

IN RE INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE OREGON SHORT LINE RAILROAD NEAR MEDBURY, IDAHO, ON JANUARY 11, 1920.

On January 11, 1920, there was a rear-end collision between a passenger train and the runaway portion of a freight train on the Oregon Short Line Railroad near Medbury, Ida., which resulted in the death of 2 care-takers and the injury of 1 employee. After investigation of this accident, the Chief of the Bureau of Safety reports as follows:

The Fourth District of the Idaho Division of the Oregon Short Line Railroad, on which this accident occurred, is a single track line, extending from Glens Ferry, Ida., to Huntington, Ore., a distance of 166.8 miles. Trains are operated over this district by time-table, train orders and an automatic block signal system. The accident occurred at a point about 2.5 miles west of the station at Medbury. Approaching this point from the east there is a 5-degree curve to the left about 2600 feet in length, followed by about 700 feet of tangent. This tangent continues beyond the point of collision an additional distance of about 4300 feet, west of which is a 2-degree curve to the right approximately one mile in length. Extending west from Medbury the grade is ascending for westbound trains to Reverse, a distance of 8.4 miles; the maximum gradient is about 2 per cent, which was the gradient at the point of collision. The weather at the time of the accident was clear.

Westbound freight train extra 2010, consisting of engine 2010, 41 loaded cars and 13 empty cars, in charge of Conductor Griffith and Engineman Ricks, left Glens Ferry, Ida., at 10.55 p.m., January 10th and at 11.35 p.m. arrived at Medbury, a distance of 11.2 miles. At this point helper engines 2241 and 2007, in charge of Enginemen Wright and Sullivan, respectively, were placed in the train between the twenty-third and twenty-fourth cars, for the purpose of assisting up the grade to Reverse. The train left Medbury at 11.50 p.m. and proceeded to a point a short distance west of mile-post 389, a distance of about 4 miles, where the train became stalled. The three engines took the first twenty-three cars to the siding at Chalk, about one mile beyond, leaving the rear portion of the train, 31 cars on a 1.7 per cent ascending grade without any hand brakes being set; the air brakes leaked off this portion of the train and it ran back down the grade a distance of about 6,500 feet, and at 12.53 a.m., while traveling at a speed of about 40 miles an hour collided with west-bound passenger train No. 17. Westbound passenger train No. 17, en route from Pocatello, Ida., to Huntington, Ore., and points west, was in charge of Conductor Locke and Engineman Thompson, and consisted of engine 3119, 1 mail car, 1 baggage car, 1 coach, 1 chair car, 1 coach, 1 tourist sleeping car, 4 standard sleeping cars and 1 observation car in the order named. This train left Glens Ferry at 12.17 a.m. and at 12.36 a.m. arrived at Medbury, where helper engine 1583, in charge of Engineman Smith, was coupled to the head end. The train left Medbury at 12.40

a.m. 1 hour and 40 minutes late and on approaching automatic block signal 3879, located about 2.5 miles west of Medbury station, the signal was found to be in the stop position. The train was brought to a stop 80 feet east of the signal at 12.45 a.m., and the head brakeman went ahead for the purpose of flagging the train through the block. A few minutes later the rear portion of extra 2010 was seen approaching from the west and train No. 17 was started backward. This train moved a distance of about 120 feet and was traveling at a speed of from 5 to 8 miles an hour when its head end was struck by the rear end of extra 2010. As a result of the collision train No. 17 was forced backwards a distance of 420 feet and was stopped by the air brakes being applied in emergency due to a broken brake pipe on the front end of the helper engine. The engine trucks and the two front pairs of driving wheels of this engine were derailed and the engine was considerably damaged. The other equipment of train No. 17 sustained no damage. The caboose and 21 cars of extra 2010 were totally demolished, while one other car of this train was slightly damaged. The two men killed were in care of stock and an emigrant outfit, and were riding in the caboose of extra 2010. Engineman Ricks, of engine 2010, stated that after his engine passed mile post 389, the train began to slow down coming to a stop with the engine about 1,200 feet beyond the mile post. At this time he did not know the reason for the train stalling. He immediately whistled out the flagman and sent the head brakeman back to see what the trouble was, telling the brakeman that if it was necessary to double the train to Chalk to cut the train ahead of the two helpers. He received a proceed signal a few minutes after the head brakeman had gone back, and had moved ahead a distance of 10 or 15 feet when he was signaled to stop. Engineman Ricks stated that when he started again he knew that the helpers had not been cut off and therefore concluded that he had the entire train with him. He did not learn that a part of the train had been left at mile post 389 until his arrival at Chalk. After uncoupling his engine from the train at Chalk, he followed engine 2007 back to where the rear portion of the train had been left and found that it had run down the grade. This was the first time he had ever doubled Medbury hill.

