

INTERSTATE COMMERCE COMMISSION  
WASHINGTON

-----

INVESTIGATION NO. 2517  
THE NEW YORK, CHICAGO & ST. LOUIS RAILROAD  
COMPANY

REPORT IN RE ACCIDENT  
AT CONNEAUT YARD, OHIO, ON  
AUGUST 13, 1941

-----

SUMMARY

-----

Railroad: New York, Chicago & St. Louis

Date: August 13, 1941

Location: Conneaut Yard, Ohio

Kind of accident: Side collision

Trains involved: Freight : Freight

Train numbers: Extra 527 West : Third 98

Engine numbers: 527 : 629

Consist: 28 cars, caboose : 56 cars, caboose

Speed: 12 m.p.h. : 12 m.p.h.

Operation: Timetable, train orders and automatic  
block-signal system on double track;  
timetable and train orders on single  
track. Accident occurred within yard  
limits.

Track: Single; 0°30' curve; 0.51 percent  
descending grade eastward

Weather: Clear

Time: 12:55 p.m.

Casualties: 3 injured

Cause: Accident caused by failure properly  
to control speed of east-bound  
train moving within yard limits and  
approaching end of double track

INTERSTATE COMMERCE COMMISSION

-----  
INVESTIGATION NO. 2517

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

THE NEW YORK, CHICAGO & ST. LOUIS RAILROAD COMPANY

-----  
October 11, 1941

-----  
Accident at Conneaut Yard, Ohio, on August 13, 1941, caused by  
failure properly to control speed of east-bound train  
moving within yard limits and approaching end of double  
track.

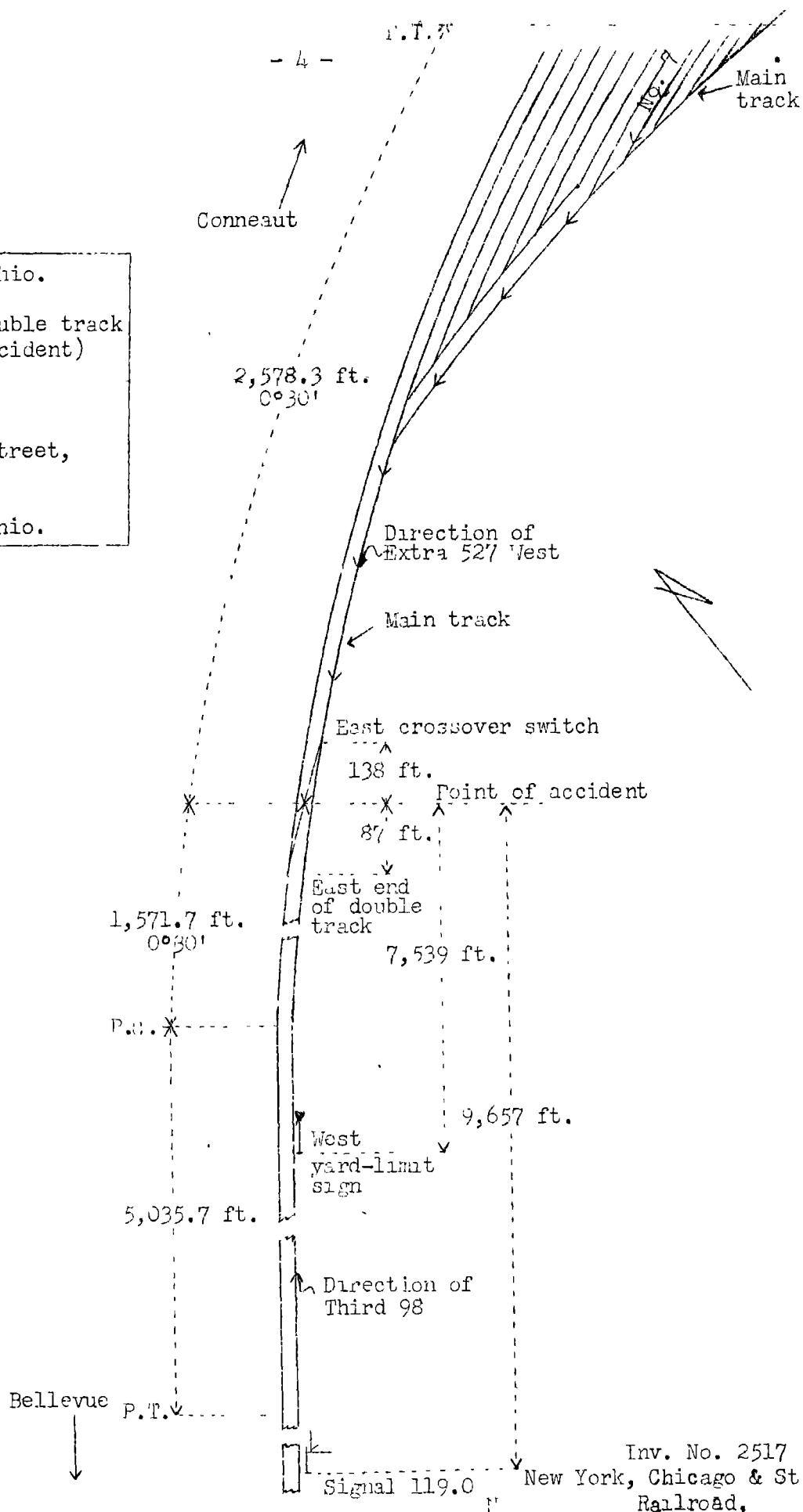
-----  
REPORT OF THE COMMISSION<sup>1</sup>

