

INV. 208
October 5, 1915.

**IN RE INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON
THE MISSOURI, KANSAS & TEXAS RAILWAY OF TEXAS
NEAR SMITHVILLE, TEXAS, ON SEPTEMBER 1, 1915.**

On September 1, 1915, there was a head-end collision between two freight trains on the Missouri, Kansas & Texas Railway of Texas near Smithville, Texas, which resulted in the death of 2 employees and the injury of 2 employees. After investigation the chief of the division of safety reports as follows:

South bound extra 484 consisted of locomotive 484, 17 loaded cars, 3 empty cars and a caboose, and was in charge of Conductor Sledge and Engineman Barnhill. This train left Granger, Texas, at 7:00 a. m., arrived at Bastrop, Texas, at 3:10 p. m., at which place the crew in charge received a copy of train order No. 103 reading as follows:

"No. 70 wait at Smithville until four forty 4:40 p. m. for exa 484 south. Exa. 484 south has right over No. 70 Bastrop to Smithville."

Extra 484 left Bastrop at about 4:11 p. m., and at about 4:38 p. m. collided with northbound train No. 70 at a point 1.32 miles north of Smithville while running at a speed of about 25 or 30 miles per hour.

Northbound train No. 70 consisted of locomotive 724, 21 loaded cars, 4 empty cars and a caboose, and was in charge of Conductor Mumaw and Engineman Vickers. This train

was a second class train, en route from Houston, Texas, to Oranger, Texas, and due to leave Smithville, a division terminal, at 2:50 p.m. On the day of the accident the crew of this train were called for 4:10 p. m. and instructed to make up their train and be ready to depart from Smithville at 4:40 p. m. They were given ten train orders, among them being train order No. 103, which was the same as order No. 102 delivered to extra 484, except that it had a different number. This train left Smithville about 4:30 p. m. and collided with extra 484 as above stated while running at a speed of about 20 miles per hour.

The division on which this accident occurred is a single-track line, operated by train orders transmitted by telephone, and time-card rights. Approaching the point of accident from the north there is a long curve to the right, then a tangent 3,125 feet long, then a $2\frac{1}{4}$ -degree curve to the right about 800 feet long, the collision occurring on this latter curve and on an ascending grade of about 0.76% for southbound trains. After leaving Smithville and approaching the point of accident from the south, there is a series of curves and tangents. The track in this vicinity follows along the base of "Fawcett Bluff", this bluff being about 100 feet high at the point of accident. Approaching the point of accident, the engineman of extra 484 had a clear view of the track ahead for a distance of about 825 feet, as he was on the inside of the curve. On account of being on the outside of the curve the engineman of train No. 70 could not have seen extra 484 until just before the collision.

The force of the collision practically demolished locomotive 484 and its tender; the locomotive turned over on its right side and came to rest on the west side of the track, against the bluff. The first four cars of extra 484 were entirely demolished, the fifth car, which had a steel underframe, was derailed and slightly damaged and came to a stop opposite the tender of locomotive 724, and the six following cars were derailed but not seriously damaged. The front end of locomotive 724 was badly damaged; it turned over on its left side and came to rest on the west side of the track against the bluff, with its cab and tender demolished. The first car of train No. 70 turned over on its left side and its head end was telescoped above its steel end sill for a distance of about ten feet by the tender of train No. 70. The four following cars were not derailed nor seriously damaged, and the next six cars were derailed and piled up in a space of about two rail lengths. The engineer and fireman of train No. 70 were killed in the collision. The weather at the time was clear.

