

## 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, AT LANOKA  
HARBOR, N.J., ON JULY 13, 1929.

November 7, 1929

To the Commission:

On July 13, 1929, there was a head-end collision between a freight train and a work train on the Central Railroad of New Jersey at Lanoka Harbor, N. J., which resulted in the death of two employees and the injury of four laborers. This investigation was made in conjunction with a representative of the New Jersey Board of Public Utility Commissioners.

Location and method of operation.

This accident occurred on the Tom's River and Barnegat Branch of the New Jersey Southern Division, which extends from Lakewood and Barnegat, N. J., a distance of 22.2 miles, and is a single-track line over which trains are operated by timetable and train orders, no block-signal system being in use. The point of accident was 643 feet east of the station at Lanoka Harbor; approaching this point from the east the track is tangent for a distance of 1,128 feet, followed by a  $2^{\circ} 03'$  curve to the right 1,071 feet in length, the accident occurring on this curve at a point 393 feet from its eastern end. Approaching from the west the track is tangent for a distance of 1,818 feet, followed by the curve on which the accident occurred. The grade is slightly descending for trains moving in either direction toward the point of accident, and is practically level at the point of accident.

The weather was clear at the time of the accident, which occurred at about 1.45 p. m.

### Description

Westbound freight train extra 433 consisted of two cars and a caboose, hauled by engine 433, and was in charge of Conductor Creby and Engineman White. The crew of this train held train order No. 17, Form 19, received at Lakehurst, reading:

"Engine 433 run extra Lakehurst to  
Barneget. Engine 181 works extra  
7.55 a.m. until 4.55 p.m. between  
Lakehurst and Barneget."

After performing station work at Tom's River, 6.1 miles east of Lanoka Harbor, extra 433 departed from that point at 1.30 p.m. It was approaching Lanoka Harbor when the work extra was seen to be approaching, and had been brought to a stop before the collision occurred.

Work extra 181 consisted of 11 cars and a caboose, hauled by engine 181, of the double-cab type, and was in charge of Conductor Hyer and Engineman Miller. This train held train order No. 9, Form 19, received at Lakehurst, reading:

"Engine 181 works extra 7.55 a.m.  
until 4.55 p.m. between Lakehurst  
and Barneget."

After performing work at Waretown, 5.7 miles west of Lanoka Harbor, extra 181 departed eastbound at 1.30 p.m., without any flag protection, and collided with extra 433 while traveling at a speed estimated to have been from 25 to 35 miles per hour.

The impact of the collision moved extra 433 backwards a distance of 315 feet and the caboose a greater distance, as it became uncoupled from the train. Both engines were derailed but remained upright, with their front ends badly damaged and their frames broken. The employees killed were the engineman and head brakeman of extra 181, those injured were laborers on the work train.

### Summary of Evidence

Fireman Yates, of work extra 181, stated that at Waretown the engineman expressed a desire to eat his lunch and they exchanged places and he took charge of the engine, the engineman going back in the tender to eat. They departed from Waretown at about 1.30 p.m.

and in the vicinity of Forked River, 2.2 miles west of Lanoka Harbor, he received a signal from the rear of his train to slow down. He slowed down and came practically to a stop at the station at Forked River and then received a signal to go ahead from some one at the station, as well as one from the rear of his train. Not finding the local freight at Forked River he did not expect to meet it until he reached Tom's River, but on approaching Lanoka Harbor he shut off steam and allowed the train to drift, thinking that the local freight might be at Lanoka Harbor, and he then saw it approaching around the curve about 10 car-lengths distant, he immediately applied the air brakes in emergency and braced himself for the collision. Fireman Yates stated that he had no conversation whatever with the engineer at Waretown as to the movement to be made or how the train should be operated, and he did not see him after they left Forked River; the engineer was in the tender firing at the time of the accident. Fireman Yates said he thoroughly understood from the train order that they were to work between Lakehurst and Barnegat, and should protect their movements at all times, standing or moving, although he stated that the flagman was not on the engine at the time of the collision and that his train had no protection against opposing extra trains, except as he could see that the track ahead was clear. He also said that he thought he had 37 minutes in which to reach Tom's River, 11.8 miles from Waretown, before train No. 4209 departed at 2.12 p.m., and did not think that the local freight would leave ahead of train No. 4209. There was no siding long enough to take care of the number of cars in his train and it would have been necessary to pack up to Barnegat if they could not reach Tom's River. He was unable to estimate the speed of his train at the time of the collision, but he was positive that at no time did he exceed the speed of 25 miles per hour permitted for the class of train he was operating. Fireman Yates, who had been on the work train about three weeks and was not a qualified engineer, stated that he knew the engineer well, but had never worked with him before.

Conductor Hyer, of extra 181, who had been on the work train nearly all the time for the past two years, stated that before leaving Waretown the engineer asked him if it had been the custom to let the fireman run the engine and he told the engineer that when working, picking up rail, etc., the fireman could relieve him under his supervision, but that he was to operate his own engine upon leaving Waretown. Conductor Hyer also told Head Brakeman Walling to ride on the engine where he belonged. Conductor Hyer was

