to further obstruct the views of the engineers of both trains, both of whom were on the inside of the curve. By placing two locomotives an equal distance away from the point of accident, it was found that the engineers could have seen the approach of their opposing trains a distance of about 960 feet. The weather at the time of the accident was clear.

As a result of the collision, the caboose of the work extra was entirely demolished; the Dozier car was turned over on the west side of the track, all of the killed and injured being on this car, with the exception of Conductor Clark, who was on the caboose. The air equipment of the rear end of locomotive 223 was somewhat damaged. Locomotive 201 stopped about 134 feet south of the point of collision with the left back driving wheel and both tender trucks derailed. The front end of this locomotive was smashed in, the headlight and pilot being destroyed, while other minor damage was received. The remainder of extra 201 was not damaged.

Engineman Riley, of extra 201, stated that at 7:05 a.m. he arrived with his train at Retta, and that after waiting until 7:10 a.m., as required by train order No. 5, he started southward for Lillian. He stated that the train had just passed underneath an overhead bridge, located just north of where the steam shovel was at work, when he saw the caboose of extra 223 about 10 car lengths away. The speed of his train at that time was about 18 or 20 miles an hour, while he thought the speed of extra 223 was about 20 miles an hour. He immediately applied the air brakes in emergency and jumped, the speed of his train when it struck extra 223 being about 15 miles an hour. He stated that extra 223 was still moving northward at a speed of 18 or 20 miles an hour when the collision occurred. Engineman Riley stated further that he looked at his watch just as the accident occurred, and found it to show 7:18 a.m. He stated that he last compared his watch with the clock in the dispatcher's office at Mart on the night previous to the accident and found five seconds variation, while he also compared watches with the conductor at the same time and found no variation. Engineman Riley also stated that while he held a 6-mile-an-hour slow order to be observed at bridge 474, located about 34 telegraph poles north of the point of accident, he reduced the speed at that point to only 12 or 14 miles an hour; he stated that he had been over this track recently and felt it to be safe for that speed.

Conductor Eberling, of extra 201, stated that his train stopped clear of the south switch at Retta at 7:05 a.m., waiting there until 7:10 a.m. He was positive in his statement that his train did not leave Retta prior to 7:10 a. m., and stated that inasmuch as extra 223 had not arrived at that time his train could depart, expecting to find the work extra either into clear at Lillian, or under protection of a flag. Conductor Eberling further stated that approaching the point of accident he was riding on the locomotive, seated behind the engineman, the head brakeman and fireman also being on the locomotive. On account of the black smoke made by the steam shovel on the inside of the curve, he did not see extra 223

until within 7 or 8 car lengths of it, at which time his train was running at a speed of about 18 or 20 miles an hour, while extra 223 seemed to be running at about the same speed. His engineman immediately made an emergency application of the brakes, and had reduced the speed to between 6 and 10 miles an hour when the collision occurred. All of the employees on the locomotive, with the exception of the fireman, jumped before the collision occurred. Conductor Iberling stated that immediately after the accident he looked at his watch and found it to be 7:18 a.m. He stated that he last compared his watch with the clock in the dispatcher's office on the night before the accident, and found it to be correct, according to that clock. He also compared his watch with the engineman's at the same time, finding not more than a minute's variation.

Fireman Quade, of extra 201, stated that his train arrived at Retta at 7:05 a.m., and waited there five minutes for extra 223. He also stated that extra 223 was about one car length away when he first saw it, and he thought the speed of his train at the time of the accident was about 10 miles an hour. He did not look at his watch at the time of the accident and did not know at what time it occurred.

Head Brakeman Fullbright, of extra 201, stated that he looked at his watch just a few seconds after the accident occurred, at which time it was 7:17 a.m.; he had compared watches with the conductor on this trip and found his watch to be a few seconds slow.

Rear Brakeman Thompson, of extra 201, stated that he thought the speed of the train at the time of the collision was about 18 or 14 miles an hour, but he could not tell at what time the accident occurred, as his watch was out of repair.

Engineman Steed, of extra 223, stated that he went on duty at 6:50 a.m., and that, thinking his train could take workmen from Lillian to the steam shovel and then return with his train to Lillian before the arrival of extra 201, he started backward down the main line at 7:05 a.m. When he reached a point about 15 car lengths south of the steam shovel he saw his conductor give a stop signal and jump off the rear end of the caboose, falling and rolling down the embankment. Engineman Steed stated that by the time he had applied the air brakes in emergency he saw the smoke-stack of extra 201. He stated that he had stopped his train and had just started forward when the collision occurred. As soon as he got off the locomotive after the accident, his watch showed the time to be between 7:12 a.m. and 7:13 a.m. The

conductor of his train was lying on the ground, and he went to see if he was badly hurt. The conductor looked at his watch and told him that it was very nearly 7:14 a.m., about 15 minutes having then passed since the accident occurred. Engineman Steed also stated that he last compared his watch with the clock in the dispatcher's office at Mart on the Monday preceding the Friday on which the accident occurred, at which time his watch was 10 seconds fast; he did not remember when he last compared watches with the conductor of his train. He further stated that about two years ago, while Mr. A. C. Whittington was superintendent of this division, Mr. Whittington and Trainmaster Goforth rode on a work train which he was operating and had told him to use a portion of the running time of other trains by keeping a lookout for the opposing train, and if it was seen approaching to stop and back up. In this way, if the opposing train was late, the work would not be interfered with, but could go on just the same. He stated, however, that he didn't follow this practice on deep curves or dangerous places. He also stated that he was not doing this at the time of the collision, but was simply running with the idea that he could go to the steam shovel and get back into clear at Lillian before the arrival of extra 201. He was of the opinion that extra 201 left Retta before 7:10 a.m. and that had it waited until that time he would have had plenty of time to make the movement.

