

In re investigation of an accident which occurred
on the Missouri, Kansas & Texas Railway Company
of Texas, at Watauga, Texas,
on August 16, 1917.

September 14, 1917.

On August 16, 1917, there was a head-end collision between a freight train and a passenger train on the Missouri, Kansas & Texas Railway Company of Texas, at Watauga, Texas, which resulted in the death of two employees and the injury of forty-seven passengers and four employees. After investigation the Chief of the Division of Safety reports as follows:

The Fort Worth Division, on which this accident occurred, extends from Fort Worth, Tex., to Whitesboro, Tex., a distance of 71.4 miles, and is operated jointly by the Texas & Pacific Railway and the Missouri, Kansas & Texas Railway Company of Texas, under the supervision of the Texas & Pacific officials. It is a single-track line and trains are operated by manual block signal system, time-table and train orders, the train orders being transmitted by telephone.

Southbound freight train No. 371 consisted of locomotive 743, 34 loaded cars and a caboose, in charge of Conductor Good and Fireman Hutchins. This train left Denison, Texas, at 1.50 p.m., 4 hours and 30 minutes late and arrived at Watauga at about 8.42 p.m., where the crew in charge received train order No. 84, reading as follows:

"No. 330, Eng. 274, wait at Hodge until nine o'clock
one, 9.01 p.m., for 371, Eng. 743."

The train was delayed at Watauga on account of a hot journal box on one of the cars, and when it became apparent that it could not reach Hodge, 5.1 miles south of Watauga, in the time specified in train order No. 84, the dispatcher informed the conductor that he could give him no more time on train No. 330, and directed him to place the train on the passing track. Train No. 371 left the station at about 8.50 p.m., pulled down the main track to the passing track switch south of the station, and was trying to back it in on the passing track when it was struck by passenger train No. 330, at about 9.15 p.m.

Northbound passenger train No. 330, en route from San Antonio, Tex., to St. Louis, Mo., consisted of locomotive No. 274, one baggage car, one combination mail car and coach, one coach, one chair car and two Pullman sleepers, in charge of Conductor Frame and Fireman Scott. The crew in charge received train order No. 84 at Fort Worth and the train left there at about 8.55 p.m., 35 minutes late, passed SW crossing tower, 2.6 miles south of Watauga, at about 9.12 p.m., where they received a caution card directing them to proceed

under control, expecting to find train No. 371 trying to back in at Watauga, and at a point 3,010 feet south of the south passing track at Watauga, this train collided with train No. 371 while running at a speed estimated to have been from 25 to 35 miles an hour.

Both locomotives were equipped with electric headlights which were burning brightly at the time of collision.

The fireman and engineman of train No. 330 were killed and both locomotives were derailed and considerably damaged. The cistern on the tender of locomotive 274 was torn loose from its frame and jammed against the boiler head, while the rear of the tender telescoped the head end of the car immediately behind it, breaking the car in two and practically destroying it. The second car from the head end of train No. 371 was destroyed, but none of the other cars was seriously damaged. The weather at the time was clear.

The track at point of collision extends generally north and south and is laid on a 15-foot fill with an ascending grade of .85% for northbound trains. The track consists of 75-pound steel rails laid on oak ties, ballasted with cinders and in fair surface and alignment. Approaching the scene of accident from the south the track is straight for 6,825 feet, then there is a 2-degree curve to the left, 750 feet long, then a tangent 614 feet long, then a 3-degree curve to the left, 712 feet long, then a tangent 25.1 feet long extending to point of collision.

A few days after the accident a test was made with two locomotives, to determine the range of vision of the engineman and fireman of train 330, approaching the scene of accident. By this test it was ascertained that the fireman could have seen the electric headlight of train 371 at a distance of 6,425 feet and the engineman could have seen it at a distance of 1,025 feet.