working on his reports in the caboose after leaving Waretown, and as they approached the curve at Forked River he noticed the train was traveling fast and went out on the rear platform of the caboose, where he saw that the rear brakeman was giving a hand signal to slow down, the train then ran very carefully. He resumed his work on the reports and later noticed they were traveling at a high rate of speed and again went to the rear platform and asked the brakeman if they were near what he called "Lenoka Curve" and if he could see anything of the extra. He then looked ahead himself and on seeing the freight train on the curve he attempted to apply the brakes from the back-up hose on the rear of the caboose, but found there was no air in the hose, the brakeman then ran in the caboose and opened the conductor's valve, the accident occurring shortly afterwards. Conductor Hyer estimated the distance between the two trains to have been about 460 feet when he first saw the approaching train, and he estimated the speed of his own train at the time of the accident to have been about 25 miles per hour, with no application of the brakes except that which was made from the caboose. Conductor Hyer further stated that no trouble had been experienced with the air brakes, and while a regular test had not been made before leaving Waretown, there was air throughout the train. It appeared, however, that a small car used by the section men, referred to as a grampus car had been chained to the caboose when west of Waretown, and fearing that the car might run under and burst the hose, the angle-cock on the back-up hose had been closed. This grampus car was then placed in a tool car at Waretown, but the angle-cock in the back-up hose was allowed to remain closed. It also appeared from Conductor Hyer's statements that he presumed the head brakeman was on the engine, but after the accident he discovered that he had been on the seventh car from the engine at the time of the accident.

The statements of Rear Brakeman Penn, of extra 181, substantiated those of Conductor Hyer as to the operation of their train from Waretown to the point of accident, and he also said that when he pulled the conductor's brake valve he noticed that the gauge registered a pressure of 70 pounds. He verified the conductor's statements about instructing Brakeman Walling to ride on the engine, and said he also heard the conductor instruct the brakeman to tell Engineman Miller to run his own engine.

Engineman Miller, of extra 181, was found in the tender, badly injured, and later died without making any statement.

Engineman White, of extra 433, stated that he received train order No. 17, previously mentioned, which gave him right to the track without protection, but required him to look out for the work extra's flag. He proceeded in a cautious manner and as he neared Lanoka Harbor he shut off steam and was drifting at a speed of about 15 or 18 miles per hour when he saw the work train approaching, and he said he immediately applied the air brakes in emergency and sounded a warning whistle for the crew of his train to get off. His train came to a stop before the collision occurred and he had hoped to get the engine in reverse, but the opposing train closed in too quickly and he jumped off when it was about 50 feet distant. He thought that when he first saw the work train it was about 50 car-lengths distant and he judged its speed to have been about 35 miles per hour. Engineman White further stated that on every day that they had met the work train during the past six weeks he had always found it protected, until the day of the accident.

Fireman Irons, of extra 433, stated that at Pinewald, 2.3 miles east of Lanoka Harbor, he got off of the engine and went back to the caboose for a drink of water, and he was riding in the caboose approaching the point of accident when he felt the air brakes applied in emergency and heard the engine whistle blowing; he looked ahead, saw the work extra and then jumped off. He stated that his train had stopped when the collision occurred and he estimated the speed of the work train to have been about 30 or 35 miles per hour.

Conductor Creby, of extra 433, stated that as they were rounding the curve just east of Lanoka Harbor he felt the air brakes applied in emergency and heard the engine whistle, and on looking out he saw the work train approaching. His train stopped and everyone on it got off before the collision occurred. He saw that the work train was traveling at such a rate of speed that it could not possibly stop before it collided with his own train.

The statements of Brakemen Husted and Van and Flagman Stout, of extra 433, practically substantiated those of Conductor Creby. Brakeman Van added that when he first saw the approaching train it was about 40 or 50 car-lengths distant.

Tests were conducted in the vicinity of the point of accident with the same type of engine as engine 181, and it was found that a man standing at the extreme eastern end of the curve could be seen when an eastbound engine was 1000 feet distant, by looking through the right front cab window, when resting one arm on the side window rest and looking out of this side window, the range of vision was extended to 1,500 feet.

### Conclusions

This accident was caused by the failure of the crew of work extra 181 to provide proper protection for its movement against an opposing train.

The evidence clearly indicates that work extra 181 was being operated by Fireman Yates, acting as engineman, at a high rate of speed and without protection, on one occasion the flagmen gave a hand signal from the rear to reduce the speed of the train, yet within a few miles it was again moving at excessive speed. Conductor Hyer should not have allowed the train to attain a high rate of speed a second time, when it was too late to avert the accident, but should have brought his train to a stop and ascertained the reason for such operation, in view of the fact that their only protection was the distance ahead which could be seen to be clear.

Fireman Yates seems to have had no real expectation of meeting the local freight until his own train arrived at Tom's River, and was operating it at a speed at least equal to the maximum allowable speed for a train of this class, instead of proceeding prepared to stop within half his range of vision, which was all he had a right to do in the absence of flag protection. He was not a qualified engineman and this was the first time that he had worked with Engineman Miller, yet Engineman Miller permitted him to operate the train and made no attempt to supervise him in any way, and according to the fireman there was no conversation as to what trains were to be met or what protection should be afforded. Engine 181 was of the double-cab type, Engineman Miller being in the second cab, and Fireman Yates stated that he saw him at Forked River when he received a signal from the rear to reduce speed, yet Engineman Miller seemed unaware of the dangerous manner in which his train was being handled. On approaching

Lanoka Harbor, had he looked out while rounding the curve, he could have seen the track ahead for a distance of more than 2,000 feet and could have brought his train to a stop by means of the emergency valve which was within easy reach. Why Enginemen Miller either did not operate his own engine as instructed by Conductor Hyer, or make an attempt to supervise its operation, is unknown, as he was killed as a result of the accident.

All of the employees involved were experienced men and at the time of the accident none of them had been on duty in violation of any of the provisions of the hours of service law.

Respectfully submitted,

W P. BORLAND,

Director.