PATTERSON, Commissioner:

On August 13, 1941, there was a side collision between  
two freight trains on the New York, Chicago & St. Louis Rail-  
road at Conneaut Yard, Ohio, which resulted in the injury of  
three employees. This accident was investigated in conjunction  
with a representative of the Public Utilities Commission of  
Ohio.

-----  
<sup>1</sup> 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.

- o Conneaut, Ohio.  
1.1 mi.
- X East end double track  
(Point of accident)  
12.3 mi.
- o NP Tower  
52.6 mi.
- o East 75th Street,  
(Cleveland)  
66.2 mi.
- o Bellevue, Ohio.



Inv. No. 2517  
New York, Chicago & St. Louis  
Railroad,  
Conneaut Yard, Ohio,  
August 13, 1941

Location of Accident and Method of Operation

This accident occurred on the Cleveland Division, which extends between Bellevue and Conneaut, Ohio, a distance of 132.2 miles. The west end of Conneaut Yard and the east end of double track are located 1.1 miles west of Conneaut. On double track trains are operated by timetable, train orders and an automatic block-signal system, and on single track, by timetable and train orders. The east end of the automatic block-signal system on the eastward main track is 35 feet west of the east end of double track. A classification yard lies north of the single track. This yard is divided into an eastward and a westward yard. The eastward yard is adjacent to the single track and its west switch is 1,409 feet east of the east end of double track. Yard track No. 7 is located in the eastward yard and is separated from the single track by four other yard tracks. Movements of trains from the single track to the westward main track are made through a facing-point crossover; the east switch of this crossover is 225 feet east of the end of double track. The accident occurred within yard limits at a point 138 feet west of the east switch of the crossover.

As the point of accident is approached from the west there is a tangent 5,035.7 feet in length, which is followed by a  $0^{\circ}30'$  curve to the right 1,571.7 feet to the point of accident and 2,578.3 feet beyond. As the point of accident is approached from the east on yard track No. 7 and thence on the main track, there is a  $0^{\circ}30'$  curve to the left 2,578 feet in length, then a  $6^{\circ}12'47''$  turnout to the right 138 feet to the point of accident and 87 feet beyond. Throughout a distance of 10,458 feet west of the point of accident the grade for east-bound trains varies between 0.163 and 0.601 percent descending eastward and is 0.51 percent at the point of accident.

Operating rules read in part as follows:

98. Trains must approach the ends of double track, \* \* \*, prepared to stop, unless the switches and signals are right and the track is clear. Where required by law trains must stop.

Time-table special instructions provide as follows:

-REGULATIONS IN YARDS-

1. GENERAL.

(a) Yard limits, Conneaut, \* \* \*, will extend to yard limit boards in each direction.

(b) All except first class trains must approach and pass through yard limits under full control.

\* \* \*

4. CONNEAUT YARD.

\* \* \*

(c) Second class and inferior trains must not proceed into the yard until given signal to do so.

(f) Eastbound second class and inferior trains and engines will approach crossover at east end MA Double (west end Conneaut Yard) under control and prepared to stop, expecting to find trains, engines and yard engines crossing over and will not proceed unless route is clear and they receive proceed hand signal with white flag by day and green light by night from switch-tender on ground.

In the vicinity of the point of accident the maximum authorized speed for east-bound freight trains is 30 miles per hour and for west-bound freight trains, 15 miles per hour.

The west yard-limit sign is located 7,539 feet west of the point of accident.

Description of Accident

Extra 527 West, a west-bound freight train, consisted of engine 527 headed east, 23 loaded and 5 empty cars and a caboose. After a terminal air-brake test was completed this train departed from track No. 7 at 12:50 p.m., according to statements of the crew, entered the single track, proceeded westward to the crossover at the end of double track, and while it was moving through the crossover at an estimated speed of 12 miles per hour the fifth car was struck by Third 98.

