

INTERSTATE COMMERCE COMMISSION
WASHINGTON

REPORT NO. 3621
THE NEW YORK CENTRAL RAILROAD COMPANY
IN RE ACCIDENT
NEAR SCHODACK LANDING, N. Y , ON
APRIL 2, 1955

SUMMARY

Date	April 2, 1955
Railroad:	New York Central
Location:	Schodack Landing, N. Y.
Kind of accident	Deraillment
Train involved:	Passenger
Train number:	1
Engine number:	Diesel-electric units 4044 and 4067
Consist:	14 cars
Speed:	77 m p. h.
Operation:	Signal indications
Tracks:	Double; tangent, level
Weather:	Clear, dusk
Time:	6 03 p. m.
Casualties:	1 killed, 34 injured
Cause:	Rock slide

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REPORT NO. 3621

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

THE NEW YORK CENTRAL RAILROAD COMPANY

May 2, 1955

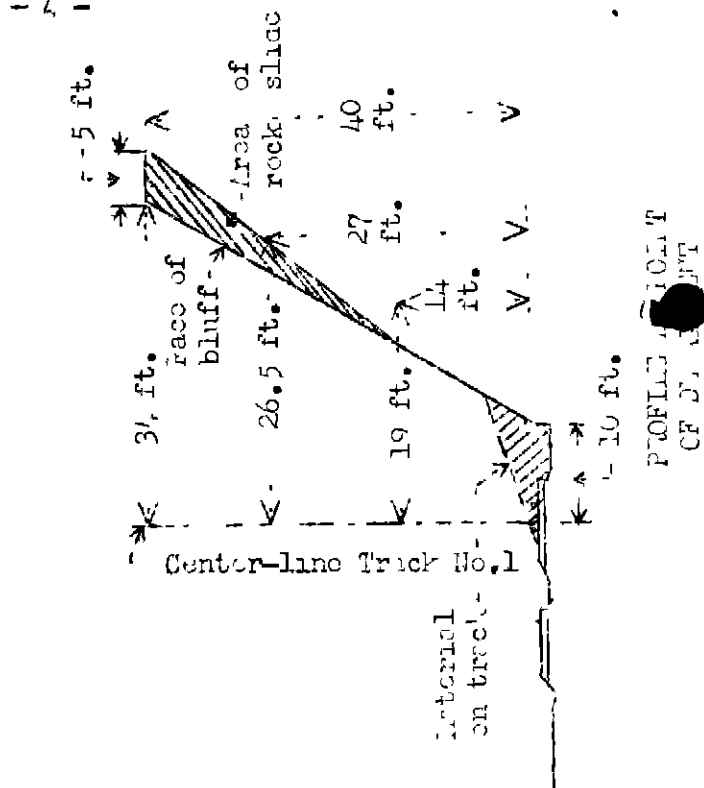
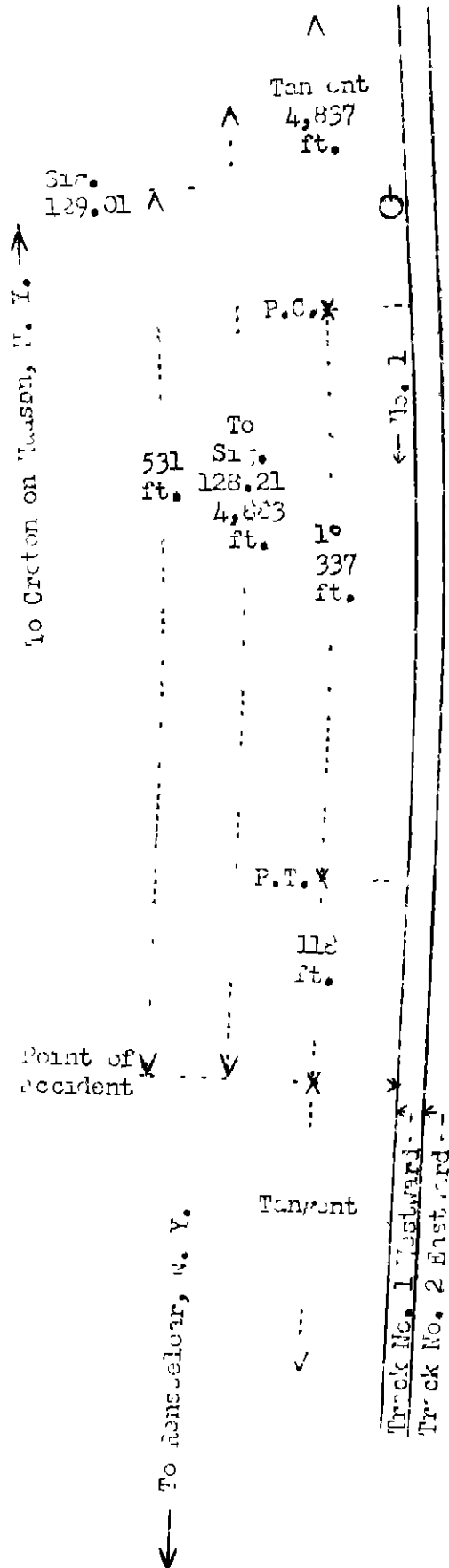
Accident near Schodack Landing, N. Y., on April 2, 1955,
caused by a rock slide.