Conductor Mumaw, of train No. 70, stated that he called at the telegraph office at Smithville about 4:00 p.m. and received several train orders, among them being order No. 103 directing his train to wait at Smithville until 4:40 p. m. for extra 484. While he was separating the orders the chief dispatcher spoke to him and said the the president's special was coming and that he would like to have him have his train moving when the special passed. Conductor Mumaw stated that he then picked up all of his orders, gave his engineer a proceed

signal, and about the time the train started he climbed upon the engine, handed all of the orders to the engineman in a bunch, got off the engine and caught the caboose. On account of the train being in motion he did not have time to have the engineman read the orders back to him, nor did he request him to do so. The train proceeded on its way without the orders being read or anything being said about them. He further stated that he had no recollection of seeing order No. 103, although he read all the orders back to the operator and signed them. The only reason he could give for overlooking this order was that he was looking for the president's special and trying to get his own train in motion. He said that if the chief dispatcher had not requested him to have his train moving when the special passed, he believed he would have taken time to read his orders more carefully and also to have required the engineman to read them to him. Conductor Mumaw stated that he gave the orders to the brakeman to read about a minute or a minute and a half after he got on the caboose and, after reading them, the latter remarked: "We have a hold at Smithville until 4:40 p. m.," and at just about that time the collision occurred. The speed of his train at the time of the collision was about 30 miles per hour.

Conductor Sledge, of extra 484, stated that he received a copy of train order No. 102 at Bastrop; that the president's special passed there about 4:09 p.m., and that his train left there about 4:11 p.m., en route to Smithville, 15 miles

distant, and collided with train No. 70 at about 4:38 p. m. He stated that it was his purpose to reach Smithville by 4:40 p.m., but admitted that had he complied with the rule, it would have been necessary for his train to clear train No. 70, a superior train, by 4:35 p.m. He further stated that it was not the custom to obey the rule requiring an inferior train to clear a superior train five minutes. Conductor Sledge stated that he knew he further violated the rules by not waiting at Bastrop ten minutes after the special had passed, and admitted that if his train were to have reached Smithville in time to clear train No. 70, it would have been necessary for it to run at a speed in excess of 25 miles per hour, the speed allowed by rule, but that it was the general practice not to observe these requirements.

Engineman Barnhill, of extra 484, stated that he received a copy of train order No. 102 at Bastrop and knew that train No. 70 was due to leave Smithville at 4:40 p.m., but thought he could reach Smithville before train No. 70 left there. He knew he would be running on close time but thought he could at least reach the yard limits at Smithville, where he would have a clear vision. He stated that the president's special left Bastrop at about 4:08 or 4:09 p.m., and that his train left there at about 4:10 p.m., passed Tawcett, 3.4 miles north of Smithville, at 4:35 p.m., and collided with train No. 70 at about 4:38 p.m., while running at a speed of 20 or 25 miles per hour. He stated that he saw train No. 70 when within about 100 yards

of it, applied the air brakes in emergency and jumped, but could not see the approaching train sooner on account of the curve and high bluffs. He admitted that under the rule requiring trains in the same direction to keep ten minutes apart, he should not have left Bustrop until 4:19 p.m., ten minutes after the president's special passed. Engineman Barnhill stated that he regarded some of the operating rules seriously and some of them lightly, but believed that the operating officials were earnest in having some of the rules observed.

Operator McCaleb, at Smithville, stated that on the day of the accident he gave Conductor Mumaw several orders, including the order to wait at Smithville until 4:40 p.m., for extra 484, and that the conductor read and signed each one. He had no distinct recollection that he read any particular order, but stated that he read all of them aloud to him.

Chief Dispatcher Sanders stated that at about 4:30 p.m. he spoke to Conductor Mumaw, reminding him that the president's special was approaching, and asked him if he could have his train moving when the special passed, and that the conductor replied in the affirmative. He stated that although train No. 70 had been called to leave at 4:40 p.m., if a train is ready to go, it is not always expected to wait until the time for which it has been previously called to depart.

It is to be noted that extra 484 received a copy of train order No. 102 and that train No. 70 received a copy of train order No. 103, both orders being identical except as to their number.

Dispatcher Moody stated that when the operator at Smithville transmitted the signature of the conductor of train No. 70 to the train order, he discovered that the operator had numbered the order "103," when it should have been "102". Inasmuch as the order could not be changed without copying it over, and as the error did not materially affect train No. 70, he permitted the order bearing the wrong number to be delivered to the crew of train No. 70.

