

**In re Investigation of an accident which occurred
on the Kansas City Southern Railway near
Stilwell, Okla., on January 26, 1917.**

On January 26, 1917, there was a rear-end collision between a passenger and a freight train on the Kansas City Southern Railway near Stilwell, Okla., which resulted in the death of the conductor of the freight train and the injury of two employees. After investigation of this accident the Chief of the Division of Safety reports as follows:

The division on which this accident occurred is a single-track line. No block signal system is in use, trains being operated by time-table and train orders. Trains moving in the same direction are required to keep at least five minutes apart, except when closing up at stations. Inferior trains are also required to be into clear at the time a superior train, running in the same direction, is due to leave the next station in the rear. Approaching the point of accident from the north, the track is tangent for 2100 feet, followed by a curve of 4 degrees leading to the right, this curve being about 850 feet in length. The track is then tangent to the point of collision, a distance of 425 feet. The last 700 feet of the curve and the first 300 feet of the tangent extend through a cut varying in depth from 5 to 20 feet. With the exception of one or two sags, the grade is ascending for southbound trains practically all of the way between Barron Fork and Stilwell, a distance of 8.4 miles, most of it being between .75% and 1%. The weather at the time of the accident was clear.

Southbound second-class freight train No. 51 consisted of 39 cars and a caboose, hauled by locomotive 493, and was in charge of Conductor Leadaman and Engineman Biser. The train left Watts at 8.10 p. m., 5 hours and 40 minutes late, Westville at 9.13 p. m., and Barron Fork, at about 9.40 p. m., or about 15 minutes ahead of the scheduled leaving time of train No. 1, and at about 10.10 p. m. the rear end of the train was struck by train No. 1, at a point nearly 6 miles south of Barron Fork, or $2\frac{1}{2}$ miles north of Stilwell. At the time of the accident the speed of train No. 51 was about 12 or 15 miles an hour.

Southbound passenger train No. 1 consisted of one baggage car, one coach, one chair car, and one Pullman sleeping car, hauled by locomotive 806, and was in charge of Conductor Garfney and Engineman Covert. It left Watts at 9.30 p. m., according to the train sheet, left Westville the last open telegraph office at 9.53 p. m., 8 minutes late and collided with the rear end of train No. 51 while traveling at a speed estimated to have been about 45 miles an hour.

The caboose of train No. 51 was demolished and the car immediately ahead of it was derailed and damaged. Fire broke out and the wreckage of the caboose was destroyed. The front end of locomotive 606 was damaged to some extent. The conductor who was killed was riding in the caboose at the time.

Engineman Covert, of train No. 1, stated that he thought his train registered out of Watts at 9.50 p. m. and left at about 9.33 or 9.34 p. m., and passed Barron Fork at about 10.00 p. m. As his train rounded the curve leading to the tangent track at the point of the accident, he saw a burning fusee and just beyond it the caboose of train No. 51. He thought they were not more than 300 feet away at the time. He at once shut off steam, applied the emergency air brakes and told the fireman to jump, at the same time doing so himself. He thought the speed of his train was about 40 or 45 miles an hour. He did not know the exact time of the collision, but said that when about one mile back he had looked at his watch and it was then 10.10 p. m. Previous to seeing the burning fusee, he had not seen any other fusees; neither had his locomotive run over any torpedoes, nor did he see any one on the rear of the caboose at the time the collision occurred. He said that the electric headlight on his locomotive was burning in proper order. The statements of the fireman added nothing to those of the engineman.

Conductor Gaffney, of train No. 1, said that he was riding in the second car of the train; that he heard the engineman sound a road crossing whistle, and shortly afterwards there was an emergency application of the air brakes followed by the shock of the collision. As soon as he had descended to the ground he looked at his watch and it was then 10.10 p. m.

Engineman Biser, of train No. 51, stated that before leaving Watts he compared watches with his fireman, but not with the conductor or with the office clock. The orders and clearance card were delivered to him by the head brakeman and at no time did he see the conductor; neither did he know how many cars in his train had air brakes in proper working order. At Westville two train orders, form 31, were delivered to him by the rear brakeman. At Barron Fork he and the fireman consulted the time-table regarding the time of train No. 1, and he decided that they would go to Stillwell for that train and so told the head brakeman when the latter boarded the locomotive. He said that he did not see the conductor at this point. When in the vicinity of mile post 255, which is about 1 mile north of where his caboose was afterwards struck by train No. 1, he realized that the passenger train would be following closely. It was then 10.02 p. m. and when his locomotive reached the road crossing, which is 800 feet