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REPORT OF THE COMMISSION

CLARKE, Commissioner.

On April 2, 1955, there was a derailment of a passenger train on the New York Central Railroad near Schodack Landing, N. Y., which resulted in the death of 1 train-service employee, and the injury of 18 passengers, 6 Pullman Company employees, 8 dining-car employees, and 2 train-service employees. This accident was investigated in conjunction with representatives of the New York Public Service Commission.

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



- Croton on Hudson, N. Y.
39.14 mi.
- SS 90 Stayvesant
5.37 mi.
- Point of accident
1.27 mi.
- Schodack Landing
11.97 mi.
- Rensselaer, N. Y.

Report No. 3621
New York Central Railroad
Schodack Landing, N. Y.
April 2, 1955

Location of Accident and Method of Operation

This accident occurred on that part of the Hudson Division extending between Croton on Hudson and Rensselaer, N. Y., 107.75 miles. In the vicinity of the point of accident this is a double-track line, over which trains are operated by signal indications supplemented by an intermittent inductive automatic train-stop system. This division of the railroad follows the general course of the Hudson River, which flows southward. Timetable directions are east and west, and these directions are used in this report. The main tracks from south to north are designated as No. 2, eastward, and No. 1, westward. The accident occurred on track No. 1 at a point 94.51 miles west of Croton on Hudson and 1.27 miles east of the station at Schodack Landing. From the east on track No. 1 there are, in succession, a tangent 4,837 feet in length, a 1° curve to the right 337 feet, and a tangent 118 feet to the point of accident and a considerable distance westward. The grade is level.

The track structure of track No. 1 in this vicinity consists of 127-pound rail, laid new in 1935 on an average of 24 treated ties to the rail length. It is fully tie-plated with double-shoulder tieplates, spiked with two rail-holding spikes and two plate-holding spikes per tieplate, and is provided with 6-hole 36-inch joint bars and an average of 12 rail anchors per rail. It is ballasted with crushed stone to a depth of 27 inches below the bottoms of the ties.

In the vicinity of the point where the accident occurred the tracks are laid at the base of a cliff on the north bank of that portion of the river which is designated as Schodack Creek. The foot of the cliff is 10 feet north of the center-line of track No. 1. The cliff rises to a height of 40 feet above the level of the tops of the rails on a slope of about $3/4$ to 1. It is composed of stratified shale. The layers vary in thickness from 6 inches to several feet and slope northward at an angle of approximately 68 degrees to horizontal. The rock face of the cliff is devoid of vegetation, and there is between 6 inches and 1 foot of earth and top soil over the rock at the top of the cliff. A drainage ditch about 2 feet deep is located between the base of the cliff and track No. 1. At the point of accident the shore-line of the river is 91 feet south of the center-line of track No. 1. In this vicinity the mean water level of the river is approximately 12 feet below the level of the tracks.

Automatic signals 128.21 and 129.01, governing west-bound movements on track No. 1, are located, respectively, 4,883 feet and 531 feet east of the point of accident.

In the vicinity of the point of accident the maximum authorized speed for passenger trains is 75 miles per hour.

