

INTERSTATE COMMERCE COMMISSION

WASHINGTON

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INVESTIGATION NO. 3079

THE NEW YORK CENTRAL RAILROAD COMPANY

REPORT IN RE ACCIDENT

AT CHARLOTTE, N. Y., ON

FEBRUARY 22, 1947

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SUMMARY

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Railroad: New York Central  
Date: February 22, 1947  
Location: Charlotte, N. Y.  
Kind of accident: Derailment  
Equipment involved: Engine with cars  
Engine number: 1599  
Consist: 38 cars  
Estimated speed: 3 m. p. h.  
Operation: Timetable, train orders and  
manual-block system; yard  
limits  
Track: Single; tangent; 0.58 percent  
ascending grade westward  
Weather: Snowing  
Time: 4:23 a. m.  
Casualties: 1 killed; 1 injured  
Cause: Failure properly to control the  
movement of an engine with cars  
approaching a drawbridge within  
yard limits

INTERSTATE COMMERCE COMMISSION

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INVESTIGATION NO. 3079

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

THE NEW YORK CENTRAL RAILROAD COMPANY

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April 7, 1947.

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Accident at Charlotte, N. Y., on February 22, 1947, caused  
by failure properly to control the movement of an  
engine with cars approaching a drawbridge within  
yard limits.

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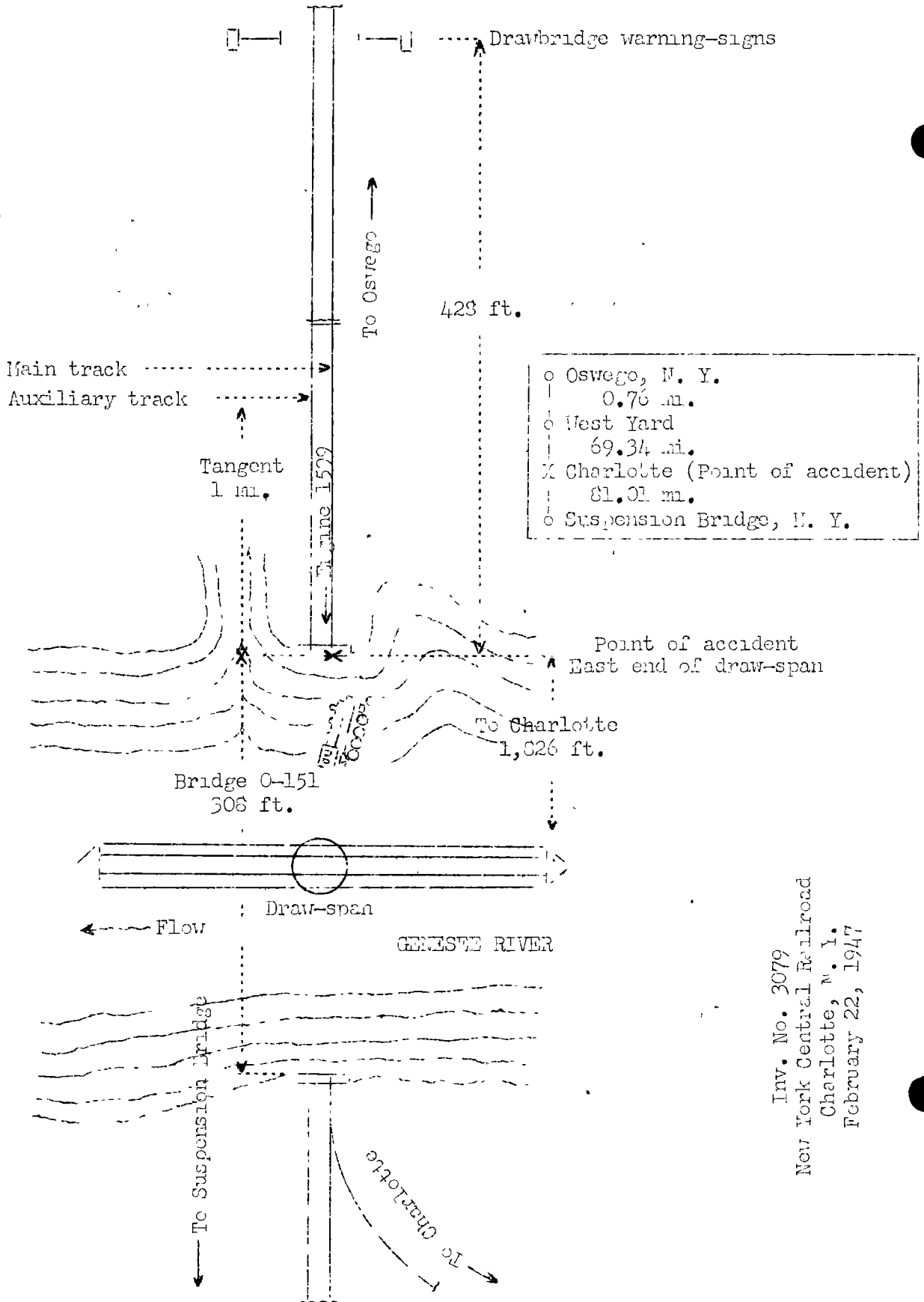
REPORT OF THE COMMISSION<sup>1</sup>

