
REPOPT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN RE INVESTIGATION OF AN ACCIPENT WHICH OCCURRED ON THE CHUTRAL FAILPOAD OF NEW JERSEY AT GLEN ONOKO, PA., ON DECEMBER 22, 1923.

January 31, 1924.

To the Commission:

On December 32, 1923, there was a head-and collision between two freight trains on the Central Hailroad of New Jersey at Glen Onoko, Pa., resulting in the death of one employee.

Location and method of operation.

This accident occurred on that part of the Lehigh & Susquehanna Division extending between Scranton and Mauch Chank, Pr., a distance of 73:31 miles; in the vicinity of the point of account this is a double-track line over which trains are obtrated by time taole, train orders, and an automatic block signal system. The accident occurred within the rellimits of Gien Onoko, just east of signal 1204; approaches round from the west there are several sharp curver and each tengents, followed by a 3° 40' curve to the right 332 feet in length and 673 feet of tangent, the accident occurring on this tangent at a point near its eastern end. The grade is prectically level. In this vicinity the tracks of the Lehigh Valley Railroad parallel the tracks of the Central Railroad of New Jersey inmediately on the south, while there is a yard located north of the main tracks, the switches of the crossover which connect the two main tracks are facing-point switches for movements with the current of traffic, the sest switch being located 154 feet east of the point of accident. The crossover is 201 feet in length, and the yard lead track connects with the westbound main track at a point llg feet east of the east crossover switch. A yard-limit board and a slow board, are located 559 and 499 feet west of the point of accident, respectively.

The automatic block signals involved are signals 1212 and 1204, located 3,839 and 357 feet west of the point of accident, respectively. Signal 1212, the distant signal, is of the two-arm, two-position, lower-quadrant semaphore type, while signal 1204, the nome signal, is of the one-arm, threeposition, upper-quadrant semaphore type. Under the rules, which an automatic block signal displays a caution indication, trains must approach the next signal prepared to stop; they also provide that extra trains must move within yard limits prepared to stop, unless the main track is seen or known to be clear. The view is uncostructed. It was raining at the time of the accident, which occurred at about 6.20 a.m.

Description.

Vestbound freight train extra 468 bassed Mauch Chunk about 5.43 a.m., and on arrival at Glen Onoko the caboose was left standing on the vestbound track while the train was placed in the vard at this point, in accordance with instructions. The caboose was then coupled to the engine and a crossover movement made from the westbound track to the eastbound track, it being intended to return mast on this track, and when the head end of engine 468 reached a point just west of the west crossover switch it was struck by extra 765.

Eastbound freight train evtra 765 consisted of 52 cars and a caboose, hauled by engine 765, and was in charge of Conductor Jones and Engineman Gruber. This train passed Penn Haven, 5.91 miles from Glen Onoko and the last open office, at 6.10 a.m., passed signal 1212 displaying a caution indication, passed signal 1204 displaying a stop indication, and collided with extra 468 while traveling at a speed of about 20 miles an hour.

Both engines, of the double-cap type, had their front ends damaged, engine 468 was forced back through the crossover and stopped on the westbound main track 868 feet east of the point of accident. Engine 765 also vent through the crossover, but was derailed near the frog of the east crossover switch, coming to rest upright with its head end 604 feet east of the point of accident. The first four cars in this train were also derailed. The employee killed was the conductor of extra 458.

Summary of evidence.

Engineman Allen, of extra 468, stated that when his engine reached about the center of the crossover he saw extr 765 approaching out thought it was a train on the tracks of the Lehigh Valley Railroad, ne then turned around in the cab to reverse his engine for the intended eastoound movement and as he did so the reflection of the headlight of engine 765 shone lirectly on him. Realizing then that this train Was on the eastbound main track he immediately opened the throttle for the reverse movement, the collision occurring at about the time the engine-started. Engineman Allen estimated_the_specifof Extra 705 to have been about 20 miles an _hour at the time of the accident. Brakeman Wilke stated that while the train was being placed in the yard at Glen Onoko he lined the soltcnes for a crossover movement. He was at the vest switch when he saw extra 7.5 approaching, realized it was not going to stop at signal 1204 and ran toward that train a listance of about two car lengths, swinging his lantern violently, and he said the engine vas working steam when it passed him, the accilent occurring immediately aftervaris.

