

In re investigation of an accident which occurred on the  
Chicago, Rock Island & Pacific Railway near  
Amity, Mo., on December 19, 1917.

January 31, 1918.

On December 19, 1917, there was a rear-end collision between two freight trains on the Chicago, Rock Island & Pacific Railway near Amity, Mo., which resulted in the death of two persons carried under contract and the injury of one employee. After investigation the Chief of the Bureau of Safety reports as follows:

That part of the Chicago, Rock Island & Pacific Railway on which this accident occurred is a single-track line, over which trains are operated by timetable, train orders transmitted by telegraph, and a manual block signal system. The trains involved were westbound freight train No. 95 and westbound freight train No. 89.

Approaching the point of accident from the east there is 5,638 feet of tangent, then a 3-degree curve to the right, 1,513 feet in length, then 309 feet of tangent, then a 3-degree curve to the left, the accident occurring 962 feet in on this curve, on a grade of .98% ascending for westbound trains and on a 20-foot fill.

Second class freight train No. 95 consisted of 25 cars and locomotive 1968, and was in charge of Conductor Williams and Engineer Wood. It left Trenton, Mo., its terminal, at 11.45 a.m., 2 hours and 30 minutes late, and arrived at Weatherby, 42 miles west of Trenton, at 7.20 p.m., where the crew received a copy of train orders No. 93 and 96 reading as follows:

"No. ninety-two 92 Eng. 1685 wait at Platte River until eight thirty 8.30 p.m., Stockbridge until eight forty-five 8.45 p.m., Clarkdale until nine fifteen 9.15 p.m., Amity until nine thirty-five 9.35 p.m., Mayesville until nine fifty 9.50 p.m., and at Weatherby until ten fifteen 10.15 p.m."

"Extra 1666 east meet No. ninety-five 95 Eng. 1698 at Mayesville instead of Amity and meet No. eighty-nine 89 Eng. 1559 at Weatherby instead of Amity."

This train left Weatherby at 7.40 p.m., left Mayesville about 9 p.m., having been delayed about 20 minutes on account of engine leaking and steaming poorly, and stalled on Amity hill about 1-1/4 miles east of Amity, at about 9.10 or 9.12 p.m. In order to reach Amity and clear train 92 by 9.35 the first ten cars were cut off and taken to Amity by the front brakeman while the conductor and rear brakeman remained with the rear portion of the train, and at about 10.02 p.m., the rear part was struck by train No. 89.

Third class freight train No. 89 consisted of locomotive 1569, 2 cars and a caboose, and was in charge of Conductor Lewis and Engineer Ogline. It left Altamont, its terminal, at 8.35 p.m., 7 hours and 30 minutes late, and arrived at Weatherby at 9.05 p.m., where the crew received among other orders, train orders Nos. 102 and 103 providing that trains 908 and 92 would wait at Amity until 11.35 p.m., and 10.10 p.m. respectively, and a block clearance card with restrictions as to these two orders only. It left Weatherby at 9.18 p.m. and collided with the rear portion of train 95 while running at a speed of 30 miles an hour.

The locomotive of train 89 was damaged. The caboose and an emigrant car on train No. 95 were completely destroyed, and the second car from the caboose was turned over. Two stockmen riding in the caboose of train No. 95 were killed. The weather at the time was clear.

Engineer Wood of train No. 95 stated that he received train orders 93 and 96 and a block clearance with restrictions as to these two orders at Weatherby and left there about 7.40 p.m., and was delayed at Maysville about 15 to 20 minutes on account of the locomotive not steaming properly. When the train stalled on the hill he immediately sounded the whistle for flagmen to go back, directed the head brakeman to cut off the ten head cars, and as he had but a short time within which to reach Amity and clear train 92 he did not wait for the conductor to come to the head end but started for Amity with the head portion of his train within three or four minutes. Upon arrival there about 9.30 p.m. he found that he did not have sufficient water in the tank to enable him to go back after the remainder of his train and then go to Clarksville for water, and therefore instructed the head brakeman to flag train No. 92 and ask them to cut off their engine and get the remainder of his train.