PATTERSON, Commissioner:

On February 22, 1947, there was a derailment of an  
engine on the New York Central Railroad at Charlotte,  
N. Y., which resulted in the death of one employee and  
the injury of one employee.

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<sup>1</sup>  
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. 3079  
 New York Central Railroad  
 Charlotte, N. Y.  
 February 22, 1947

Location of Accident and Method of Operation

This accident occurred on that part of the Rochester Division extending between West Yard, near Oswego, and Suspension Bridge, N. Y., 150.35 miles, a single track line, over which trains are operated by timetable, train orders and a manual-block system. Within yard limits at Charlotte, 69.34 miles west of West Yard, the main track and an auxiliary track, which parallels the main track on the north, cross the Genesee River over Bridge O-151. The accident occurred on the main track 1,826 feet east of the station at Charlotte, at the east end of the draw-span of Bridge O-151. From the east there is a tangent about 1 mile to the east end of the bridge and a considerable distance westward. The grade for west-bound movements is, successively, 0.72 percent descending 3,000 feet, 0.33 percent descending 300 feet, level 200 feet and 0.58 percent ascending 500 feet to the east end of the bridge, then it is level over the bridge.

The railroad crosses the river at approximately right angles. The draw-span is of the double-track, steel, through-lattice truss, swing type, and is 308 feet in length. The central pier is of stone and concrete construction, and is about 40 feet in diameter. The mean low level of the water under the draw-span is 13 feet 4 inches below the base of the rail, and the water is approximately 22 feet deep. The draw-span mechanism is operated by a steam engine. The draw-span is in the charge of a bridge tender. The normal position of the draw-span is for movement on the railroad. At the time of the accident the draw-span was open for river traffic and was at right angles to the tracks.

Stop signs governing west-bound movements on either track are located immediately adjacent to each track at points 428 feet east of the east end of the bridge. These signs are rectangular in shape, 2 feet wide and 4 feet long, mounted on masts 6 feet 5 inches high, and bear the words "DRAWBRIDGE 400 FEET STOP" in white letters on a red background.

Operating rules read in part as follows:

DEFINITIONS.

\* \* \*

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

Note To Definition Of Fixed Signal.--The definition of a "Fixed Signal" covers such signals as \* \* \* stop boards \* \* \*

10. Color Signals.

Color,	Indication,
(a) Red.	Stop.
* * *	
(c) Green.	Proceed, * * *
* * *	

34. The engineman and fireman must, and when practicable the trainmen will, communicate to each other the indication of all signals affecting the movement of their train.

