

May 7, 1915

No. 265

**In Re Investigation of accident which
occurred on the Great Northern Railway
at Rainbow, Mont., April 8, 1915.**

On April 8, 1915, there was a rear-end collision on the Great Northern Railway at Rainbow, Mont., which resulted in the death of 2 employees. After investigation of this accident, the Chief of the Division of Safety reports as follows:

Eastbound freight train No. 676 was en route from Great Falls, Mont. to Havre, Mont. It consisted of 53 cars and a caboose, hauled by locomotive 1207, and was in charge of Conductor Bertram and Engineman Siegrist. It left Great Falls, 9 miles from Rainbow, at 6:00 a.m. and reached Rainbow at 6:40 a.m., at which time work extra 1160 was on the western end of the side track. As soon as train No. 676 had passed out of sight around a curve, the work extra went out on to the main line and spotted the steam ditcher, which was a part of its equipment, for the purpose of coaling the ditcher from a car of coal standing on the side track. After passing the work extra, train No. 676 stopped with its rear end out of sight on account of a curve. The first 11 cars in train No. 676 were destined to Volta, a point 3 miles east of Rainbow, and it was necessary to push these cars to that point ahead of the engine. With that end in view it had been the intention to stop at the west passing track switch and pull the 11 cars into the passing track and run around them with the engine, pulling in behind them with the balance of the train, which

was to be left on the passing track at Rainbow until the 11 cars were disposed of. On account of the work extra not wishing to delay, the train was run to the east switch and the 11 cars set off on the passing track. The engine then coupled to the train and started to back west on the main track for the purpose of heading in on the passing track at the west switch and in that manner get the 11 cars ahead of the engine. It was while this part of the train, consisting of 43 cars, was backing down the main line that its rear end collided with work extra 1160, while moving at a rate of speed estimated to have been about 5 or 6 miles per hour. The shock of the collision caused the steam ditcher to slide to one end of the car on which it was mounted, the two men killed being caught between it and the adjoining dump car. Only very slight damage was sustained by any of the equipment.

This part of the Great Northern Railway is a single track line, trains being operated by train orders and time-card rights. At the point of accident the track is level and near the western end of a curve of 3 degrees leading to the left for eastbound trains. The view around this curve was much obscured by high banks on the inside of the same.

Conductor Bertram of train No. 676 stated that he expected his train to stop at the west switch. After it had stopped at the east switch, he started to walk ahead and met the rear brakeman about midway the train and instructed him about unloading some way freight, and then walked back toward the work extra to find out what the crew of that train was

going to do. He had nearly reached the work extra when he saw the rear end of his train being backed down the main line, at which time it was within two car lengths of the work extra, and he at once called to the crew of that train to get out of the way. He further stated that he did not know why Engineman Siegrist had backed the train up as he did not give any signal to do so, neither did he hear the engineman sound the back-up signal on the whistle.

Head Brakeman Farmer stated that he had been instructed by the conductor that the locomotive was to run around the 11 cars at Rainbow, pushing them to Volta, and then was to return for the balance of the train, nothing being said about stopping at the west switch at Rainbow. The engine and 4 cars were over the east switch when the train stopped and he switched out the 11 cars himself. After coupling the engine to the balance of the train, he got on the sixth car from the engine. Just as he did so the engineman sounded the back-up signal on the whistle and when he reached the top of the car, he saw the rear brakeman, apparently in full view of the engineman, and supposed that the rear brakeman had signaled the engineman to back up. The engineman started to back the train and as the rear brakeman gave back-up signals he repeated them to the engineman. After giving back-up signals two or three times, the rear brakeman started toward the rear of the train, giving no signals after the train had started to move. Head Brakeman Farmer further stated that he did not give any signal to the engineman until after he saw the rear brakeman give the back-up

signal; neither did he see any stop signals given and he did not give any stop signals himself until he felt the jar of the collision.