beyond the point where the accident afterwards occurred, he stated that he sounded a whistle signal for the flagman to protect the train. After his locomotive had proceeded an additional distance of about seven telegraph poles, he felt the air brakes apply from the rear. This was due to the collision, but at the time he thought the train had broken in two. Engineman Biser further stated that his train could not have gone to Stilwell ahead of train No. 1, and at the same time observe the rule requiring it to be into clear before train No. 1 was due to leave Barron Fork, as it would have given him only fifteen minutes to travel a distance of 8.4 miles, most of which was on an ascending grade of practically 1%. In fact, he said that 30 minutes was the average time, but that with the train he had it could usually be done in 25 minutes. Engineman Biser also said that while it was not customary for him to make movements of this character, yet in handling these manifest freight trains a greater effort was made to get them over the road and a little chance had to be taken on the rules.

Fireman Warren stated that he did not remember having any conversation with the enginemen as to where they would go for train No. 1, also that the head brakeman did not discuss the matter with the enginemen. He did say, however, that before reaching Barron Fork, the enginemen remarked that they would go to Stilwell for train No. 1. He said the enginemen did not whistle out a flag until the train had stopped, apparently having broken in two, but afterwards he said that he was not sure as to whether or not the enginemen whistled out a flag before that time.

Head Brakeman Yeakey, of train No. 51, stated that at Watts the conductor gave him the train orders in the office, together with a clearance card, and told him to give them to the enginemen. He did not know of any unusual conditions which made this violation of the rules necessary. At Barron Fork he did not look at his watch and while he knew that train No. 1 had not passed, yet he did not pay any attention to it and it did not occur to him that that train might be close to his train, and he said that while he was on the locomotive, he did not hear any conversation as to where they would go for train No. 1. The first he knew of the collision was when the air brakes applied from the rear and at the time he thought the train had broken in two. When the brakes were applied, the enginemen sounded the whistle signal for the flagman to go back and protect the train and also sounded a break-in-two signal.

Rear Brakeman Wright stated that at Westville he signed the conductor's name to two train orders, form 31, that the operator did not object to his doing so, and that he then delivered them to the enginemen, not stopping to read them over to him or to have the enginemen read them back. It was not an

ordinary practice to handle train orders in this manner and this was the first time he had carried the orders to an engineman in over one year. At Barron Fork the train stopped about 10 minutes to await the arrival of northbound freight extra 489. A part of this time he was on the caboose platform and a part of the time on the ground, no attempt being made to protect the rear of the train by flag; neither had any fuses been dropped off when the train approached Barron Fork. As far as he knew, the conductor did not leave the caboose, being at work on the waybills and switching lists. When the engineman whistled off brakes, after extra 489 had arrived, the conductor was inside of the caboose and so he gave a proceed signal to the engineman without saying anything to the conductor, and he said that he had entirely overlooked train No. 1. He did not know at what time his train left Barron Fork, and said that the first intimation that he had overlooked the passenger train came just before the collision, when he noticed the reflection of the electric headlight of the passenger train shining through the woods. He then threw off a fuse and taking a lantern, jumped off on the right side of the track just before the collision, being about opposite the tender of the locomotive of the passenger train when the collision occurred. The last he saw of the conductor the latter had followed him out on the caboose platform, but for some reason remained there instead of jumping. He did not look at his watch when the collision occurred, but did so afterwards and it was then between 10.05 and 10.10 p. m. He thought the speed of his train was about 12 or 15 miles an hour at the time of the collision. Rear Brakeman Wright also stated that at no time did he hear his engineman sound the whistle signal for him to protect the train by flag, saying that the whistle on locomotive 495 was not in a good condition and that it was difficult to hear it from the rear of the train.

This accident was caused by the crew of train No. 51 attempting to go from Barron Fork to Stilwell ahead of passenger train No. 1, without having sufficient time in which to do so, and without being protected by flag, for which Conductor Leadman, Rear Brakeman Wright and Engineman Biser are responsible.

According to the statements of Engineman Biser, he knew that he had only fifteen minutes in which to make the run of 8.4 miles to Stilwell, most of it on an adverse grade of practically 1%, and clear the passenger train as required by rule No. 86, which reads as follows:

"An inferior train must clear the time of a superior train, in the same direction, not less than five minutes; but must be clear at the time a first-class train, in the same direction, is due to leave the next station in the rear where time is shown."

Train No. 1 is due to leave Barron Fork at 9.55 p. m., and under the rules train No. 51 had to be into clear at Stilwell by that time. Regardless of this fact, however, he started his train from that point at about 9.40 p. m., knowing, according to his own statement, that the average time of this train between Barron Fork and Stilwell was twenty-five minutes, and that if he made average time his train could not arrive at Stilwell until 10.05 p. m., or 10 minutes after train No. 1 was due to leave Barron Fork.

