

INTERSTATE COMMERCE COMMISSION.

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN RE INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE CENTRAL RAILROAD OF NEW JERSEY NEAR CARTERET, N.J., ON JULY 19, 1923.

August 7, 1923.

To the Commission:

On July 19, 1923, there was a derailment of a freight train on the Central Railroad of New Jersey near Carteret, N.J., which resulted in the death of one employee and the injury of one employee.

Location and method of operation.

The Carteret Extension branch of the Central Division is a single-track line extending between East Rahway tower, on the Perth Amboy branch, across the Sound Shore branch, to the Reformatory branch, New Jersey Terminal branch, and to various industrial concerns in the vicinity of Carteret and Chrome. There are no passenger movements over this line, it being used to assemble and distribute freight cars to the industries in this vicinity and to relieve the congestion in the yards at Elizabethport, all movements being governed by yard rules. The point of derailment was on a connection leading to the right from the Carteret Extension branch to the New Jersey Terminal branch. This connection is about 500 feet long between switch points, and its center portion for a distance of 370 feet is on a curve to the right of $17^{\circ} 15'$. At a point about 140 feet from the switch on the Carteret Extension branch, the connection crosses the Sound Shore branch, and about 40 feet beyond this crossing there is a switch leading to the left to an industrial plant. The first marks of derailment were between the frog of the Carteret Extension switch and the Sound Shore Branch crossing, while the train became entirely derailed at the switch leading to the industrial plant. The track on the Carteret Extension branch is tangent for 2,200 feet while the grade for the entire distance is level. The weather was clear at the time of the accident, which occurred at about 8.45 a.m.

Description.

Switch engine 46, in charge of Conductor Murphy and Engineman McCarthy, was switching in the vicinity of the point of derailment, at about 8.35 a.m., it coupled to a cut of cars, approximately 35 or 40, the engine backing up, with helper engine in charge of Conductor Leary and Engineman Byrnes coupled to the rear of the cut, which engine was also backing up. This train was enroute westward to a point on

the New Jersey Terminal tracks. It first moved back eastward until the leading engine was about 4,300 feet from the Sound Shore crossing, in order to increase speed so as to be able to ascend a heavy grade on the New Jersey Terminal tracks just beyond the connection. The train entered the connection track switch and was then derailed while traveling at a speed estimated by the crew to have been between 10 and 15 miles an hour.

The engine and tender were derailed to the left, the engine coming to rest on its right side at a point about 250 feet from the initial point of derailment, the following nine cars were derailed on both sides of the track, piled up, and more or less badly damaged. The employee killed was the engineman of engine 46.

Summary of evidence.

Fireman Kenny, of engine 46, stated that the first knowledge he had of anything wrong was when he heard a clicking noise as the engine was rounding the curve, he had just finished putting in a fire and said that at first he thought the engine was all right, but in a moment he felt it on the ground. While holding on to the tender he saw the box cars piling up and the engine began to turn over. He said the air brakes were coupled on part of the train, but he did not know on how many cars they were operating. He estimated the speed of the train at the time of the derailment to have been about 14 miles an hour, and was of the opinion that the engine was the first to be derailed.

Conductor Leary, of the helper engine, was riding in the cab of engine 46, just behind Engineman McCarthy. He said the first intimation he had of anything wrong was when the engine passed over the switch points of the Carteret Extension branch switch, at which time the engine seemed to sway and then right itself, Engineman McCarthy applied the air brakes and it again swayed and rocked, and he jumped.

Conductor Murphy stated that he was sitting on the top of a coal car about 19 cars back of the engine, and that the train had attained a speed he thought to have been less than 14 miles an hour when he noticed that the engineman had shut off steam, his first impression was that possibly one of the other switch engines working in this vicinity was approaching on the New Jersey Terminal branch, but at about that time he saw a tank car, which was the first or second car back of the engine, sway and then start turning over. He immediately jumped to the ground and began giving stop signals to the engineman of the helper engine, these being acted upon promptly. He said that it was not customary to couple air brakes on all of the cars in a train of this kind, but rather to couple only the number thought necessary, in this instance he himself had

not coupled any of the air brakes, he knew that Brakeman Blannick had coupled the air on some of the cars, but he did not know on how many. In his opinion, burned marks on the rails indicated that a driving wheel had been derailed first.

Brakeman Blannick stated that he was riding on the fourth car back of the engine, and that he had coupled the air on the first six cars. After passing the Sound Shore crossing he noticed that the engine was off of the track and bouncing on the ties, at about which time one of the tank cars near the engine also became derailed and he jumped. He did not think the helper engine continued to push the cars after the derailment. He estimated the speed to have been about 10 miles an hour, and said he did not know what caused the derailment. Brakeman Van Doren was about one-third of a mile in advance, protecting a highway crossing, and said he saw the engine and a tank car derail just beyond the Sound Shore crossing.

Engineman Byrnes, of the helper engine, said that after coupling to the rear of the cars, and as soon as he felt engine 46 begin to pull, he started ahead and continued to push until he felt a slight jar, just previous to which he had noticed that engine 46 had shut off steam, but in a few seconds he felt engine 46 pull again and he again started to push and he again felt a lagging in the train; about this time the speed was about 12 or 15 miles an hour, and he saw Conductor Murphy giving stop signals and at once applied the brakes on his engine in emergency. He thought the train traveled about a car length after he had applied the brakes in emergency.

Division Engineer Reamer made an examination of the track shortly after the accident, he found a mark on the top of the outside or left rail, at a point 30.8 feet west of the frog of the Carteret Extension branch switch, this mark continued on top of the rail for a distance of 12.4 feet, at which point the wheel evidently dropped down on the outside of the rail and rubbed the outside for a distance of 20.6 feet, at this point it came in contact with the end of an easer rail of the crossing frog of the Sound Shore branch, mounted and ran on the top of this rail for its full length, 18 feet, and again dropped down and ran along the outside of the rail a distance of 31.4 feet to a point opposite the switch points of the switch leading to the industrial plant, the switch braces were broken at this point and the marks indicated that the wheel crossed the left rail after traveling an additional distance of 36 feet. This switch was badly damaged and the track torn up for some distance.

Road Foreman of Engines Kirkendall inspected engine 46 after the accident, found nothing which could have contributed to the cause of the accident, and advanced no reason for its

occurrence. He stated that Engineman McCarthy was considered one of the best and most careful enginemen in the service.

An inspection was made of the track between the switches on the connection track, and it was gauged from a point 3 feet east of the switch points of the Carteret Extension branch to the switch points of the switch leading to the industrial plant, a distance of about 180 feet, while elevations were taken at various points; nothing was found which could have caused the accident.

Engine 46 1B of the 0-6-0 double-cab type, it came out of the shops on July 7 after having received class 5 repairs. Careful examination of this engine, including trammig, spring and brake rigging, driving wheels and boxes, gauge of wheels, lateral motion, etc., failed to disclose the presence of anything which could have contributed to the occurrence of the accident.

Conclusions.

The cause of this accident was not definitely ascertained.

Although very careful examination was made both of track and equipment, nothing was found which had any bearing on the cause of the accident. It is to be noted, however, that the air brakes were coupled on only a few cars at the head end of the train, had the air brakes been coupled throughout and in operation, it is probable that the results would have been less serious.

None of the employees involved had been on duty in violation of any of the provisions of the hours of service law.

Respectfully submitted,

W. P. BORLAND,

Director.