Conductor Clark, of extra 223, stated that his train pulled out on the main line at Lillian, stopped at the depot, where chains and cables were loaded onto the Dozier car, and between 7:00 and 7:05 a.m. started for the steam shovel with the workmen. He stated that he saw the smoke of extra 201 when that train was about 20 or 25 car lengths away. He signaled the engineman to stop and jumped from the train. His engineman, immediately upon receipt of his signal, applied the brakes in emergency, reversed the locomotive, succeeded in stopping the train within four car lengths, and the train was moving southward when struck by extra 201. He stated that he looked at his watch at the instant the accident occurred, and found it to be 7:12 a.m., and shortly afterwards, as he was lying on the ground, Engineman Steed came to him and he asked the engineman what time he had, and was told by him that it was 7:13. Conductor Clark admitted that he had no right on the main track on the time of extra 201 without flag protection, but stated that it had been the practice since he started working for this railroad in October, 1904, to run work trains on straight track against opposing trains without flag protection. He even knew of instances where work-train crews would come to a curve, stop and listen for the opposing train, and if they could not hear it they would proceed around the curve without first sending a flag-

man ahead. He stated that he had never received any instructions to do this, either on straight track or curves, but had always been instructed to get as much work done as possible, and that after a flood in 1913 he had worked all day on a work train without orders. He also stated that, with Chief Engineer Crittenden and Trainmaster Goforth on the train, he had left a telegraph office against an opposing train without train orders. He stated further that he had never made it a practice to go around curves on the time of opposing trains without flag protection, but in the instance here involved he thought he had plenty of time to go to the steam shovel and return to Lillian and get into clear at 7:15 a.m., not thinking that extra 201 would come along so soon as they did.

Fireman Johnson, of extra 223, was unable to say positively at what time the accident occurred, but he thought that his train left Lillian between 7:08 and 7:09 a.m., and collided with extra 201 at about 7:15 a.m.

Head Brakeman Dinkins, of extra 223, stated that his train was backing up at a speed of 12 or 14 miles an hour when he first saw extra 201, and he thought that his train was still moving northward when the collision occurred, although he could not say at what speed, as he had just jumped from the locomotive. He stated that after the accident he crossed from one side of the track to the other and then looked at his watch, finding it to be between 7:14 and 7:15 a.m. He then compared watches with the conductor of his train and found that the two watches were practically together.

Rear Brakeman Holland, of extra 223, stated that his train was almost stopped at the time of the collision; he did not look at his watch and did not know at what time the collision took place.

Section Foreman Walston stated that he was riding on the Dozier car at the time of the accident, and not a minute had elapsed after the accident when he looked at his watch and found it to show 7:15 a.m.

Steam Shovel Foreman Boyd estimated that it must have been about 7:10 a.m. before he and his men boarded extra 223 at Lillian and started for the steam shovel. He stated that he was riding on the back platform of the caboose and saw extra 201 when it was about 400 or 500 feet away. He further stated that extra 223 had been brought almost to a standstill when the collision occurred. He did not look at his watch until some time after the accident when it was 7:25 a. m.

Trainmaster Goforth stated that instructions have never been given by him, or any other official, to his knowledge, to trainmen and engineers to disregard in any particular the full requirements of the rules with reference to the proper protection of trains. He also stated that he had no knowledge of any crew violating the provisions of the flagging rule without being disciplined, and he could not recall any employee ever having been disciplined for such violation, with the exception of the crew of a northbound train on which Conductor Clark was conductor, about two years previous to this accident. He stated that work trains having orders to protect against certain trains have moved on straight track where the view was unobstructed, under conditions where it was impossible for them to be overtaken by another train, without a flagman preceding such trains, but that it was not a practice, so far as he knew, and he felt that he was conversant with all of the practices concerning the movement of work trains on the division. Trainmaster Goforth also stated that it has been his endeavor to instruct trainmen and engineers under his supervision in regard to the proper observance of rules for the movement of trains, and to caution them constantly along the lines of safety.

Mr. S. E. Burkhead, Assistant General Manager, stated that he had never known of any order being given to employees, either verbally or written, containing instructions to violate any of the company's rules.

The direct cause of this accident was work extra 223 occupying the main line on the time of extra 201, a superior train, without protection, for which Conductor Clark and Engineman Steed are responsible.

On account of the conflicting testimony, it is impossible to state accurately at what time the accident occurred. However, under rule 87, extra 223 had no right to the main line between Retta and Lillian after 7:10 a. m. without protection, as required by rule 99.

Engineman Steed has been employed as engineman on the International & Great Northern Railway for about 11 years. In July, 1909, he was dismissed from service on account of violating speed bulletin and was reinstated in August of the same year. During his service he has been suspended for 15 days for running through a crossing gate, and 10 days for failure to comply with rule 559. Conductor Clark entered the service as freight brakeman in October, 1904, and was promoted to conductor in November, 1906. In September, 1914, he was dismissed for violation of rule 99, causing accident at College Station, and was reinstated in July, 1915.

At the time of the accident the crew of extra 223 had been on duty about 45 minutes after a period off duty of 9 hours.