The direct cause of this accident was the failure of the crew of train No. 70 to wait at Smithville until 4:40 p.m., as directed by train order No. 103, and for which Conductor Mumaw and Engineman Vickers are responsible.

Rule 310a, of the Missouri, Kansas & Texas Railway of Texas, reads in part as follows:

"Engineman must read their orders aloud to conductors and understand them before acting upon them. Conductors must read their orders to rear brakemen and enginemen to their firemen, and when practicable, to the head brakeman."

Had this rule been complied with, it is probable that this accident would not have occurred, for in that case both the conductor and engineman of train No. 70 would have read and understood train order No. 103, and would not have left Smithville before 4:40 p.m., by which time it is likely that extra 484 would either have reached Smithville or been near enough to be seen by the crew of train No. 70. Although Conductor Mumaw stated that if he had not been requested by the chief dispatcher to have his train moving when the special passed he believed he would have read his orders more carefully.

and have had his enginemen read them back to him, such an excuse cannot in any way be accepted for such dereliction of duty as was exhibited in this case, and does not relieve him of the all-important duty of reading and understanding his orders and seeing that his enginemen does the same.

A contributing cause of this accident was the failure of extra 484 to clear train No. 70, as required by Rule 89, quoted below, and for which the crew of extra 484 is responsible.

Rule 89, of the book of rules, reads in part as follows:

"At meeting points between trains of different class, the inferior train must take the siding and clear the superior train at least five minutes, and must pull into the siding when practicable."

When extra 484 left Bastrop it was about 4:11 p.m. and train No. 70 was to wait at Smithville until 4:40 p.m. The crew of extra 484, therefore, knew that they had only 24 minutes in which to reach Smithville, 13 miles distant, and clear train No. 70 the five minutes required by rule No. 89. To have done this would have required an average speed of 37½ miles per hour, which is materially in excess of the 25-miles-per-hour speed restriction. From the statements of employees it appears that it was not customary to observe the rule requiring an inferior train to clear a superior train five minutes.

Rule 91 reads in part as follows:

"Unless some form of block signals is used, trains in the same direction must keep at least ten minutes apart, except in closing up at stations."

From the statements of the crew of extra 484, it appears that the president's special passed Bastrop about 4:09 p.m.

and that extra 484 left there about 4:11 p.m. Had this rule been observed, extra 484 would have remained at Bastrop until 4:19 p.m., at which time it would have been as near the expiration of the time train No. 70 was to wait at Smithville that it is improbable that the crew of extra 484 would have attempted to reach Smithville before the departure of train No. 70.

The investigation of this accident disclosed a total disregard for the operating rules by the employees involved, and that it was the custom to regard some of those rules lightly. It once more calls attention to the fact that on many railroads the rules governing the operation of trains are not properly obeyed by the employees nor enforced by the officials. The requirements of safety demand that the officials of this road take immediate steps to correct the evils disclosed by this investigation. It is inconceivable that such unsafe practices, involving disobedience of well understood rules, could have existed without the knowledge of the operating officers of this road.

Attention is called to the fact that the train order delivered to train No. 70 was erroneously numbered, and that this error was known to the dispatcher, but that he permitted the order with the wrong number to be delivered to the crew of train No. 70. While the numbering of this order had no direct bearing on the accident, it indicates a loose method of handling train orders on the part of the train dispatcher.

The records show that Conductor Mumaw was employed as a brakeman in 1899 and promoted to conductor in 1901. He was dismissed on February 11, 1902, for responsibility in con-

nection with an accident, and reinstated on May 24, 1908; dismissed on September 27, 1910, on account of improper flagging, and reinstated on October 10, 1910; dismissed on May 10, 1912, for overlooking an order, and reinstated on October 24, 1913. He was suspended severl times for various reasons. All of the other employees had good records.

At the time of the accident, the crew of extra 434 had been on duty about nine and one-half hours, while the crew of train No. 77 had just left their terminal and were on duty less than one hour.