

October 7, 1915.

In Re: Investigation of an accident which occurred on the Memphis, Dallas & Gulf Railroad, near Bingen, Ark., on September 9, 1915.

On September 9, 1915, there was a head-end collision between a mixed train and an extra train on the Memphis, Dallas & Gulf Railroad near Bingen, Ark., resulting in the injury of 6 employees. After investigation of this accident, the Chief of the Division of Safety submits the following report:

The Memphis, Dallas & Gulf Railroad, on which this accident occurred, is a single-track line. Trains are operated by time-table and a telegraphic train-order system, no block signal system being in use.

Westbound mixed train No. 5, in charge of Conductor Pope and Engineman Quigg, left Hot Springs, Ark., en route to Ashdown, Ark., at 10.30 a. m., September 8th, 3 hours and 20 minutes late, and at 11.10 a. m., it passed Murfreesboro, Ark., 70 miles west of Hot Springs, 10 hours and 40 minutes late. After leaving Murfreesboro, it was delayed at Ball, about 4.2 miles west, by having to double a hill. On account of being on duty nearly sixteen hours, and in order to make up time and get into Nashville as soon as possible, the crew of train No. 5 set off 2 cars at Ball and proceeded with the remainder of the train, consisting of locomotive 107, 5 loaded cars, a caboose and a coach. The train passed Tokio, a scheduled stopping point, 2.5 miles west of Ball at 1.45 a. m., at which time the crew had been on duty 16 hours and 15 minutes.

At this point the train did not stop as required by timetable rule, for the Prescott and Northwestern Railroad Crossing located just east of the station at Tokio; it did not register at Tokio and failed to observe a stop signal claimed to have been given by the agent with a white light from the station platform. The train proceeded until it reached bridge 30, about 3.9 miles west of Tokio, where it collided with eastbound extra 102 at about 2.00 a. m., while running at a speed of 10 or 15 miles an hour.

At 10.00 p. m. on September 24th, a crew, consisting of Conductor Aubrey, Engineman Hicks, a fireman and two brakemen, was called for duty at Nashville, Ark., with instructions to do certain switching in the yard with engine 102 and upon arrival of delayed mixed train No. 5, from Hot Springs, to relieve the crew of that train on account of the sixteen-hour law, and take train No. 2 through to Ashdown. At about 1.20 a. m., having completed the switching, Conductor Aubrey went to the residence of Trainmaster Strong and reported that train No. 5 had not arrived. The trainmaster then went to the dispatcher's office which had been closed since 9.00 p. m. and got into communication with the operator at Murfreesboro and found that train No. 5 had passed that point at about 11.00 p. m. He then called the residence of Agent Holt at Tokio, a station 7 miles east of Nashville. Agent Holt, who was asleep, was awakened and informed Trainmaster Strong that train No. 5 had not passed his station, and, upon request of the trainmaster, agreed to

go to the station and hold train No. 5 until the trainmaster and crew of engine 108 arrived at Tokio. There being no record of other trains on the road, the trainmaster issued train order No. 1 to the crew of locomotive 108, as follows:

"Eng. 108 run extra Nashville to Tokio and return, with rights over all trains."

Locomotive 108 left Nashville at about 1.40 a. m., backing up and pushing a flat car of steel rails in front of the tender of the engine. At about 2.00 a. m., it collided with train No. 5 on bridge 50, about  $3\frac{1}{2}$  miles east of Nashville, while running at a speed estimated to have been about 5 or 6 miles an hour.

Engine 107 of train No. 5 was badly damaged and was partially derailed, although it remained upright. The tender of this engine, however, turned over on its side to the north of the track. The box car immediately behind the engine sustained only slight damage. The flat car that was being pushed in front of the tender of locomotive 108 was partially derailed and was very badly damaged, while engine 108 received slight damage.

Beginning at a point about .7 of a mile east of the point of the accident and proceeding westward the track is tangent for 3,380 feet; this is followed by a 2-degree curve to the right 1,000 feet in length, which in turn is followed by a tangent 2,700 feet in length. It was at the beginning of this tangent that the collision occurred. East of the point of accident there is a slight descending grade for westbound trains, while west of the point of accident the

track is practically level. Enginemen of westbound trains have a view of about 800 feet approaching the point of accident, while the view of enginemen approaching from the east is unobstructed. The weather at the time was clear.