In view of the death of Conductor Leadman, no reason can be assigned for his action in allowing his train to depart from Barron Fork without sufficient time on train No. 1, but the manner in which he handled his train from Watts to the point of accident indicates a carelessness which could not help but result in an accident sooner or later. At Watts he gave train orders and a clearance card to the rear brakeman to deliver to the engineman, while at Westville he did not leave the caboose, but told the rear brakeman to sign his name to any orders which there might be and deliver them to the engineman. While at Barron Fork the rear end of his train stood on the main line for a period of ten minutes, according to the statements of the rear brakeman, without any flag protection whatever. For such flagrant violations of the operating rules, as well as for his action in apparently paying no attention to the fact that his train was leaving Barron Fork immediately ahead of train No. 1, no excuse whatever can be offered.

Rear Brakeman Wright stated that he overlooked train No. 1 and that at no time did he think of that train until he saw the reflection of the electric headlight of the locomotive hauling the train, just before the collision occurred.

Engineman Biser had been employed as an engineman on this railway since 1903, previous to which time he had had over 14 years' previous experience in shop work and as fireman and engineman on other railroads. His record was good. Conductor Leadman entered the service of the Kansas City Southern Railway as a brakeman in 1907, and was afterwards promoted to a conductor. His record was good. Rear Brakeman Wright entered the service in the year of 1910 and had a good record. At the time of the accident all of these employees had been on duty about 2½ hours after a period of off duty of about 11 hours.

The investigations made of accidents which have occurred on the Kansas City Southern Railway at various times have generally developed operating conditions which constitute a menace to the safety of both the traveling public and the employees, and the attention of the officials has been called repeatedly to these conditions, with the warning that until

they were corrected, the occurrence of accidents of a more or less serious nature might be expected. In the case of the accident here under investigation, the crew went on duty at Watts and the train left that division terminal without the engineman having seen the conductor, and with him in possession of five train orders, form 31, and one train order, form 19, together with a clearance card all of which had been given to him by the head brakeman, a violation of rule No. 210a. At Westville two more train orders, form 31, were received and in this case the rear brakeman signed the conductor's name to the orders, a violation of rule No. 210. According to his statement, no objection was made by the operator. He then delivered them to the engineman without reading them over to the engineman or having the engineman read them over to him, another violation of rule No. 210a. At Barron Park, train No. 51 was standing on the main line a period of ten minutes or more, with the conductor inside of the caboose and the rear brakeman standing a part of the time on the platform of the caboose and part of the time on the ground alongside of the caboose, evidently with no thought of proper protection and when the train started, the rear brakeman gave the proceed signal without saying anything to the conductor, resulting in the train occupying the main track on the time of train No. 1, in violation of rules 86 and 87. Such constant violations of operating rules by nearly every employee at nearly every opportunity offered for violating the rules, would seem to indicate that the past record of fatal accidents on this railway where similar disobedience of the rules has been shown to exist, has made but little impression upon the officials of this railway charged with the enforcement of the rules. In connection with the investigation of the accident which occurred on this railway at Kansas City, Mo., on October 19, 1915, attention was called to dangerous operating conditions existing, and a quotation was made from the report covering a previous accident which had occurred on September 26, 1912, in which it was stated that:

"The Kansas City Southern Railway Company has permitted to grow up and continue in vogue on this division loose and slipshod methods of operation which led directly to this collision. These dangerous practices should be abandoned immediately and some safe method of operation should be adopted before a more disastrous accident occurs."

The report covering the accident which occurred on October 19, 1915, called attention to the fact that the operating officials of this railway apparently had failed to profit by that warning, and the further statement was made that, "It is to be hoped that another accident of this character will not be necessary to bring about the elimination of such conditions as are herein pointed out."

The accident herein under investigation did not occur on the same division as the two accidents above referred to, or under exactly the same conditions, but the same general slackness seems to exist, and if it had been customary for the rules to be enforced by the officials or observed by the employees, Conductor Leadaman undoubtedly would have been paying strict attention to the operation of his train, and had he done so, would not have allowed it to leave Barron Fork immediately ahead of train No. 1. At the same time Engineman Biser probably would not have attempted to run ahead of this passenger train, in direct violation of the rules, taking as he said, "a little chance on the rules in order to get over the road."

While the direct cause of this accident rests with the failure of employees properly to perform their duties, yet in the face of these constantly recurring accidents, in nearly every one of which there has been developed a slack operating condition, it is impossible for the officials of this railway to be relieved of their share of responsibility, not only for this accident, but for the accidents which are certain to occur in the future, unless prompt, efficient steps are taken to enforce a strict observance of the rules on the part of all concerned.