Head Brakeman Rash, of extra 2010, stated that when the train stalled the engineman instructed him to go back and cut off whatever part of the train his engine could not handle alone. He proceeded back, uncoupled the hose between the twenty-third car and the leading helper engine and gave Engineman Ricks a proceed signal. The forward portion of the train had moved about 10 feet when Conductor Griffith appeared, ordered him to recouple ahead of the helpers, while the conductor uncoupled behind them. He stated that Conductor Griffith then gave Engineman Ricks a signal to proceed, and that he himself rode to Chalk on the car ahead of engine 2241. On one previous occasion when he had been on a train which had doubled up the hill he was told by the conductor that if he should give a signal indicating that they were going to double the hill he was to apply the hand brakes on the rear of the train before going back to protect by flag.

Conductor Griffith, of extra 2010, stated that when the train stalled he told Flagman Coffelt that he would go forward and see what the trouble was and that

they would probably have to double to Chalk. He stated that he also told the flagman not to go back to flag, until he received a second whistle signal to do so, and to be sure to set sufficient hand brakes to hold the rear portion of the train on the grade before going back. He then went forward and on reaching the helpers found that the steam was low on engine 2241 and that it would be necessary to double the train to Chalk. He stated that he told the engineman on engine 2007 to whistle out the flagman, and that the cut would be made behind engine 2007. He then separated the train behind the helpers, after which he made about a 15-pound application of the air brakes by opening the angle cock on the head end of the car immediately behind engine 2007. He gave Engineman Ricks a signal to proceed and rode to Chalk on engine 2007, feeling confident that Flagman Coffelt had set the brakes on the rear portion of the train. Conductor Griffith further stated that he knew that train No. 17 was not very far behind and that he should not have instructed Flagman Coffelt to wait before going back to protect the rear of the train, but should have set the hand brakes himself; in any event he should have seen that the hand brakes were set before the helpers were uncoupled. However, the train was standing in a position where the headlight of train No. 17 could be seen a considerable distance away and he thought it better judgment to have Flagman Coffelt set the brakes before going back while he himself ascertained whether or not it would be necessary to double the train to Chalk. He stated further that he had never before stalled on this hill while acting as a conductor, but had done so several times when working as a brakeman. In these instances the conductor had gone ahead to ascertain the trouble while he set the brakes on the rear portion of the train and then went back to flag. He thought Flagman Coffelt was sufficiently experienced to understand this practice. He afterwards stated that he had never received instructions from conductors to remain with the train instead of going back to flag.

Flagman Coffelt, of extra 2010, stated that when his train stalled, he received a whistle signal to go back to flag. He secured his red lantern and fusee's and had started back when Conductor Griffith told him to wait a minute, and without saying anything more started forward. Flagman Coffelt was positive that the conductor did not instruct him to set the hand brakes before going back to flag or to wait until he received a second whistle signal. He also said that he would have refused to comply with such instructions if given him. He disregarded the conductor's instructions to wait and started back to protect the rear of the train as required by rule 99. Upon reaching a point about one-fourth mile from his train he heard a second whistle signal to go out and flag. He continued back and when about one-half mile from his train, he saw train No. 17 come to a stop east of block signal 3879. Shortly afterwards he heard a noise behind him and on looking around saw the rear lights of his caboose coming toward him. As the caboose passed him he yelled and attempted to board the train but was unable to do so on account of its speed, which he estimated at 25 or 30 miles an hour. On a previous occasion when he had been on a train which had doubled the hill the conductor had remained with the rear portion of the train.