Engineman Hicks, of extra 108, stated that on account of having no headlight on the rear end of his engine he could not see beyond the end of the flat car, and the first intimation he had of the opposing train was when brakeman Aubrey, who was riding on the flat car, flagged him. He immediately reversed his engine and at about that time the collision occurred. He stated that his engine was pushing the flat car in front of his tender, as the trainmaster thought it was a good idea to have this car ahead of the engine for protection in case of accident.

Conductor Aubrey, of extra 108, stated that about 1 hour after completing the switching at Nashville, train No. 5 not having arrived, he went to the home of the trainmaster, awakened him and told him that it was about 1 o'clock and asked for further instructions. The trainmaster then went to his office, called the agent at Murfreesboro and ascertained that train No. 5 had departed from that station. He then called the agent at Tokio and asked him if he would hold train No. 5 until he arrived there with a relief engine. Upon the agent informing him that he would, the trainmaster wrote order No. 1, giving them rights over train No. 5. He stated that the trainmaster did not issue the order to the agent at Tokio, the arrangement being that the agent would hold train No. 5 until

the arrival of extra 108. Conductor Aubrey further stated that at the time of the accident he was standing on the rear of the flat car with Brakeman Aubrey, both of them having white lanterns, while Brakeman Hudspeth, who was riding on the engine tender, also held his lantern. He stated that the first intimation he had regarding train No. 5 was when he heard steam escaping from the approaching locomotive. He looked and saw the smoke stack of the engine and at once told Brakeman Aubrey to flag the engineman. Conductor Aubrey then jumped from the train. He stated that he could see about 4 car lengths ahead of the flat car. He also stated that there were no lights of any kind visible on train No. 5, but thought that had the electric headlight of the engine of train No. 5 been burning he could have seen it when a quarter of a mile away, and the accident would not have occurred.

The statements made by Fireman Harrod and Brakeman Aubrey and Hudspeth, of extra 108, agree with those of Conductor Aubrey and Engineman Nickle.

Trainmaster Strong stated that there being no dispatcher on duty at the time he was called by the crew of engine 108, he looked over the train sheet and train orders and found that there was no train on the line except train No. 5. He then issued train order No. 1 to engine 108. He stated that the crew of train No. 5 had had positive instructions not to exceed 16 hours on duty at any time under any circumstances, and was unable to account for their having done so; neither could he understand why the crew of train No. 5 did not register at Tokio, that being a register station.

Agent Holt, at Tokio, stated that Trainmaster Strong called him by telephone at his home about 1.20 or 1.25 a. m. and asked him if train No. 5 had passed. He replied that it had not. The trainmaster then asked him to go to the station and flag train No. 5, and said that it had passed Murfreesboro at 11.38, and that he had an engine ready and would go out and assist it in getting in. Agent Holt stated that he did not receive order No. 1, and that the trainmaster's instructions to him to hold train No. 5 were only verbal. He further stated that he went down to the station immediately and sat down on the back platform with his lantern and had been sitting there about 25 minutes when he heard train No. 5 whistle for the station. He stated that he then arose, stepped to the end of the ties and gave a stop signal. The engineman of train No. 5 answered the signal with two short blasts of the whistle. He stated that he then stepped back to the edge of the platform, thinking the train would stop. However, the speed of the train did not slacken and as the coach passed him he began to give the stop signal with his lantern and continued to do so, following the train down the track some 30 or 40 yards. He stated that when he first saw the train and at the time it answered his signal it was between 50 and 100 yards distant. He does not think the train slowed down for the crossing and he estimated that its speed was about 15 miles an hour when it passed his station. Agent Holt said that as a rule all trains whistled off before reaching the railroad crossing and that it is not the custom for night trains to register at his station. Agent Holt also stated that there is no fixed

method for stopping trains for orders at his station but that a lantern is used. He did not, however, have a red lantern and in this instance flagged the train with a white light.

Engineman Guigg, of train No. 5, stated that the delay to his train was caused by the poor condition of his engine. The cylinder packing was blowing very badly and the engine did not handle the train in a satisfactory manner which caused it to double the grade at Ball. The engineman further stated that as he approached Tokio, he sounded the station whistle, after which he brought the train under control and then sounded four blasts of the whistle as a call for signals from the rear of his train. He received an all-right signal from the rear, which he answered by two blasts of the whistle. On account of the bad condition of locomotive 107, he did not come to a full stop before proceeding over the railroad crossing, as required by rule, as he feared that he would have difficulty in getting his train started again. Engineman Guigg stated that there are no fixed signals controlling the movement of trains, but that when trains are to be stopped for orders at stations, a red flag is used by day and a red lantern by night, and that with the exception of Tokio, there are designated places at which these flags or lights are displayed. He stated further that if a red light had been displayed at Tokio, he would have stopped, expecting to receive orders the same as at any other station. He stated that as he came close to the station, he noticed a man leaning against the building with what looked to him like a farmer's lantern at his feet. The man rose