Rear Brakeman Cummings stated that he rode on the engine from Great Falls to Rainbow, the Conductor having instructed him at Great Falls to ride on the engine and assist in running around the cars at Rainbow. The conductor also said that he would go with the 11 cars to Volta and that the rear brakeman was to return to the rear end of the train at Rainbow. He stated that he told the engineman while en route from Great Falls to Rainbow that they would have to run around the cars destined to Volta, and would also have to pull their train between the switches in order to let the work extra out. When approaching Rainbow he saw that they were not going to stop at the west switch and again called the matter to the attention of the engineman, but received no reply from him. When walking back over the top of the train after it had stopped at the east switch he met the conductor about fifteen car lengths from the rear end, and after giving him instructions about spotting a car for unloading some freight, the conductor said he was going to return to the rear end of the train. Shortly afterwards he heard the engineman sound the back-up signal and he at once started to run toward the rear end of the train, at the same time giving stop signals with one hand. He could not see the rear end of his train, or the conductor; neither could he see the head brakeman.

Engineman Siegrist stated that he must have mis-

understood what Rear Brakeman Cummings had said about the method of doing the work at Rainbow. He thought the rear brakeman had said that they would have to let the work extra out and the only way to do so was by running past the work extra, stopping at the east end of the passing track instead of the west end. After the 11 cars were set out, the engine was coupled to the rear portion of the train and as soon as the head brakeman got on the top of the sixth car he at once gave a back-up signal. He stated further that he did not see Rear Brakeman Cummings at any time; neither did he sound a back-up signal on the whistle prior to being signaled to back up by Head Brakeman Farmer.

Fireman Flavel stated that he saw the head brakeman on top of the train but could not see the rear brakeman. After the engineman sounded the back-up signal, the head brakeman gave a signal to back up. The train, however, did not move until after the signal to back up had been received.

Conductor Prevost of the work extra stated that when train No. 676 passed his train and disappeared around the curve, he remarked to the brakeman that they were not going to make any stop at Rainbow. After the freight train had passed, the work extra went out on to the main line and the steam ditcher was spotted opposite the car of coal on the siding. After the steam ditcher had been coaled, which took about ten minutes, he started toward the rear of his train to notify sectionmen who were working on the track that the work extra was going to back up. He heard some one call to get out of the way and on look-

ing around saw the caboose of train No. 676 about two car lengths away from his train. His train started to back up and at first he did not think there would be any collision, but after it had backed up about 5 car lengths it was struck by the rear end of train No. 676. He thought the speed of that train at the time was about 8 miles per hour. He further stated that he did not hear the engineman of train No. 676 sound any signal to back up.

This accident was caused by train No. 676 being backed down the main track without any signal to back up having been given from the rear end, as required by rule No. 483-A, which reads as follows:

"No train, under any circumstances, must be backed without the engineer first having received a back-up signal from a trainman on the rear end of same."

The rear brakeman claimed that the engineman sounded the back-up signal and that he at once gave stop signals, at the same time running toward the rear of the train; the head brakeman claimed that the engineman sounded the back-up signal and that when he got on top of the train he saw the rear brakeman giving back-up signals and repeated the signals to the engineman; the engineman claimed that he could not see the rear brakeman and that he received a back-up signal from the head brakeman and then sounded the whistle signal to back up, while the fireman stated that he could not see the rear brakeman but that he did see the head brakeman and that the engineman sounded the back-up signal, after which the head brakeman gave him the signal to back up. There can be no question but that the

engineman received a back-up signal from the head brakeman before he backed the train, and as no signal to back up had been received from the conductor, the responsibility for the accident rests with the two brakemen. In view of the conflict in their statements, it is impossible definitely to state whether a back-up signal was given by the rear brakeman or whether he gave a stop signal and the signal was misinterpreted by the head brakeman.

All the employees involved were experienced men, and at the time of the accident the crew of train No. 676 had been on duty about 2 hours after about 10 hours off duty.