Engineman Wright, of helper engine 2241, stated that when he went on duty at 1.30 p.m., one stay bolt was broken on the engine and the arch flue plugs were

leaking. Before assisting extra 2010 out of Medbury he had assisted a train from Glens Ferry to Reverse and another from Medbury to Reverse. At the time of helping the train from Medbury to Reverse the steam pressure was low, due to the fire being low and leaky flues, and it had been necessary to back the train down the hill to Medbury on account of being unable to go to Chalk in time to clear an opposing passenger train. At the time his engine was coupled into extra 2010 at Medbury for the third movement up the hill the steam pressure was 190 pounds and while the fire was dirty the engine seemed to be steaming satisfactorily and he thought he would have no trouble getting to Chalk. When the train reached a point about one mile from Chalk, however, the steam pressure had decreased to about 115 pounds, due to the condition of the engine and to poor coal, and it was on this account that the train stalled. During the time the train stood at this point he was busy assisting the fireman in getting up steam and was therefore unable to tell what took place in regard to cutting off a portion of the train or what action was taken to hold the cars by hand brakes. He left this duty entirely to the train crew and made no inquiries about it. He had never known of the rear of a train being unprotected when it became necessary to double a hill.

Fireman Galpin, of helper engine 2241, stated that prior to coupling the engine into extra 2010, it had assisted two other trains between Medbury and Reverse, and on both trips he had had considerable difficulty in keeping up steam. Upon returning to Medbury after the second of these trips the fire needed cleaning, but extra 2010 was ready to leave before he had time to do this. He told Engineman Wright of the poor condition of the fire and the engineman replied that they would use the blower. Fireman Galpin further stated that during the time extra 2010 was stalled he was interested only in getting up steam, and did not know what provision was made for holding the rear portion of the train on the grade while the head portion was being taken to Chalk.

Engineman Sullivan, of helper engine 2007, stated that when the train stalled the head brakeman came back and told him that they intended to cut the train and take the head portion to Chalk. About 10 or 12 minutes after the train had stopped, Conductor Griffith came to him, told him that the flagman was setting the hand brakes on the rear of the train, and instructed him to sound the whistle signal for him to go out and flag. The conductor also told him that he was going to take his engine and the portion of the train ahead of it to Chalk and return for the remainder of the train. The conductor then uncoupled the train behind his engine and opened the angle cock, allowing some air to escape from the train line. Engineman Ricks was then signaled to proceed and the train started.

Engineman Sullivan further stated that he knew that it was his duty to ascertain whether or not the hand brakes were set on the rear of the train before his engine was uncoupled, but that he relied on the conductor's word that this had been done by the flagmen and he took no further steps to see personally that the brakes had been set. He said that on several occasions trains had been handled this way when doubling the hill.

Engineman Smith, in charge of helper engine 1583, on train No. 17, stated that his engine was coupled to the head end of train No. 17 at Medbury and the train

left that station at about 12:40 a.m. Upon reaching block signal 3879 the signal was found in the stop position and he brought his train to a stop about 3 car lengths east of it, after which he whistled out a flag in both directions. The head brakeman went forward to flag the train through the block and he, after oiling around his engine, started forward with the thought that possibly the automatic signal was sticking and would release if he jarred it. When he reached a point about a car length from the signal he saw the reflection of his headlight on the windows of the caboose of extra 2010. At first he thought this was a signal maintainer approaching with his motor car, but an instant later the head brakeman, who was then some distance away, lighted a red fusee and gave him a signal to back up. By this time he was able to see the marker lights on the caboose and he ran back to his engine and started the train backwards. Engineman Smith estimated the speed of extra 2010 at the time of the collision at 35 or 40 miles an hour, while he estimated the speed of train No. 17 at from 5 to 8 miles an hour.

