INTERSTATE COMMERCE COMMISSION

WASHINGTON

INVESTIGATION NO. 2541

THE NEW YORK CENTRAL RAILROAD COMPANY

REPORT IN RE ACCIDENT

NEAR WAYNEPORT, N. Y., ON

NOVEMBER 12, 1941

SUMMARY

Railroad:	New York Central		
Date:	November 12, 1941		
Location:	Wayneport, N. Y.		
Kind of accident:	Derailment		
Trains involved:	Freight	: Passenger	: Freight
Train numbers:	Extra 3020 East	: 35	: Extra 2765 West
Engine numbers:	3020	: 5228	: 2765
Consist:	75 cars, caboose	: 8 cars	: 87 cars, caboose
Estimated speed:	30-35 m. p. h.	: 40 m. p. h.	: Standing
Operation:	Automatic block-signal and automatic train-stop system		
Tracks:	Four; tangent; level		
Weather:	Rain mixed with snow		
Time:	About 5:49 a. m.		
Casualties:	1 killed; 43 injured		
Cause:	Accident caused by failure of coupler in freight train and by passenger train striking freight car which had been derailed from adjacent track		

INTERSTATE COMMERCE COMMISSION

INVESTIGATION NO. 2541

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

THE NEW YORK CENTRAL RAILROAD COMPANY

January 2, 1942

Accident near Wayneport, N. Y., on November 12, 1941, caused by failure of coupler in freight train and by passenger train striking freight car which had been derailed from adjacent track.

REPORT OF THE COMMISSION[1]

PATTERSON, Commissioner:

On November 12, 1941, there was a derailment of a freight train and a passenger train on the New York Central Railroad near Wayneport, N. Y. The accident resulted in the death of 1 train-service employee, and the injury of 9 passengers, 28 railway-mail clerks, 2 Pullman employees, 2 dining-car employees, 1 employee off duty and 1 train-service employee. This accident was investigated in conjunction with representatives of the New York Public Service Commission.

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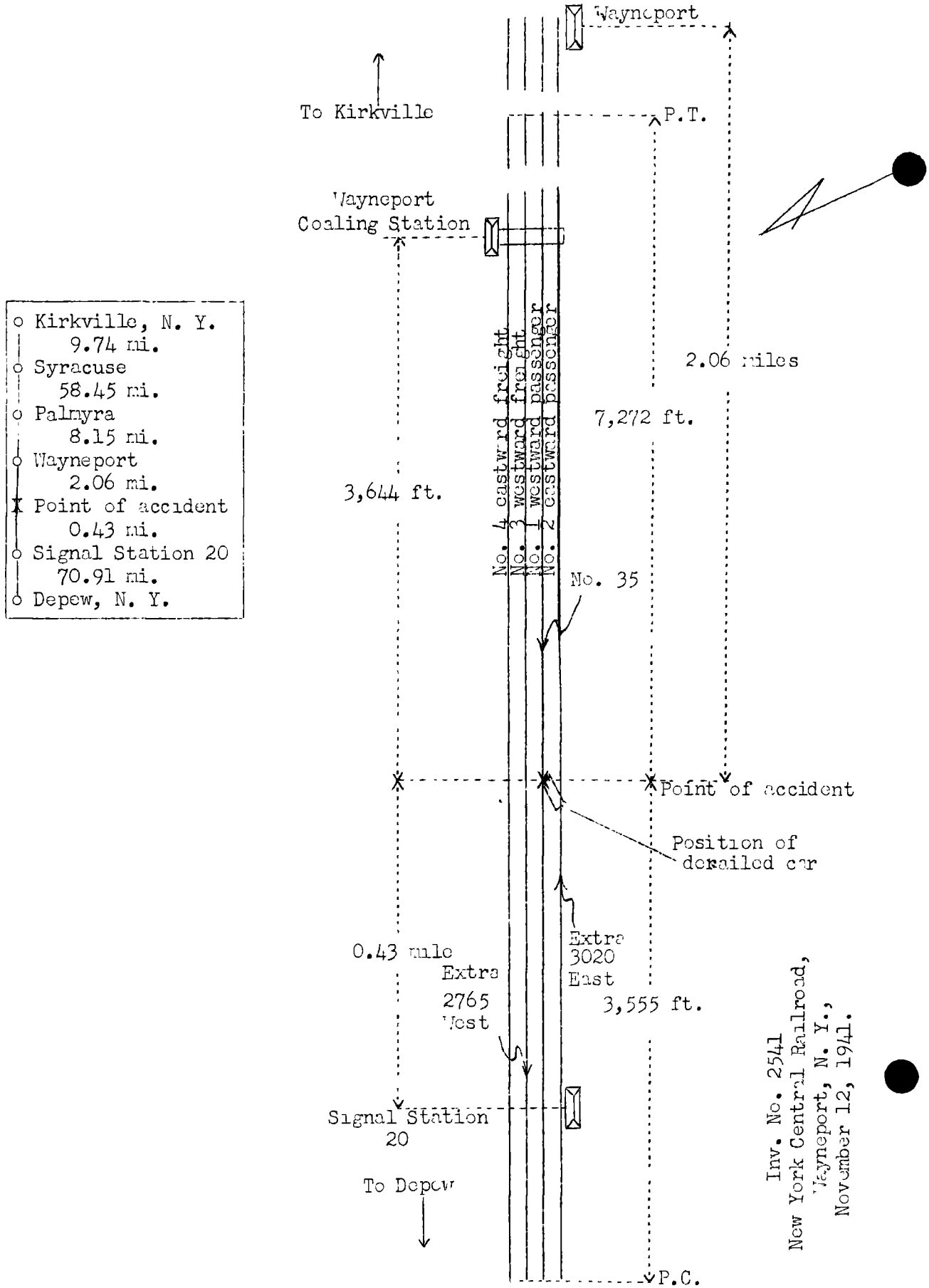
[1]Under authority of section 17 (2) of the Interstate Commerce Act the above-entitled proceeding was referred by the Commission to Commissioner Patterson for consideration and disposition.