93. Within yard limits the main track may be used, protecting against first class trains.

All other trains and engines must move within yard limits prepared to stop unless the main track is seen or known to be clear.

\* \* \*

98. Trains must approach \* \* \* drawbridges, prepared to stop, unless \* \* \* signals indicate proceed, and track is clear. \* \* \*

Time-table special instructions read in part as follows:

98. DRAWBRIDGES.

Location	Signals
Charlotte, Genesee River, . . . .	Hand.

All trains will come to a stop 400 feet from drawbridge and may then proceed only when track is known to be clear. \* \* \* A "Proceed" signal displayed by bridge tender with green flag or green hand lamp indicates drawbridge closed and train may proceed.

The maximum authorized speed over Bridge O-151 is 8 miles per hour.

### Description of Accident

Engine 1599, headed westward and pulling a cut of 38 cars westward in a switching movement on the main track, passed the stop sign located 428 feet east of Bridge O-151, passed a lighted red lantern displayed in the center of the main track immediately east of the east end of the draw-span, and was moving at an estimated speed of 3 miles per hour when the engine dropped into the river.

The engine stopped practically upright, in reverse direction on the river bed. The tender became separated from the engine and stopped immediately east of the bridge opening. The front wheels of the front truck were derailed.

The engineer was killed, and the flagman was injured.

It was snowing and a strong wind was blowing at the time of the accident, which occurred about 4:23 a. m.

During the 30-day period preceding the day of the accident there was an average daily movement of 10.4 trains, 26.4 engines and 3.8 ships at the bridge involved.

### Discussion

The rules governing operation on this line provide that within yard limits all movements, except first-class trains, must be operated prepared to stop unless the main track is seen or known to be clear, and all trains and engines must approach drawbridges prepared to stop unless the signals indicate proceed and the way is clear. Special instructions provide that a train or an engine must stop short of the drawbridge involved, then it may proceed only when a proceed signal is displayed by the bridge tender with a green flag by day or a green light by night.

Engine 1599 was moving westward in forward motion, within yard limits, and was pulling a cut of 38 cars on the main track in a switching movement from a point about 1,500 feet east of Bridge O-151. The engine had passed the stop sign, located 428 feet east of the bridge, and a lighted red lantern, which was displayed between the rails of the main track immediately east of the bridge, when the engine dropped into the river. The draw-span was in open position for the passage of a car ferry. The engine was working steam and the speed was about 3 miles per hour when the accident occurred. The headlight at

the front of the engine was lighted brightly. The fireman had been tending the fire and was just returning to his seat on the left side of the engine when the accident occurred. He had not observed that the draw-span was in open position. The conductor and two brakemen were in the vicinity of the east end of the cut of cars and a third brakeman was on the tenth car. These employees said that they gave stop signals with lighted white lanterns when they observed that the draw-span was in open position immediately after the engine passed the stop sign, and they continued to give stop signals until the engine dropped into the river. The engineer was killed in the accident, and it could not be determined if he was aware at any time that the draw-span was not in position for the movement of the engine over the bridge.

The investigation disclosed that about 6 minutes prior to the time the accident occurred the bridge tender placed a lighted red lantern in the center of the main track immediately east of the east end of the bridge, then the control lever of the draw-span mechanism was placed in position for the draw-span to open for river traffic. The bridge tender was in the operating cabin at the center of the bridge when he observed that the engine was moving in the immediate vicinity of the east end of the bridge and saw stop signals being given by the members of the crew on the cars attached to the engine. Then the bridge tender gave stop signals with a lighted electric flashlight.

#### Cause

It is found that this accident was caused by failure properly to control the movement of an engine with cars approaching a drawbridge within yard limits.

Dated at Washington, D. C., this seventh day of April, 1947.

By the Commission, Commissioner Patterson.

(SEAL)

W. P. BARTEL,

Secretary.