Fireman Meisenzahl, of engine 1583, estimated the speed of extra 2010 at the time of the collision at 40 or 45 miles an hour.

Engineman Thompson, in charge of road engine 3119, train No. 17, stated that about five minutes after the flagman had been whistled out, Engineman Smith, in charge of the helper engine, sounded a whistle signal to back up. He did not see or hear the approach of the rear portion of extra 2010 and, as his train had been standing on the heaviest part of the grade, he supposed the backing up was being done for the purpose of getting a good start. He stated that his train moved backwards about 7 car lengths and was moving at the rate of about 6 or 7 miles an hour when the collision occurred.

Head Brakeman Larsen, of train No. 17, stated that the train came to a stop at signal 3879 at 12.57 a.m. and he immediately secured torpedoes, fusees and his lantern and started forward to flag his train through the block. When he reached a point about one-fourth mile from his train he saw a red light about one-fourth mile farther west and at first thought it was a block signal. He then saw that the light was moving and also saw the reflection of the headlight of his engine on the glass door of the caboose. He at once lighted a red fusee and signaled the crew of his train to back up. He estimated the speed of the rear portion of extra 2010 as it passed him to have been approximately 40 or 45 miles an hour.

This accident was caused by the failure of the crew of extra 2010 to set a sufficient number of hand brakes on the portion of their train which was left standing on a heavy grade with no engine coupled to it, for which Conductor Griffith is responsible.

Rule 761 reads as follows:

"On all grades, when stopping on the main track or on a siding, when cutting an engine off a train at stations to do work, or at any stops of unusual length, the air must be released and a sufficient number of hand brakes set to hold the train. Both conductors and engineman will be held responsible for failure to comply with this rule."

Conductor Griffith, who admitted his responsibility for this accident, should have personally set the hand brakes before uncoupling the helpers instead of instructing Flagman Coffelt to do so before going back to flag. The conductor was the only experienced member of the train crew, and should have exercised unusual precaution in the handling of his train. Flagman Coffelt denied that the conductor instructed him to set the hand brakes, but regardless of this fact, the evidence indicates that Flagman Coffelt went back immediately to protect his train, as prescribed by rule 99, and under these conditions he was in no way responsible for this accident.

Under rule 761 Enginemen Wright and Sullivan, in charge of the helper engines of extra 2010, were required to see that the hand brakes were set before allowing their engines to be uncoupled from the rear portion of the train, but in view of the statement of the conductor that he told Engineman Sullivan he had arranged for the hand brakes to be applied, they were justified in doing as they did under the existing circumstances.

The testimony of the employees involved in this accident indicates that when trains are stalled on the grade between Medbury and Reverse, making it necessary to double, it sometimes occurs that the rear brakeman sets the hand brakes on the rear portion of the train before going back to flag. This disobedience of the flagging rule cannot be too strongly condemned.

Conductor Griffith entered the service of the Oregon Short Line Railroad Company as brakeman in September, 1911, and was promoted to conductor in January, 1917. His record was good. Flagman Coffelt was employed as a student brakeman on September 8, 1919, being qualified on September 18, 1919. Head Brakeman Rash was employed as a student brakeman on September 12, 1919, and was qualified on October 3rd. The records of both these employees were clear. Engineman Wright was promoted from engine watchman to fireman in November, 1910, and to engineman in January, 1917. Engineman Sullivan entered the service as fireman in July, 1910, and was promoted to engineman in January, 1917.

The train crew of extra 2010 and the crew of the road engine had been on duty about three and one-half hours after about 17 hours off duty. The crews in charge of the two helpers had been on duty about 12 hours after periods off duty of 24 hours or more