

February 23, 1915.

In re: Investigation of accident which occurred on
the Oregon Short Line Railroad, near American
Falls, Idaho, on February 5, 1915.

On February 3, 1915, there was a derailment of a freight train on the Oregon Short Line Railroad near American Falls, Idaho, which resulted in the death of the engineman. After investigation of this accident the Chief of the Division of Safety reports as follows:

Eastbound freight train extra 1120 was en route from Glenn's Ferry, Idaho to Pocatello, Idaho. It consisted of 33 loaded cars, 5 empty cars and a caboose, hauled by locomotive No. 1120, and was in charge of Conductor Norman and Enginemen Smith. It left Quigley, Idaho, 10.9 miles from American Falls, at 10.46 a.m., and at about 11.15 a.m. was derailed at a point about one mile west of the station at American Falls. The speed at the time of derailment was about 15 miles per hour.

The locomotive ran a distance of 297 feet beyond the point of derailment and sustained very little damage. The engineman was killed by being crushed under the cars after jumping from his engine. The first 10 cars were derailed, some being demolished.

This part of the Oregon Short Line Railroad is a single track line, train movements being protected by the automatic block signal system. An eastbound block signal is located 350 feet east of the point of derailment, while the eastbound signal in the rear is located nearly one mile west of the point of derailment. Approaching from the west there is a curve to the left of 1 degree 4 minutes about 4460 feet in length, a tangent

1,115 feet in length, followed by a curve to the right of 4 degrees, nearly 1,100 feet in length. The derailment occurred in about the middle of the second curve. The grade is 0.7% descending for eastbound trains. About 700 feet east of the point of derailment there is a bridge over the Snake River, over which the speed of train is limited to 20 miles per hour. The track is laid with 90-pound rails 33 feet in length, with about 18 or 20 treated fir ties under each rail. Tie plates are used on all ties and the rails are double-spiked every four ties. The ballast is of washed gravel, varying in depth from 8 to 13 inches. The general condition of the track was good. The weather was clear.

Operating rule No. 1054, of the rules and regulations for the maintenance of way and structures, provides as follows;

"When rails are to be changed or road bed raised at a point where wires run from the track to battery chutes or relays, or when track has to be lined up at switches, or switch points adjusted, notice must be given the signal repairman in charge of the signals in that district so that he may co-operate in the work."

In accordance with this rule, Section Foreman Mills told Signal Maintainer Lightner early on the morning of the accident that he intended to change some rails west of the Snake River bridge, not saying definitely when he intended to do this work. Having some matters to attend to at Coolidge, 8 miles west of American Falls, the Signal Maintainer said that he would return later. Preparatory to changing the rails the section foreman removed every other spike from the inside of the two rails to be changed, which were on the outside of the curve, and as soon as westbound train No. 19 passed, at about 10.25 a.m., he removed the remaining spikes and took out the two rails, without sending out any flagman to warn approaching trains.

When he started to place the two new rails in the track he found that the track had crept down the hill from the west about one and one-half inches. He then fastened the two rails together with one bolt and fastened each end of this two-rail section to the track with one bolt and endeavored to work the rails into place. At about this time Signal Maintainer Lightner returned from the west on his track-speeder, and when he came around the curve and saw the condition of the track he turned the speeder in the opposite direction and started west in the endeavor to flag extra 1120 which was following him. He reached a point about 1,450 feet from the place where the derailment afterwards occurred before he had to remove the speeder from the track on the fireman's side. While he was travelling westward he waved a red flag given to him by the section foreman and continued to wave it until he had to get off the track. At the time of the derailment the automatic block signals were in the clear position on account of the tight connection formed by the rails the section foreman was endeavoring to place in the track.

Section Foreman Mills stated that ordinarily the work to be done would not have required very much time and that he therefore depended on the automatic block signals to afford protection. When the signal maintainer returned from Coolidge the foreman saw that the signals were in the clear position and gave the maintainer a red flag with which to flag the approaching extra, at the same time running toward it waving his hat. He thought he had gone about 4 or 5 telegraph poles before the engine passed him. He further stated that this was the first time he had ever changed rails without sending out a flagman, and did not know why he failed to do so in this case, instead of depending upon the block signals for protection.

Signal Maintainer Lightner stated that when he returned from Coelidge he found the section foreman changing the rails. He saw the smoke of the freight train approaching around the curve and asked the section foreman if he did not see that there was a train coming. The section foreman helped him turn his speeder and gave him a red flag and he at once started west in an endeavor to stop the train. He thought he had gone about 11 telegraph poles before he had to get off the track. He further stated that when the train passed him the brakes did not seem to be taking hold as well as they should, the train not appearing to slow down very rapidly.

Fireman Selders stated that the eastbound signal was in the clear position. As the engine passed it, the engineman made a slight application of the air brakes, shortly after which both Fireman Selders and the head brakeman, being on the inside of the curve, saw the signal maintainer waving a red flag. Both of them told the engineman that they were being flagged and he made a heavy application of the air brakes. Immediately afterwards Fireman Selders saw the section foreman running toward the train waving his cap and he at once told the engineman to apply the emergency brakes, which he did.

Head Brakeman Beckley stated that the engineman made a slight application of the air brakes at the eastbound signal and that when they saw the signal maintainer waving a red flag, he told the engineman to apply the emergency brakes, which he did, the brakes not having been released after the first application. This emergency application, however, did not seem to check the speed of the train as much as it should. He further stated that he did not know

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how the engineman handled the air after the emergency application was made, as he himself got down on the steps in readiness to jump.

Conductor Norman did not think any emergency application of the air brakes was made, the brakes being applied once and the speed of the train gradually reduced. Rear Brakeman Corbett, however, stated that the engineman made an application of the air brakes and then released them, and in about 10 or 12 car lengths made an emergency application. There was not, however, a full train line pressure when the emergency application was made.

Road Foreman of Engines Joslyn stated that in his opinion the engineman made the first application of the air brakes in order to reduce the speed of the train and comply with the 20 miles per hour speed restriction over the Snake River bridge. When the engineman was told that he was being flagged he made a further reduction, releasing the brakes when he was far enough around the curve to enable him to see the signal maintainer removing the speeder from the track.. He thought that Engineman Smith then saw the section foreman running towards him waving his hat and at once placed the brake valve in the emergency position.

The statement of Road Foreman of Engines Joslyn is believed to be correct statement of the facts regarding the handling of the air brakes by Engineman Smith, and the statement of the signal maintainer that when the train passed him the brakes did not seem to be holding as well as they should also seems to demonstrate that when the first two applications of the air were made the train line pressure was reduced to such an extent that when the brake valve was placed in the emergency position it did not have the effect ordinarily

had by such an application, there having been no opportunity for the re-charging of the train line.

This accident was caused by Section Foreman Mills changing the rails in the track without protection, as required by that part of rule No. 743 of the Rules and Regulations for the Maintenance of Ways and Structures reading as follows:

"When track is impassable, or before obstructing track or in any way rendering it impassable, flagmen must be immediately sent in both directions with stop signals a sufficient distance to insure full protection."

Section Foreman Mills thought that the work to be done would require only a few minutes, and instead of obeying the rules requiring the sending out of flagmen decided to depend upon the protection afforded by the automatic block signals. There is no excuse for such negligence, and as long as employees fail to obey rules laid down for their guidance, such accidents may be expected to occur.

Section Foreman Mills had had about 7 years' experience as a section foreman and was considered to be a very efficient employee. His record was clear.