Inv. No. 2541
New York Central Railroad,
Wayneport, N. Y.,
November 12, 1941.

Location of Accident and Method of Operation

This accident occurred on that part of the Syracuse Division which extends between Kirkville and Depew, N. Y., a distance of 149.74 miles. In the vicinity of the point of accident this is a four-track line over which trains are operated with the current of traffic by an automatic block-signal and automatic train-stop system. Signal indications supersede time-table superiority. The main tracks from south to north are No. 2, eastward passenger; No. 1, westward passenger; No. 3, westward freight; and No. 4, eastward freight. The accident occurred on track No. 1 at a point 2.06 miles west of Wayneport. As the point of accident is approached from the east the tracks are tangent 7,272 feet to the point of accident and 3,555 feet beyond. The grade is level at the point of accident.

Operating rules read in part as follows:

> 102a. When a train is disabled or stopped suddenly by an emergency application of the brakes, or by other causes, adjacent tracks as well as tracks of other railroads that are liable to be obstructed must at once be protected until it is ascertained they are safe and clear for the movement of trains.

Rules for the operation of air brakes read in part as follows:

> 1569. Brakes must not be released on trains of 60 or more cars when moving at a speed of 15 or less miles per hour, * * *.
>
> Before releasing brakes at higher speeds or with shorter trains, the independent or straight air brake must be applied on engine to prevent slacking running out too quickly, after which it must be carefully graduated off.

In the vicinity of the point of accident the maximum authorized speed for passenger trains on tracks Nos. 1 and 2 is 75 miles per hour and for freight trains, 55 miles per hour. On track No. 3 the maximum authorized speed for freight trains is 45 miles per hour. At Wayneport Coaling Station, located 3,644 feet east of the point of accident, the maximum authorized speed on all four tracks is 20 miles per hour.

Description of Accident

Extra 3020 East, symbol XB-2, an east-bound freight train, consisted of engine 3020, 75 loaded cars and a caboose. At East Buffalo, 79.22 miles west of Wayneport, a terminal air-

brake test was made and the brakes functioned properly en route. This train departed from East Buffalo at 3:35 a. m., according to the dispatcher's record of movement of trains, passed Signal Station 20, 2.49 miles west of Wayneport and the last open office, at 5:47 a. m. While this train was moving on track No. 2 at an estimated speed of 30 to 35 miles per hour, the train parted and the coupler at the rear of the fifty-eighth car dropped to the ties and the fifty-ninth car was derailed. The latter car stopped with its front end fouling track No. 1 at a point 2.06 miles west of Wayneport and soon afterward it was struck by No. 35.

