# INTERSTATE COMMERCE COMMISSION WASHINGTON

INVESTIGATION NO. 3075

THE LONG ISLAND RATLROAD COMPANY

REPORT IN RE ACCIDENT

AT KINGS PARK, N. Y., ON

FEBRUARY 16, 1947

#### SUMMARY

Long Island Railroad:

February 16, 1947 Date: -

Location: Kings Park, N. Y.

Derailment Kind of accident:

Train involved: Passenger

4612 Train number:

Engine number: 5406

Consist: ll cars

40 m. p. h. Estimated speed:

Timetable, train orders and manual-block system Operation:

Single; tangent; level Track:

Weather: Clear

Time: 12:10 p. m.

62 injured Casualties:

Train entering open switch at high rate of speed Cause:

#### INTERSTATE COMMERCE COMMISSION

#### INVESTIGATION NO. 3075

IN THE MATTER OF MAKING ACCIDENT INVESTIGATION REPORTS UNDER THE ACCIDENT REPORTS ACT OF MAY 6, 1910.

· THE LONG ISLAND RAILROAD COMPANY

March 18, 1947.

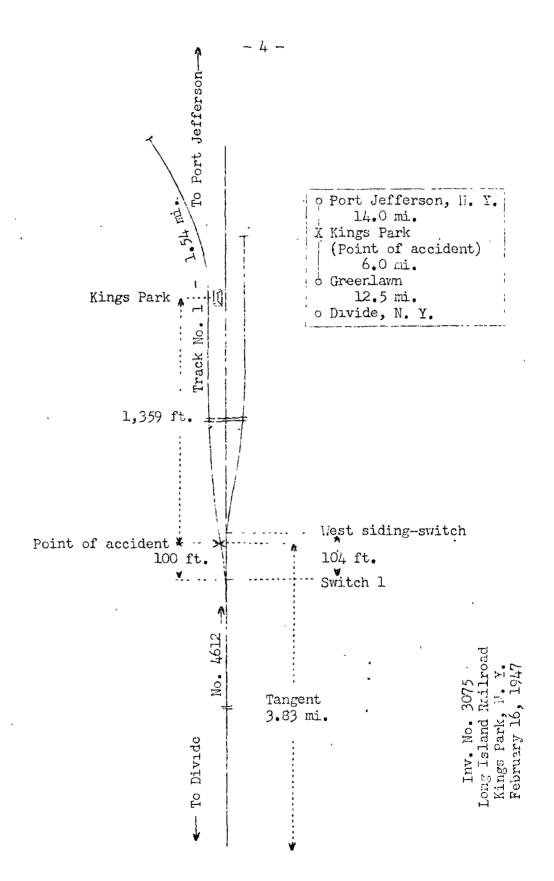
Accident at Kings Park, N. Y., on February 16, 1947, caused by a train entering an open switch at a high rate of speed.

REPORT OF THE COMMISSION

## PATTERSON, Commissioner:,

On February 16, 1947, there was a derailment of a passenger train on the Long Island Railroad at Kings Park, N. Y., which resulted in the injury of 62 passengers. The accident was investigated in conjunction with a representative of the New York Public Service.

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



## Location of Accident and Method of Operation

This accident occurred on that part of the railroad extending between Divide and Port Jefferson, N. Y., 32.5 miles, a single-track line in the vicinity of the point of accident, over which trains are operated by timetable, train orders and a manual-block system. At Kings Park, 18.5 miles east of Divide, auxiliary track No. 1 connects with the main track at switch 1 and extends northeastwardly 1.54 miles to Kings Park State Hospital. Switch 1 is 1,459 feet west of the station. Entry to track No. 1 at switch 1 is made through a No. 9 turnout having a curvature of 12°, without superelevation. The accident occurred on this turnout about 100 fect east of this switch. The main track is tangent throughout a distance of 3.83 miles immediately west of switch 1 and a considerable distance eastward. The grade for east-bound trains varies between 0.2 percent and 1:1 percent descending throughout a distance of 2,850 feet, then it is level 6 feet to switch 1 and 119 feet eastward.

The turnout of switch I is provided with a rigid-type tangent frog about 12.5 feet in length, having an angle of 6°21'35", and 100-pound rail sections and switch points. The switchstand is of the ground-throw hand-operated intermediatestand type, and is provided with two targets and a lock. The centers of the targets are 6 feet 6-1/4 inches above the level of the tops of the rails and 6 feet south of the gage side of the south rail of the main track. When the switch is lined normally a white circular target 16 inches in diameter is displayed, and when the switch is lined for entry to track No. 1 a red diamond-shape target is displayed.

Operating rules read in part as follows:

#### DEFINITIONS

\* \* \*

Fixed Signal -- A signal of fixed location indicating a condition affecting the movement of a train or engine.

\* \* \*

10.

Color Signals

COLOR

INDICATION.

(a) Red.

Stop.

\* \* \*

104. Conductors and flagmen are responsible for the position of switches used by them and their trainmen \* \* \*. Switches must be properly lined after having been used.

Employees throwing hand switches must examine the switch points and know that they fit the rail properly \* \* \*

\* \* \*

Where trains or, engines are required to be reported clear of main track, such report must not be made until switch has been secured in its normal position.

The maximum authorized speed for passenger trains is 65 miles per hour.

## Description of Accident

No. 4612, an east-bound first-class passenger train, consisted of engine 5406, a 4-6-2 type, and 11 coaches. All cars were of steel construction. This train departed from Greenlawn, 6 miles west of Kings Park, at 11:57 a. m., 5 minutes late, and while it was moving at an estimated speed of 40 miles per hour it entered track No. 1 at switch 1 at Kings Park, and the engine and the first five cars were derailed.

The engine stopped practically upright, between the main track and track No. 1 and at an angle of about 15 degrees to them, with the front end 475 feet east of switch 1. The tender stopped on its left side, at the rear of the engine and at an angle of about 45 degrees to it. The derailed cars stopped in various positions across the tracks and in line with them. The derailed equipment was considerably damaged.

The weather was clear at the time of the accident, which occurred about 12:10 p. m.

During the 30-day period preceding the day of the accident, the daily average movement in the vicinity of the point of accident was 27.6 trains.

#### Discussion

No. 4612 was moving on tangent track, in territory where the maximum authorized speed is 65 miles per hour, when it entered track No. 1 at switch 1, which was lined and locked for entry to track No. 1. As the train was approaching Kings **-** 7 **-** 3075

Park the speed was about 60 miles per hour. When the engine was about 700 feet west of switch 1 the engineer observed that the switch was lined for entry to track No. 1, and he moved the brake valve to emergency position. The speed was about 40 miles per hour when the derailment occurred. The brakes of this train had been tested and had functioned properly en route.

The investigation disclosed that about 30 minutes prior to the time of the accident a passenger-equipment train moved from track No. 1 through switch 1 to the main track, then entered the siding, which parallels the main track on the south, at the west switch located 104 feet east of switch 1. The conductor of the passenger-equipment train said that he last observed the position of these switches about 3 minutes after the movement was completed, and at that time the switches were lined normally. The flagman said that he operated both switches during the movement, and he thought he had lined and locked these switches in normal position about 20 minutes before the accident occurred. No member of the crew of the passenger-equipment train, which was on the siding when the derailment occurred, observed any unauthorized person in the vicinity of switch 1.

### Cause

It is found that this accident was caused by a train entering an open switch at a high rate of speed.

Dated at Washington, D. C., this eightcenth day of March, 1947.

By the Commission, Commissioner Patterson.

(SEAL)

W. P. BARTEL,

Secretary.