Third 98, an east-bound second-class freight train, consisted of engine 629, 56 loaded cars and a caboose. This train departed from Bellevue Yard, 131.2 miles west of Conneaut Yard, at 9:10 a.m., according to the train sheet, 3 hours 10 minutes late, passed NP Tower, 13.1 miles west of Conneaut Yard, at 12:36 p.m., 2 hours 4 minutes late, passed the west yard-limit sign at Conneaut Yard at a speed of about 50 miles per hour, according to statements of the crew, passed the end of double track, and while moving at an estimated speed of about 12 miles per hour it collided with Extra 527 West at the fouling point of the crossover. The brakes of this train had been tested and had functioned properly en route; however, at Cleveland, about 67 miles west of the point of accident, the air brake on the twenty-ninth car was cut out because of a defective brake beam.

There was no condition of the engine of this train that distracted the attention of the crew or obscured their vision. Because of track curvature and telegraph poles adjacent to the track, the view from the right side of an east-bound engine of the point where the accident occurred was restricted to a distance of 1,950 feet.

The left side of the fifth and sixth cars of Extra 527 West were scraped and the rear truck of the sixth car was derailed. The seventh to tenth cars, inclusive, were derailed and stopped, badly damaged, in various positions on the crossover. The front truck of the eleventh car was derailed. Engine 629 was derailed and stopped, headed north, on its right side across the crossover and at right angles to it. This engine stopped on top of the tenth car of Extra 527 and 120 feet east of the point of collision. The pilot, engine truck, and left cylinder were demolished. The cab was crushed and shifted forward on the boiler. The tender was derailed and stopped, headed south, on its left side, across the main track and just west of the engine. The first car was derailed to the left but remained upright. The second car was derailed but remained upright and in line with the track. Both of these cars were badly damaged. The rear coupler and the end-sill of the eighteenth car were torn off and the center-sill was buckled. The nineteenth car was derailed and demolished. The twentieth car was derailed and stopped, badly damaged, on top of the wreckage of the nineteenth car.

The weather was clear at the time of the accident, which occurred at 12:55 p.m.

The employees injured were the engineman, the fireman and the front brakeman of Third 98.

### Discussion

According to the operating rules, all trains must approach the end of double track and be prepared to stop unless the switches are properly lined and the way is clear. The timetable instructions governing operation within the yard limits provide that all except first-class trains must approach and move within yard limits under control, that east-bound second-class and inferior trains and engines must approach the end of double track at the west end of Conneaut Yard under control and be prepared to stop clear of the fouling point of the crossover if trains or engines are moving through the crossover, and that east-bound second-class and inferior trains and engines must not proceed beyond the clearance point of the crossover unless the route is lined, the way is clear, and the switchtender gives a proceed signal. All members of both crews involved understood these requirements. They had been examined on operating rules during the past six months.

The switchtender lined the route for Extra 527 West to move from yard track No. 7 to the single track and then to the westward main track. He gave a proceed signal, which authorized this train to make that movement. Since no first-class east-bound train was due for several hours, Extra 527 was not required to provide flag protection. Third 98, a second-class train, was required to move under control within yard limits and to approach the end of double track prepared to stop clear of the fouling point of the crossover unless the route was lined and a signal to proceed was given by the switchtender. According to the statement of the engineman of Third 98, as his train was approaching the point where the accident occurred, the throttle was open and the speed was about 50 miles per hour. He was maintaining a lookout ahead and there was no condition of the engine to distract his attention or to obscure his vision. At a point about 7,000 feet west of the crossover he made a 10-pound brake-pipe reduction, which was not released. About 4,200 feet west of the crossover the speed was about 35 or 40 miles per hour and he made a further brake-pipe reduction of 7 pounds. About 1,300 feet west of the crossover the speed was reduced to approximately 20 miles per hour. When the engine was about 790 feet west of the crossover the engineman observed that Extra 527 was moving through the crossover. He closed the throttle, moved the brake valve to emergency position, and opened the sander valve; however, the distance was not sufficient for stopping short of the fouling point of the crossover. According to the statement of the fireman, the first and the second brake-pipe reductions were made at points 5,590 feet and 1,300 feet west of the crossover. According to the statement of the conductor the brakes were applied at a point about 6,500 feet west of the end of double track and remained applied throughout that distance. The engineman said that because of the previous service application and only two cars in the train equipped with



AB valves, the emergency application was not effective. The brakes had controlled the speed of the train properly at all points where they were used en route. The engineman said he probably misjudged the speed of his train; however, the train entered the yard limits at a speed of 50 miles per hour and action was not taken to control the speed until the engine reached a point 500 feet east of the west yard-limit sign. Had the speed of Third 98 been controlled within yard limits so that the train could have been stopped clear of the end of double track this accident would have been averted.

Cause

It is found that this accident was caused by failure properly to control the speed of the east-bound train moving within yard limits and approaching the end of double track.

Dated at Washington, D.C., this eleventh day of October, 1941.

By the Commission, Commissioner Patterson.

(SEAL)

W. P. BARTEL,  
Secretary.