Dispatcher Beckler, who was on duty at Watauga at the time of the accident, stated that when train No. 371 arrived at Watauga he issued train order No. 84, giving that train until 9.01 p.m. to reach Hodge on account of train No. 330 being late, and later, when it became apparent that train No. 371 could not reach Hodge in the time specified in the order, he directed the operator to advise the crew that he could give them no more time on train No. 330, and for them to move their train in on the passing-track. He stated that he then instructed the operator at SW crossing to issue a caution card to train No. 330, directing that train to proceed under control to Watauga, expecting to find train No. 371 in the block, and to make a notation thereon that "No. 371 is backing in at Watauga."

Operator Cady, on duty at Watauga, stated that, acting upon

instructions given her by Dispatcher Beckler, she advised the conductor of train No. 371 that his train could be given no more time on train No. 330 and directed him to place his train on the passing track. Upon request of the operator at SW crossing, she gave him the block at 8.57 p.m. for train No. 330, but advised him that train No. 371 was trying to back in at the south passing-track switch and that he should give the crew of train No. 330 a caution card.

Operator Bock, on duty at SW crossing, stated that when he was informed by Operator Cady that train No. 371 was not in the clear, he placed the block signal in the caution position and as train No. 330 passed him at about 9.12 p.m., running at a speed of 7 or 8 miles an hour, he delivered a caution card to someone in the engine and one to the conductor.

Conductor Good, of train No. 371, stated that he received a copy of train order No. 84 at Watauga, and after attending to the hot box and being unable to get any more time on train 330, he signalled the engineman to pull down the main track and back in on the passing track south of the station, as instructed by the operator at Watauga, and as soon as the train came to a stop at the south switch, the head brakeman, who was riding in the caboose with him, started ahead to flag at about 8.50 p.m. He stated that the brakeman had about 11 or 12 minutes in which to go to the head end of his train and protect it, and admitted that he could not walk the required flagging distance in that time. After reaching the south switch, the engineman made about a half dozen attempts to back the train, but could not do so on account of the grade. Conductor Good stated that he did not know whether fuses were carried on the engine, but assumed that the proper flagging equipment was carried there, and said that the accident would not have been prevented even though a fuse had been used, because his flagman did not get far enough ahead.

Engineman Huggins, of train No. 371, stated that when he saw that it would be impossible for his train to reach Kodge by 9.01 p.m., he sounded the whistle at about 8.50 p.m. for the flagman to protect the head end of his train. In about four or five minutes he received a signal from the rear to move his train down the main track to the south passing-track switch, and did so. When he had pulled down a sufficient distance, he tried to back the train in on the passing-track, but could not do so on account of the grade, and as he was expecting train No. 330, to arrive within a short time, he sounded the whistle again for the flagman and, after waiting a short time and the flagman not appearing, he directed the fireman to go ahead and flag train No. 330, and to keep going until he met that train, and the fireman took a red light and started ahead on the run. He assumed that train No. 330 would receive a caution card at SW crossing and thought the engineman could see the electric headlight of his train for a distance of a mile and a half, and would be running slowly. He saw the electric headlight of train No. 330 when it was

some little distance away, but that train did not appear to slacken its speed and collided with his train at a speed of about 35 miles an hour.

Fireman Houk, of train No. 371, stated that his train pulled down to the south passing-track switch and had made two or three unsuccessful attempts to back in when the engineman told him to run ahead as far as he could and flag train No. 330. He stated that he took a red lantern and torpedoes with him and had reached a point about 11 telegraph poles from the head end of his train when train 330 passed him without heeding his stop signals or reducing speed. He first saw the headlight of train 330 when it was about a half mile away from him. He admitted that he should have gone a distance of 20 telegraph poles to afford full protection to train 330.

Head Brakeman Anderson, of train No. 371, stated that as soon as his train reached the south switch he went forward to the engine and learned that the fireman had gone ahead to flag train 330. He also went ahead with a white lantern and had reached a point about 4 or 5 telegraph poles ahead of his train when train 330 passed him at a speed of 30 or 35 miles an hour. He saw the engineman of that train standing up and believed that the brakes were applied just before the collision occurred.