No. 35, a west-bound first-class passenger train, consisted of engine 5228, two baggage cars, one mail car, one baggage car, one dining-lounge car and three Pullman sleeping cars, in the order named. All cars were of steel construction. After a terminal air-brake test was made this train departed from Syracuse, 66.6 miles east of Wayneport, at 4:40 a. m., according to the dispatcher's record of movement of trains, 5 minutes late, passed Palmyra, 8.15 miles east of Wayneport and the last open office, at 5:35 a. m., 4 minutes late, stopped at Wayneport Coaling Station, 1.38 miles west of Wayneport, at 5:44 a. m. and departed at 5:48 a. m., according to the station record of train movements kept by the coaling station attendant. While this train was moving on track No. 1 at a speed of 40 miles per hour, as indicated by the tape of the speed recorder with which the engine was equipped, it collided with the derailed freight car and was derailed. Some of the derailed equipment struck Extra 2765 West, which was standing on track No. 3.

Extra 2765 West, a west-bound freight train, consisted of engine 2765, 4 loaded and 83 empty cars and a caboose. After a terminal air-brake test was made this train departed from DeWitt, 71.71 miles east of Wayneport, at 1:45 a. m., according to the dispatcher's record of movement of trains, arrived at Wayneport Coaling Station at 5:23 a. m. and departed at 5:44 a. m., according to the station record of train movements, proceeded westward and stopped on track No. 3 with the front end of the engine standing 5,771 feet west of Wayneport Coaling Station. Soon after this train stopped, the forty-seventh, forty-eighth and forty-ninth cars were struck by the second and third cars of No. 35.

Immediately after the accident occurred the coupler yoke at the rear end of M. P. L. X. 397, the fifty-eighth car in Extra 3020, was found broken in two places. These breaks were new and the rivets were sheared. At a point 79.6 feet west of the point of derailment a mark on a tie 1 foot inside the north rail indicated that the coupler dropped to the track structure. A mark on the spring plank of the front truck of the fifty-ninth car indicated that the truck encountered the coupler. The

fifty-ninth car was derailed and stopped at an angle of 30 degrees to track No. 2, with the front end near the center-line of track No. 1 and the rear end on track No. 2. The front portion of Extra 3020 stopped with the fifty-eighth car standing about 800 feet east of the point of derailment.

The front pair of engine-truck wheels of engine 5228 of No. 35 were derailed to the left and the driving wheels, trailer-truck wheels and tender-truck wheels were derailed to the right. The engine and the tender stopped upright and in line with the track, with the front end of the engine standing 261 feet west of the point of derailment. The engine-truck frame, the trailer-truck frame and the left front cylinder head were broken. The cab was demolished. The water column and various steam pipes in the cab were broken off. The first car was derailed to the north and stopped upright, badly damaged and in line with the track, with the front end 52 feet east of the rear of the tender. The front truck was detached and was about midway of the car. The second car was derailed to the north and stopped, badly damaged, to the rear of the first car and leaned to the north at an angle of 30 degrees. The third car was derailed and stopped upright, to the rear of the second car. The front truck of the fourth car was derailed.

The front truck of the forty-seventh car of Extra 2765 was derailed to the north. The forty-eighth car was derailed to the north and stopped on its right side on track No. 4 about 9 feet to the rear of the forty-seventh car. The forty-ninth car was not derailed but the front end of the body was raised about 5 feet and leaned to the north at an angle of 20 degrees.

Rain and snow were falling at the time of the accident, which occurred about 5:49 a. m.

The train-service employee killed was the engineer of No. 35, and the train-service employee injured was the fireman of No. 35.

Data

The coupler involved was of the A. A. R. type "D" and had a 5-inch by 7-inch shank and a 9-1/8-inch butt, a type "D" knuckle and a riveted yoke attachment. The draft gear was of the friction type. Examination disclosed that the coupler yoke was broken through at both rear bends. There was no indication of prior fracture or of defective metal. The striking plate and the end-sill were bent as a result of the coupler pulling outward. The carrier-iron was bent and one bolt was broken.

The derailed car was of the gondola type and was loaded with steel bars. The light weight was about 25 tons and the lading was about 55 tons.

