

INTERSTATE COMMERCE COMMISSION
WASHINGTON

INVESTIGATION NO. 3104
THE LONG ISLAND RAILROAD COMPANY
REPORT IN RE ACCIDENT
AT NORTH YARD, LONG ISLAND CITY, N. Y., ON
MAY 25, 1947

SUMMARY

Railroad: Long Island
Date: May 25, 1947
Location: North Yard, Long Island City, N. Y.
Kind of accident: Collision
Equipment involved: Front and rear portions of yard
movement
Engine numbers: 101, 118
Consist: Front portion-- : Rear portion--
engine and 18 cars : caboose and
engine
Estimated speed: Standing : 10 m. p. h.
Operation: Operating rules and special
instructions
Tracks: Two; 9° curve; 1.2 percent ascending
grade eastward
Weather: Cloudy
Time: 4:38 p. m.
Casualties: 4 injured
Cause: Separation of couplers during yard
movement of engines and cars, as
a result of a knuckle lock not
being in locking position

INTERSTATE COMMERCE COMMISSION

INVESTIGATION NO. 3104

IN THE MATTER OF MAKING ACCIDENT INVESTIGATION REPORTS
UNDER THE ACCIDENT REPORTS ACT OF MAY 3, 1910.

THE LONG ISLAND RAILROAD COMPANY

June 30, 1947

Accident at North Yard, Long Island City, N. Y., on May
25, 1947, caused by separation of couplers during
yard movement of engines and cars, as a result of
a knuckle lock not being in locking position.