Description of Accident

No. 1, a west-bound first-class passenger train, consisted of Diesel-electric units 4044 and 4067, coupled in multiple-unit control, one baggage-dormitory car, seven sleeping cars, one lounge car, one dining car, three coaches, and one lounge-observation car, in the order named. The third car was of conventional all-steel construction. The other cars were of lightweight steel construction and were equipped with tightlock couplers. This train passed Signal Station 90 at Stayvesant, 89.14 miles west of Croton on Hudson and the last open office, at 5:58 p. m., 1 minute later, and while moving at a speed of 77 miles per hour it struck a rock slide at a point 94.51 miles west of Croton on Hudson and 1.27 miles east of the station at Schodack Landing. The locomotive and the first 10 cars were derailed.

A separation occurred between the Diesel-electric units. The first unit turned end for end and stopped on its right side in the river, about 21 feet south of the shore-line and parallel to it. The front end of this unit was 425 feet west of the point of derailment and approximately 50 feet south of track No. 1. The trucks of the unit were displaced and stopped in the river at points, respectively, 325 feet and 415 feet west of the point of accident. The second Diesel-electric unit stopped with the front end 817 feet west of the point of derailment. The coupler at the rear end of the fifth car was broken. There was no separation in the train at this point, and the other units of the train remained coupled. The derailed equipment, with the exception of the first Diesel-electric unit, stopped approximately in line with the track and from 10 feet north to 20 feet south of the center-line of track No. 1. None of this equipment overturned. The second, third, and fourth cars leaned toward the north at angles of from 30 to 45 degrees. The Diesel-electric units and the first eight cars were badly damaged, and the ninth and tenth cars were considerably damaged.

The engineer was killed. The fireman and the front brakeman were injured.

The weather was clear and it was dusk at the time of the accident, which occurred about 6:03 p. m.

Discussion

As No. 1 was approaching the point where the accident occurred the speed was 77 miles per hour, as indicated by the tape of the speed-recording device. The headlight was lighted brightly. The brakes of this train had been tested and had functioned properly when used en route. The engineer and the fireman were maintaining a lookout ahead from their respective positions in the control compartment at the front of the locomotive. The members of the train crew were in various locations in the cars of the train. Because of track curvature and a pole line adjacent to the track on the inside of the curve the view of the point of accident from the east is restricted to a distance of about 840 feet. The fireman said that signals 128.21 and 129.01 each indicated Proceed and that he and the engineer called the indications. He said that he saw the slide on the track at a distance of approximately 800 feet. He called a warning at approximately the same time that the engineer moved the brake valve to emergency position. The derailment occurred before the speed of the train was appreciably reduced. The conductor and the baggageman said that the emergency application of the brakes was made immediately before the derailment occurred.

Examination of the track after the accident occurred disclosed that approximately 80 cubic yards of shale had become dislodged from near the top of the cliff and had fallen into the ditch at the base of the cliff and upon track No. 1. The slide extended over the rails of track No. 1 to a maximum depth of about 3 feet and covered the rails throughout a distance of 64 feet.

Examination of the cliff after the accident occurred disclosed that there was no seepage and that the face of the cliff was dry. Apparently the slide was the result of weathering which had taken place over a long period of time. This line was constructed in 1851. No records of previous slides at this point could be found. The division engineer said that older employees informed him that a slide had occurred at this point in 1922, but details as to its size were not known. In this territory it is the practice for maintenance-of-way forces to inspect cliffs and cuts after severe storms.

The cliff at the point of accident was last inspected by these forces on March 24 and 25, 1955, after a protracted rainfall. No defective condition was found. The division engineer and the supervisor of track inspected this territory from the rear end of a passenger train on March 30, 1955, and no defective condition was observed. A section force twice passed the point where the accident occurred on April 1, 1955, and made no report of a defective condition. No. 41, a west-bound passenger train, passed the point of accident on track No. 1 about 4:49 p. m., approximately 1 hour 15 minutes before the accident occurred, and No. 36, an east-bound passenger train, passed that point on track No. 2 about 5:28 p. m., approximately 35 minutes before the accident occurred. Members of the crews of these trains observed no unusual condition in the vicinity of the point of accident.

Cause

This accident was caused by a rock slide.

Dated at Washington, D. C., this ninth day of May, 1955.

By the Commission, Commissioner Clarke.

(SEAL)

HAROLD D. MCCOY,
Secretary.