Discussion

The equipment of Extra 3020 East had been inspected before that train departed from East Buffalo and no defective condition was found that could have contributed to the cause of the accident. A terminal air-brake test was conducted. Between East Buffalo and Signal Station 20 the brakes were used several times to control the speed of the train, and the brakes functioned properly. According to the statement of the engineer, brake-pipe pressure was 70 pounds, main-reservoir pressure was 130 pounds and brake-pipe leakage was 3 pounds per minute. As his train was approaching the point where the accident occurred, it was moving on track No. 2 and the speed was 45 miles per hour and the throttle was open. Because the maximum authorized speed at Wayneport Coaling Station was 20 miles per hour, he applied the train brakes to reduce speed. He made a 7 or 8-pound initial brake-pipe reduction, then, after an interval of 15 seconds, another 7-pound reduction; however, the speed was not reduced as desired, and another 5-pound reduction was made. The driving-wheel brakes were applied throughout this automatic brake application. About 15 seconds after the third brake-pipe reduction was completed, the engineer placed the brake valve in release position and 15 seconds later he returned it to running position. The rules require that when the train brakes on a moving freight train are released, the independent brake valve must be placed in application position until it is certain that the train brakes are released and the slack in the train is adjusted. In this instance the engineer did not place the independent brake valve in application position when he released the train brakes. About 5 seconds after he returned the automatic brake valve to running position, he moved it momentarily to release position to insure that the train brakes would release properly; however, the speed of the train continued to reduce gradually and he closed the throttle. Just before his train stopped he observed No. 35 passing on track No. 1. Soon after Extra 3020 stopped, the engineer placed the brake valve in lap position and, observing the duplex air gauge, he discovered that the brake-pipe pressure was depleted.

Extra 2765 West departed from the coaling station at 5:44 a. m. and was moving on track No. 3 at a speed of 17 miles per hour, as indicated by the tape of the speed recorder with which the engine was equipped. When the engine was about 3,600 feet west of the coaling station, the fireman returned to the left seatbox after he had adjusted the feed of the stoker. At that time he observed that a car in the train of Extra 3020 was derailed opposite his engine and that it obstructed track No. 1. He informed his engineer, who immediately applied the brakes and stopped the train, with engine 2765 standing opposite the caboose of Extra 3020. The fireman of Extra 2765 warned the conductor of Extra 3020 East concerning the derailed car, and the

conductor, displaying a lighted red fusee, immediately started to run eastward. The conductor observed No. 35 approaching on track No. 1 and waved stop signals; however, the derailed car was between him and No. 35 and undoubtedly it obscured the view of the fusee from the engine crew of No. 35. All the employees involved understood that when a train is disabled or stopped by an emergency application of the brakes all adjacent tracks must be protected at once; however, prior to the passage of No. 35 the members of the crew on the engine of Extra 3020 were not aware that their train was disabled or that the brakes were applied in emergency. The conductor observed that the brake-pipe pressure was depleted and alighted as soon as his train stopped. Just as he alighted the fireman of Extra 2765 informed him of the derailed car. The fireman of Extra 2765 was unable to alight from the engine in time to flag No. 35 and the conductor of Extra 3020 provided flag protection as soon as the fireman could have done so.

The fireman of No. 35 was tending his fire as his train departed from Wayneport Coaling Station at 5:48 a. m. After he had adjusted the stoker feed he returned to the left seatbox and at that time he observed simultaneously the reflection of a lighted fusee and the derailed car. The accident occurred before any action could be taken to avert it. The speed of No. 35 was 40 miles per hour, the headlight was lighted brightly, the throttle was open and the engineer was maintaining a lookout ahead from his usual position. The engineer did not apply the brakes prior to the collision. The fireman said that visibility was restricted because of rain mixed with snow. Since the engineer of No. 35 was killed in the accident it could not be determined if he observed that the derailed car obstructed track No. 1.

The investigation disclosed that the rear coupler of the fifty-eighth car in the train of Extra 3020 had dropped to the track because of a failed coupler yoke and, as a result, the fifty-ninth car was derailed. The metal of the coupler yoke was not defective, and the two fractures were entirely new. In the vicinity of the point of accident slack action was not felt at either end of the train. The tape of the speed recorder with which engine 3020 was equipped indicated that at the time the brake application was made prior to the accident the speed was 45 miles per hour. The rate of deceleration was greatest from 45 miles per hour to 38 miles per hour, lessened from 38 to 36 miles per hour and declined sharply from 36 miles per hour until the train stopped. The tape indicates that the coupler failed and the train parted when the speed was 38 miles per hour, and also that between the speeds of 38 miles per hour and 36 miles per hour there may have been a partial release of

the train brakes; however, according to the engineer of Extra 3020, the speed was about 32 miles per hour when he placed the automatic brake valve in release position.

Cause

It is found that this accident was caused by the failure of a coupler in a freight train and by a passenger train striking a freight car which had been derailed from an adjacent track.

Dated at Washington, D. C., this second day of January, 1942.

By the Commission, Commissioner Patterson.

(SEAL)

W. P. BARTEL,

Secretary.