to his feet and picked up the lantern, no other movement being made before the train passed him. Engineman Quigg stated that just after leaving Ball, the carbon of his electric headlight burned out and that he had no more to put in. He did not have any fuses and did not have a red lantern on his engine, as he could not get one. He stated that he could see about four car lengths ahead of his train without the headlight burning and thought the accident would not have occurred had a headlight been in use on either train. He did not stop at Tokio and register, as it is not the custom to do so at night after the station is closed, although Tokio is a scheduled stop for this train. Engineman Quigg further stated that he had never had any direct instructions from officials regarding the action he should take in case he is on the road at the expiration of the sixteen-hour period, but that he had been told by other employees that it is customary to tie up wherever they might happen to be. In this particular instance he considered it best to come through to Nashville as there was no one to take charge of the engine, there was no place at which to tie up except on the main line, and everything was closed at the time, which prevented the train crew from communicating with the officials. He further stated that ordinarily this run is made within 16 hours and would have been done this time had it not been for the difficulty that was encountered in getting over the hill at Ball.

Conductor Pope, of train No. 5, stated that at the time



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the train passed Tokio, he was riding in the coach and although he saw a man with a white lantern on the station platform, he did not see him give any signal to stop. He stated that the first knowledge he had of the accident was when the trains collided.

Both Fireman Myers and Brakeman Smith of train No. 5 stated that they noticed the white light at Tokio, but that they could not distinguish who held it and did not see any stop signals given.

This accident was caused by an extra train being given rights over, and running against, an opposing superior train without the superior train having been provided with a copy of the train order, for which Trainmaster Strong is responsible.

According to the recognized standard practice, a copy of the order giving extra 108 a right over all trains should have been issued to superior train No. 5, before extra 108 was permitted to leave Nashville. In this instance Trainmaster Strong awakened an operator from his sleep at his residence and ascertained that train No. 5 had not passed his station and, on the strength of the operator's statement that he would hold train No. 5, issued the order to extra 108, giving it right over all trains, depending entirely upon Agent Holt to protect the movement. Such action on the part of Trainmaster Strong is indefensible and is little short of criminal carelessness.

Contributing to the cause of this accident was the failure of Station Agent Holt to take effective measures to insure

stopping train No. 5. In the absence of a red lantern and in view of the importance of his stopping the train, he should have placed torpedoes upon the rails and used every possible means to bring the train to a stop. Although provided with torpedoes, he made no effort to use them and depended entirely upon his white light. The speed at which the train approached his station, together with the fact that it is a custom for trains to whistle off before reaching the crossing should have indicated to him that his signal was not understood. His own statement indicates that instead of making extraordinary efforts to stop the train, after giving the first stop signal, he took no further steps to signal the train until the coach on the rear end of the train was passing him.

The investigation of this accident discloses a careless, loose and dangerous method of train operation. This railroad is a hundred miles in length and has no operating rules to govern its employees, other than a few special rules printed on the back of the time-table, which are of the most rudimentary nature.

An official of this company called an agent at his residence at one o'clock in the morning, aroused him from his sleep, and on the strength of his statement that a certain superior train had not passed, and that he would go to the station and flag it, issued an order giving an extra train rights over the superior train to the point at which it was to be held and did not even provide the superior train with a copy of the order which restricted its rights. A station agent was may be called upon to handle train orders at any time,

day or night, was not provided with a red lantern with which to stop trains; a locomotive on a freight train was started out without sufficient material to keep the headlight burning during the trip; an engine was not equipped with fuseses nor a red lantern, and this material could not be secured; a flat car loaded with steel rails was being pushed ahead of the tender by the direction of an official for protection in case of accident, which would seem to indicate that the official issuing these directions feared that just such disaster might occur.

This investigation also discloses the fact that one of the crews involved had been on duty in direct violation of the Hours of Service Act.

For these conditions, the management of the Memphis, Dallas & Gulf Railroad alone are responsible and it is remarkable only that such accidents have not occurred with greater frequency.

The safety of the traveling public urgently demands that the Memphis, Dallas & Gulf Railroad take immediate steps to provide adequate operating rules and regulations and such supervision as will insure the safe operation of its trains.