Engineman Gruber, of extra 765, admitted that he saw the caution indication displayed by signal 1212, at which time the speed of nis train was about 15 or 20 miles an hour, but after passing this signal he fell asleep and did not awake until he was directly opposite signal 1204, at which time he saw the headlight of extra 468, and he then applied the air brakes in emergency, practically at the time of the accident. Although he fid not actually see the indication of signal 1204, he had its inflication on his mind and knew that it was set against him, and he said he awakened just in time to see the base of this signal. When about $2\frac{1}{2}$ miles east of Penn Haven he had felt himself getting drowsy, and on coming into Ox Bow, located about 2 miles west of the point of accident, he went out on the front end to inspect the left side of the engine, but primarily to refresh and endeavor to thoroughly awaken himself. He had had eight or nine hours sleep while off duty prior to this trip, and was unable to explain why he fell asleep. Engineman Gruber further stated that the air brakes on extra 765 were tested and worked properly en route, that he had experienced no difficulty in observing signal indications account of weather conditions; that he was thoroughly familiar with the territory in the vicinity of the point of accident, also the type of engine he was handling; knew his location when passing signal 1213 and expected to find a train occupying the main track within the yard limits at Glen Onoko without flag protection.

Fireman Nothstein and Heai Brakeman Wolfe admitted that they did not keep a proper lookout for signal indications. When approaching Glen Onoko, they were both sitting down in the cao on the fireman's side riding backwaris, and the head brakeman was eating his lunch. Fireman Nothstein stated that he was aware it is his duty to call signal indications to the engineman when his other luties permitted, but that in this instance he failed to obey this rule; that he did not talk to Engineman Gruber after the train left White Haven, 22.04 miles from Glen Onoko, and that he his not see the indications displayed by signals 1213 or 1204, although signal 1204 can be seen first from the fireman's side of the cab, and he was aware there were yard limits at Glen Onoko and that the speed of his train was about 20 miles an hour approaching these yard limits. The evidence indicated that this is the usual rate of speed when the signals are displaying proceed indications.

Immediately after the accident signal 1204 was found to be displaying a stop indication, and signal 1212 a caution indication, while inspection showed them to be in proper working order.

Conclusions

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This accident was caused by the failure of Engineman Gruper, of extra 765, properly to observe and be governed by automatic block-signal indications.

Ingineman Gruber said he could not overcome his desire to sleep and that he finally fell asleep after observing the caution indication displayed by signal 1212, and did not avaken until ne was directly opposite signal 1204, located within yard limits. At this time he did not have his train under proper control, the speed being about 15 or 20 miles an hour, and then he saw extra 408 a very short distance away it was too late to avert the accident. He was unable to explain why he fell asleep.

Fireman Nothstein and Head Brakeman Wolfe nad the first opportunity to observe the indication displayed by signal 1204, and although extra 765 was approaching the yard limits at Glen Onoko not under proper control, these employees neither observed signal indications nor took any action whatever toward the safe operation of their train.

This accident again clearly demonstrates the need for the use of automatic train-control devices which will intervene to control a train whenever for any reason an engineman fails to see or to head signal indications. Had an adequate automatic train-control device been in use at this point, this accident would not have occurred.

Engineman Gruber entered the service of this railroad in June, 1911, as a fireman, and was promoted to engineman in Jamuary, 1920; Fireman Nothstein was employed in his present capacity in September, 1920, while Head Brakeman Nolfe entered the service as a brakeman in November, 1917, resigned in March, 1918, and was re-employed as such in September, 1922. Their records were good. Engineman Gruber and Fireman Nothstein had been on duty 10 hours and 50 minutes at the time of the accident, while Head Brakeman Wolfe had been on duty 10 hours and 20 minutes, prior to which they had been off duty 25 hours and 5 minutes, 25 hours and 15 minutes, and 59 hours and 40 minutes, respectively.

Respectfully submitted,

W. P. BORLAND,

Director.