Conductor Frame, of train 330, stated that his train left Fort Worth at about 8.57 p.m., after receiving a copy of train order No. 84, directing his train to wait at Hodge until 9.01 p.m. for train 371. When he reached FW crossing, the block signal was at caution and he saw the operator there give a caution card to someone in the engine cab and one to the train porter, who was riding two cars ahead of him. After passing FW crossing at a speed of 7 or 8 miles per hour, the speed of his train was increased gradually and he started forward to secure the caution card from the porter, but was delayed by passengers asking questions and did not see the caution card until after the accident. He said the accident occurred at 9.16 or 9.17 p.m., and the speed of his train at the time of collision was about 30 miles an hour and that he considered this a safe speed at which to run under a caution card. He stated that he did not see train 371 prior to the accident and the first he knew of the impending collision was the application of the brakes on his train.

Train Porter Luster, of train No. 330, stated that he received the caution card at FW crossing from the operator as his train passed there, read it, and started back to deliver it to Conductor Frame, but the collision occurred before he reached him. He thought the speed of his train was 25 or 30 miles an hour at the time of collision.

This accident was caused by train No. 371 occupying the main track on the time of a superior train without proper flag protection, for which the crew in charge is responsible.

Rule 99 of the Texas & Pacific operating rules governing the operation of trains over the joint track upon which the accident occurred, provides in part as follows:

"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.

In case of emergency the fireman must protect the front of the train."

The head brakeman of train No. 371, whose duty was to protect the head end of his train, was in the caboose when it reached the south switch at 8.50 p.m., and when directed by the conductor to protect the head end of his train, proceeded to do so with only a white light. The conductor of train No. 371 is at fault for not having the brakeman or a flagman on the front end of his train when it reached the switch, so as to be in position to go ahead promptly and give it proper flag protection. The enginemen of train No. 371 is also at fault for not sending his fireman out sooner to protect the head end of his train when the brakeman did not respond promptly to his signals.

The enginemen and conductor of train No. 330 are also at fault for not having their train under control after passing SW crossing, where a caution card was issued to them, informing them that train 371 was in the block.

Rule 362-C of the Texas & Pacific operating rules reads as follows:

When trains move under Caution Card, they must proceed under control.

The evidence is conclusive that the speed of train No. 330 at the time of the collision was at least 30 miles an hour. By a test it was demonstrated that the enginemen and fireman of train 330 could have seen the headlight of train 371 in sufficient time to have brought their train to a stop in time to avoid the collision, but as both were killed, it is impossible to determine why they failed to have their train under control and apparently overlooked train 371; neither is it possible to explain why they did not see the fireman of train No. 371, who was attempting to flag them. While the conductor stated that he did not receive a copy of the caution card at SW crossing, he admits that he saw the block signal

at that place in the caution position, indicating to him that the block from there to Watauga was occupied, and he should have seen to it that his train proceeded under control when in that block.

All of the men involved in this accident were experienced men. The records show that Enginemen Scott was promoted to engineman in 1889 and since then he has been held responsible for two collisions and a derailment, all occurring in 1907. Conductor Good was promoted to conductor in 1901, dismissed on July 21, 1906 for accepting a scratched train order, reinstated on August 16, 1906, discharged on July 11, 1909 for responsibility in connection with a collision, reinstated on August 21, 1911, dismissed on March 29, 1917, for delaying a train, and reinstated on May 29, 1917. Enginemen Hudcins was promoted to engineman in 1906, and was disciplined for violating speed restriction on January 12, 1917, and again for responsibility in connection with a rear end collision on May 29, 1917. The records of the other employees involved were good. At the time of the accident the crew of train No. 371 had been on duty about 8 hours and the crew of train No. 330 about 3 1/2 hours.

J.O.T.