Head Brakeman Browning of train No. 95 stated that when his train stalled he cut off the first ten cars of the train, as directed by the engineer, and went with them to Amity, arriving there about 9.30 p.m. When he cut the train in two he saw Conductor Williams but did not tell him that they were going to double into Amity for he felt sure the conductor and rear brakeman would take care of the train and they had only a short time in which to reach Amity and meet train No. 92. When the head end of the train started toward Amity he was riding on top of the rear car, looked back and saw a white light near the caboose but did not see anyone going back to protect the rear of the train. He said he had talked with Conductor Williams at Maysville and the latter had instructed him in case they get on short time to cut off the engine, proceed to Amity and flag train No. 92, and when the

train stalled, there was no question in his mind but that the conductor knew they were doubling the hill, as the engine was working hard and he would know from the speed that they were not making good time. Train No. 92 arrived at Amity about 10 p.m., and acting upon instructions from Engineer Wood he stopped the train, cut off the engine and went with the engine crew after the rear portion of his train. They met Conductor Williams about a half mile from where the rear portion of train 95 was standing and he informed them that train No. 89 had collided with it.

Conductor Williams of train No. 95 stated that when his train stalled on the hill at about 9.10 p.m. he stepped down onto the ground and saw the head brakeman giving the engineman proceed signals, whereupon he went back into the caboose and said to the rear brakeman, who was putting on his coat, that the head man had cut off and gone to Amity with the head end. He told the rear brakeman that he would go to the front end and set a sufficient number of brakes to hold it, for him to set the caboose brake and look out for train No. 89, as that train was at Heatherby and was likely to get close, to which he replied, "Go on and I will take care of 89." He did not see him go back to flag but took it for granted that he would do so when he said he would. After setting the brakes on five or six cars he remained with his train ten or fifteen minutes and walked toward Amity and had gone about a half mile when he heard the collision, walked back toward his train and was overtaken by the locomotive of train No. 92, got on it and rode back to the scene of accident. He stated that when he left Altamont he saw train No. 89 and knew it was following his train, and at Maysville he told Brakeman Browning if they got stalled on the hill not to let train No. 92 get too close before cutting off the engine and going to Amity and flag that train. He said he did not throw off any fuses between Maysville and point of accident as he did not think it necessary. He further stated that he did not hear any torpedoes explode before the accident occurred, and that the rear portion of his train did not move down the hill after being stalled and that it had been standing about 50 minutes when the accident occurred.

Rear Brakeman Wallace of train No. 95 stated that when his train stopped on Amity hill Conductor Williams told him to "look out for 89" and he set the brakes on the caboose, took a red and white light, torpedoes, and fuses with him and walked back six or seven car lengths and stood there for sometime. He said he heard no train approaching and upon looking toward the caboose he thought he saw the rear lights moving slightly which made him think the brakes were not holding and that the train was creeping down the hill. He stated that he put down two torpedoes about four or five car lengths from the rear of the train, went back to the train and set two or three more brakes and

then went inside the caboose. The stockman in the caboose complained of being cold and he stirred up the fire, put more coal on it, and was kneeling before the fire waiting for it to burn when he looked up and saw the headlight of train No. 99. He shouted to the stockman but the collision occurred before either the stockman or he could get off. He said he did not go back further to flag because the track was straight there and he thought approaching trains could see his train in time to stop, as the rear lights were burning brightly. He thought the torpedoes he put down might have been exploded by his train backing over them.

Engineer Ogline of train No. 99 stated that the electric headlight on locomotive was burning brightly and the air brakes working good and he left Altamont without any information concerning train No. 95. He said he saw one of the rear lights on train No. 95 just before the collision occurred and about that time the fireman called to him that that train was there. He did not hear the explosion of any torpedoes or see any signals on Amity Hill. He thought his range of vision at the point of accident was about three car lengths, but thought the fireman would have had a clear view ahead for a distance of about twenty car lengths had he been on his seatbox and looking ahead.

Fireman Rose of train No. 99 stated that his train left Mayville about 9.50 a.m. and the accident occurred about ten minutes later while his train was running about 25 or 30 miles an hour. He said he had just finished putting in coal, stepped to his side of the cab, looked ahead and saw the two markers on the caboose of train No. 95 about three car lengths away, and called to the engineer who applied the air brakes about the same time. He stated that the electric headlight on his locomotive and the rear lights on the caboose of train No. 95 were burning brightly, and he did not see any signals of any kind just prior to the accident nor did he hear the explosion of any torpedoes.

Conductor Lewis of train No. 99 stated that his train left Altamont about 8.35 p.m. When he arrived at Altamont train 95 left there, the crew stating that they wanted to get out right away as they wanted all the time possible against train No. 99. He left Weatherby at 9.15 p.m. after receiving train orders 102 and 103 and a block clearance card with restrictions as to those orders, as well as train orders Nos. 77, 93 and 96, and left Mayville at 9.51 or 9.52 p.m. Nothing was said about train 95 at Weatherby, and he had no reason to believe that that train would be on the hills.