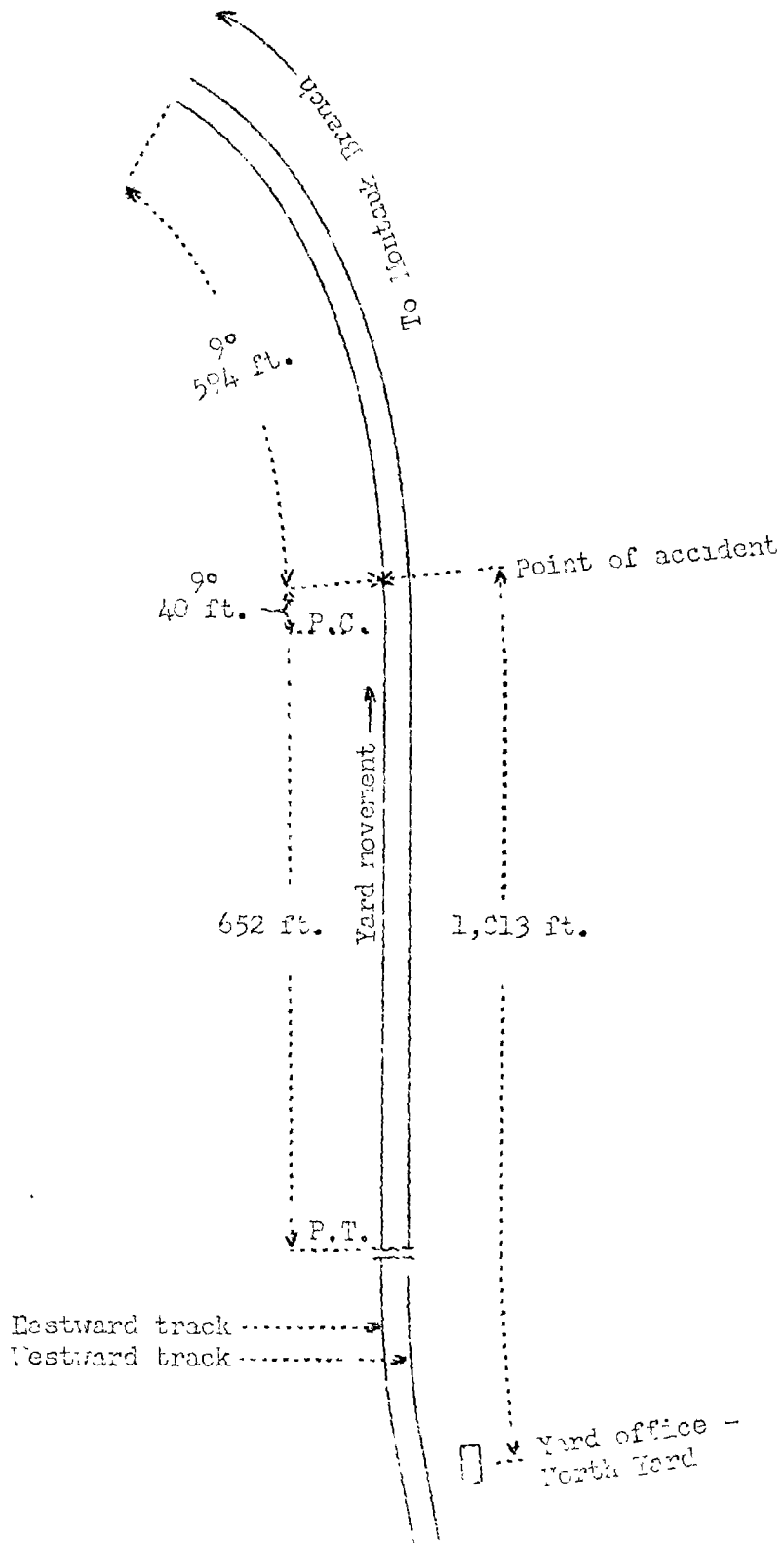
REPORT OF THE COMMISSION¹

PATTERSON, Commissioner:

On May 25, 1947, there was a collision between the
front and rear portions of a yard movement on the Long
Island Railroad at North Yard, Long Island City, N. Y.,
which resulted in the injury of four employees.

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Under authority of section 17 (2) of the Interstate Com-
merce Act the above-entitled proceeding was referred by the
Commission to Commissioner Patterson for consideration and
disposition.



Inv. No. 2104
Long Island Railroad
North Yard, Long Island City, N. Y.
May 25, 1947

Location of Accident and Method of Operation

This accident occurred on that part of the railroad designated as North Yard, Long Island City, N. Y. In the vicinity of the point of accident two parallel lead tracks, 0.63 mile in length, connect a classification yard on the west and the main tracks of a line designated as the Montauk Branch on the east. The lead tracks from south to north are designated as westward track and eastward track. Movements on these tracks are governed by operating rules and special instructions. The accident occurred on the eastward track at a point 1,813 feet east of the yard office at North Yard. From the west on the eastward track there is a tangent 652 feet in length, then a 9° curve to the left 40 feet to the point of accident and 594 feet eastward. The grade is 1.2 percent ascending eastward.

Brake and Train Air Signal Instructions of this railroad read in part as follows:

5-f. After the locomotive has been coupled to the train, the couplers between the locomotive and the train, and where practicable, the entire train should be stretched to see that all couplings are made. * * *

* * *

19-a. Helping Locomotives--When two or more locomotives are coupled to any part of a train, and when running light over the road or through yards, coupled together, the air brake and train air signal must be connected to, and the air brakes operated from the leading locomotive in the direction of movement. The handle of the double heading cock on all locomotives, except the one from which the air brake is operated, must be placed in cut out position. * * *

* * *

Helping locomotives detached from the rear of moving freight trains must be cut off in the following manner:

Trainman will give the helping engineman cut-off signal; after the engineman acknowledges this signal, * * * trainman will close angle cock or brake pipe end cock on cabin car, lift coupler lock on cabin

car which will permit knuckle to open, leaving angle cock, end cock or cut-out cock on locomotive open. Trainman will then uncouple the air hose between cabin car and locomotive by using the hose uncoupling device. When hose is separated the brakes will apply in emergency on the helping locomotives. Care must be exercised to see that hose is not permitted to pull apart.

The maximum authorized speed is 15 miles per hour.

Description of Accident

Engine 101, headed east and coupled to the east end of a cut of 18 freight cars, stopped on the eastward lead track at North Yard about 4:35 p. m., with the most westerly car standing about 1,000 feet east of the yard office. About 4:35 p. m., engine 118, headed east and pushing a caboose, coupled the caboose to the west end of the cut of cars attached to engine 101. Soon afterward this movement, en route to the Montauk Branch, proceeded eastward on the eastward lead track and was moving at an estimated speed of 10 miles per hour when the brakes became applied in emergency as a result of a separation between the rear car and the caboose. The front portion of the movement stopped about 4:38 p. m., with the west end of the rear car standing 1,813 feet east of the yard office. Immediately afterward the rear portion, which consisted of the caboose and engine 118 and moving at a speed of about 10 miles per hour, struck the west end of the front portion.

The body of the caboose was torn loose from the trucks, and stopped on its right side across both tracks and at an angle of about 15 degrees to them. The rear wheels of the front truck were derailed. The east end of the superstructure of the caboose was demolished, and the underframe was badly distorted. The front end of engine 118 and the west end of the eighteenth car were slightly damaged.

The conductor and two brakemen, and the fireman of engine 118 were injured.

It was cloudy at the time of the accident, which occurred about 4:38 p. m.

The caboose was of wooden superstructure and steel-underframe construction, and was provided at each end with top-operated Type D couplers having No. 3 lock lifters, 9-inch knuckles and 5-inch by 7-inch shanks. The couplers were provided with riveted yokes containing the draft gear

attachments, and coupler-release mechanism of the push-down type. Lifting chains, 36 inches in length, attached at one end to the end-platform railing and at the other end to the lifting arm of the coupler-release mechanism adjacent to the left side of the lock-lifter, were provided at each end of the caboose to enable trainmen to uncouple the caboose from other equipment during movement. The coupler at the west, or A, end of the car next ahead of the caboose was a bottom-operated Type D coupler having a 6-inch by 8-inch shank and a 9-inch knuckle.

Discussion

Engine 101 assembled a cut of 18 cars in North Yard and, after an air-brake test of these cars was made, this movement proceeded eastward on the eastward lead track and stopped with the rear of the eighteenth car about 1,000 feet east of the yard office. Soon afterward engine 118, coupled to the west end of a caboose, coupled the east end of the caboose to the west end of the eighteenth car. Then the brake-pipe hose between the caboose and the cut of cars were coupled; the brake-pipe hose between the caboose and engine 118 were not coupled. About 4:39 p. m., after this movement, consisting of engine 101, 18 cars, a caboose and engine 118, in that order, had proceeded eastward a distance of about 700 feet and had attained a speed of about 10 miles per hour, the brakes became applied in emergency on each unit of the movement except engine 118, as a result of a separation which occurred between the eighteenth car and the caboose. Immediately afterward the west end of the eighteenth car was struck by the caboose, which was being pushed by engine 118.

As this movement was approaching the point where the accident occurred the enginemen of engine 101 were maintaining a lookout to the east, the conductor was on the east platform of the caboose, one brakeman was in the caboose, the other brakeman was on the west platform of the caboose, and the enginemen of engine 118 were maintaining a lookout ahead. The first that any of these employees knew of anything being wrong was when the conductor observed that a separation had occurred between the eighteenth car and the caboose. Then the brake-pipe hose separated and the front portion of the train was stopped abruptly by an emergency application of the brakes. When the engineer of engine 101 observed that an emergency application of the brakes had occurred, he moved the brake valve to emergency position and closed the throttle. Because the air-brake system was not connected to the pushing engine, the engineer of this engine was not aware until the collision occurred that the cars had become separated and that the front portion had stopped.

The investigation disclosed that it had been a long-standing practice in the yard involved for a helping engine to be detached from the rear of an east-bound movement at a point about 1,800 feet east of the yard office. In the present case, the engineer of the helping engine closed the throttle at the usual point and he expected that his engine would be detached from the caboose. However, when the brakeman who was stationed on the rear platform of the caboose attempted to lift the lock-lifter of the rear coupler of the caboose the lock-lifter failed to operate, and the brakeman gave a proceed signal for the engineer of the helping engine to close the slack so that the lock-lifter could be operated by using the lifting chain. Then the engineer opened the throttle in response to this signal, and the collision occurred immediately afterward. Apparently the separation between the eighteenth car and the caboose occurred when the engineer of the helping engine closed the throttle.

Examination after the accident disclosed that the coupler at the west end of the eighteenth car and the coupler at the east end of the caboose were within the required limits, and that the anti-creep features were in proper condition. The height of the centers of the couplers of the eighteenth car was 33-1/2 inches above the tops of the rails. Because of damage, the height of the couplers of the caboose could not be definitely determined. The lifting chain at the east end of the caboose was wrapped in a half-hitch around the lifting arm of the coupler-release mechanism at the right of the lock-lifter. However, this position of the chain appeared to have been a result of the accident. The conductor said that before the movement was started he observed the coupling of the caboose to the eighteenth car. He was positive that the knuckles of both couplers had locked in closed position and that, prior to the accident, the lifting arm of the coupler-release mechanism was not fouled by the lifting chain. After the coupling was completed the slack was not stretched, as required by the rules, but the helping engine drifted backward slightly and there was no indication that the knuckles were not locked. However, since no defective condition of the couplers was found, it is apparent that the separation occurred as a result of the knuckle lock of the front coupler of the caboose not being in locked position.

The air-brake rules of this carrier require that when two or more engines are coupled in place in any portion of a train, the train-brake system must be connected to each of the engines and the train-brake system must be controlled from the leading engine. The double-heading cock of each helping engine

must be placed in closed position. The employees concerned and the superintendent said that it is not customary to couple the brake-pipe hose to the helping engine at the rear of a movement of this character, because of the short distance over which the helping movement is made. Interpretation of this rule by the officers and the employees is that the brakes of helping engines will be arranged so as to be controlled from the train-brake system only when the movement of the helping engine is in main track or inter-yard service. In the instant case, if the air-brake system of the helping engine had been connected to the train-brake system of the other units of the movement, the brake of this engine would also have become applied in emergency when the separation occurred.

Cause

It is found that this accident was caused by separation of couplers during yard movement of engines and cars, as a result of a knuckle lock not being in locking position.

Dated at Washington, D. C., this thirtieth day of June, 1947.

By the Commission, Commissioner Patterson.

(SEAL)

W. P. BARTEL,
Secretary.