Brakeman Strohm of train No. 99 stated that he was riding in the cupola of the caboose on the left hand side and first saw the tail lights on train No. 95 when seven or eight car lengths from it, and he had only sufficient time in which to call to the conductor and

the other brakeman before the accident occurred.

Operator Irvin who was on duty at Weatherby stated that he asked for and received the block from the operator at Asity at 7.35 p.m., admitted train No. 95 into that block and it left Weatherby at about 7.40 p.m. No. 89 arrived at Weatherby at 9.03 p.m. where it met extra 1666. The block station at Asity having closed at 8 p.m., he said he reported the arrival of extra 1666 to the operator at Clarkdale at 9.04 p.m., and asked him if "No. 95 was by yet," and received the reply "by at 9.04," whereupon he asked him for the block for train No. 89 and received the reply "S.D.S." This reply under the block rules means that the signal is displayed, block not clear. He assumed from the operator's reply that train No. 95 had passed Clarkdale at 9.04 p.m., gave the block to train No. 89, and made no mention of train No. 95.

Operator Robertson, who was on duty at Clarkdale, stated that at 9.04 p.m. Operator Irvin reported to him that extra 1666 had passed Weatherby and asked for the block, and as he did not understand all he said he asked him for what train he wanted the block and was told it was for train No. 89. Operator Robertson stated that he replied "S.D. card." He said that he also said "by 9.04 p.m.," intending that as a repetition of what Operator Irvin had said when he said extra 1666 had gone by Weatherby at 9.04 p.m. to make sure that he understood him correctly, and when he gave him the block for train No. 89 he thought he was going to admit it with a caution card showing that train No. 95 was in the block.

Rule 99 of the operating rules of the Chicago, Rock Island & Pacific Railway 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. One-fourth mile from the rear of the train he will place one torpedo on the rail; continuing back three-fourths mile from the rear of the train, he will place two torpedoes on the rail, two rail lengths apart. During foggy or stormy weather, or in the vicinity of obscure curves or descending grades, or if other conditions require it, the flagman will increase the distance, placing two more torpedoes, two rail lengths apart, at the farthest point reached. He may then return to the single torpedo, where he must remain until relieved by another flagman or is recalled. When recalled but not before, if

he does not see or hear an approaching train, the single torpedo will be removed. In stormy or foggy weather, or if the view for at least one-fourth mile to the rear of the train is not clear, or if other conditions warrant, he will leave a burning red fusee to protect the train while returning."

The direct cause of this accident was the failure of Flagman Wallace properly to protect the rear end of his train as required by Rule 99. Train No. 95 had been standing for about 50 minutes before the collision occurred, which was ample time to enable him to go back a sufficient distance properly to protect it by flag, yet from his own statements he went back only a distance of six or seven car lengths, and was back in the caboose when the collision occurred. He knew that train No. 89 was not very far behind and had told Conductor Williams he would look out for that train. He claimed that he thought the train was creeping back down the hill, but it appears that his fears were unfounded, and in any event had no bearing on his failure to go back a proper flagging distance in the first instance, and when he did return to the caboose and made sure that the train was not creeping down the hill and had finished setting the brakes he should have immediately gone back <sup>to</sup> protect the rear of his train. Had he done so then, it is very probable that this accident would not have occurred.

Conductor Williams is also at fault for not making sure that his train was properly protected by flag before leaving it.

Operator Irvin is also at fault for permitting train No. 89 to enter the block without a caution card showing that the block was not clear. When reporting the arrival of extra 1666 at 9.04 he asked the operator at Clarksdale about train No. 95 and received the reply "by at 9.04," and assumed that it had passed there and the block was clear, whereas all that the operator at Clarksdale intended by that reply was a repetition of the time extra 1666 passed Weatherby for the purpose of signifying that he understood it. However, when Operator Irvin asked for the block for train No. 89 and received the reply "S.D. 5," that should have indicated to him that the block was not clear, as that was the code used to convey that information.

Conductor Williams was employed as a brakeman in 1906, promoted to conductor in 1911, dismissed in 1913 for responsibility for an accident, and reinstated March 10th, 1915. Brakeman Wallace was employed as a brakeman August 28, 1913, and had a good record. Operator Irvin was employed October 1, 1908, and had a good record. Operator Robertson was employed as a station helper June 22, 1916,

transferred to operator June 3, 1917, and had a good record. At the time of the accident the crew of train No. 95 had been on duty about thirteen hours, the crew of No. 89 about eleven hours, Operator Irvin seven hours, and Operator Robertson six hours.