INTERSTATE COMMERCE COMMISSION

WASHINGTON

REPORT NO. 3417

THE NEW YORK, CHICAGO AND ST. LOUIS RAILROAD COMPANY

IN RE ACCIDENT

AT FAIRVIEW, PA., ON

JULY 8, 1951

SUMMARY

Date:	July 8, 1951
Railroad:	New York, Chicago and St. Louis
Location:	Fairview, Pa.
Kind of accident:	Derailment
Train involved:	Freight
Train number:	39
Engine number:	779
Consist:	73 cars, caboose
Speed:	48 m. p. h.
Operation:	Signal indications
Track:	Single; tangent; 0.3 percent descending grade westward
Weather:	Clear
Time:	2:10 a. m.
Casualties:	1 killed
Cause:	Broken journal

INTERSTATE COMMERCE COMMISSION

REPORT NO. 3417

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

THE NEW YORK, CHICAGO AND ST. LOUIS RAILROAD COMPANY

September 23, 1951

Accident at Fairview, Pa., on July 8, 1951, caused by a broken journal.

REPORT OF THE COMMISSION[1]

PATTERSON, Commissioner:

On July 8, 1951, there was a derailment of a freight train on the New York, Chicago and St. Louis Railroad at Fairview, Pa., which resulted in the death of one trespasser.

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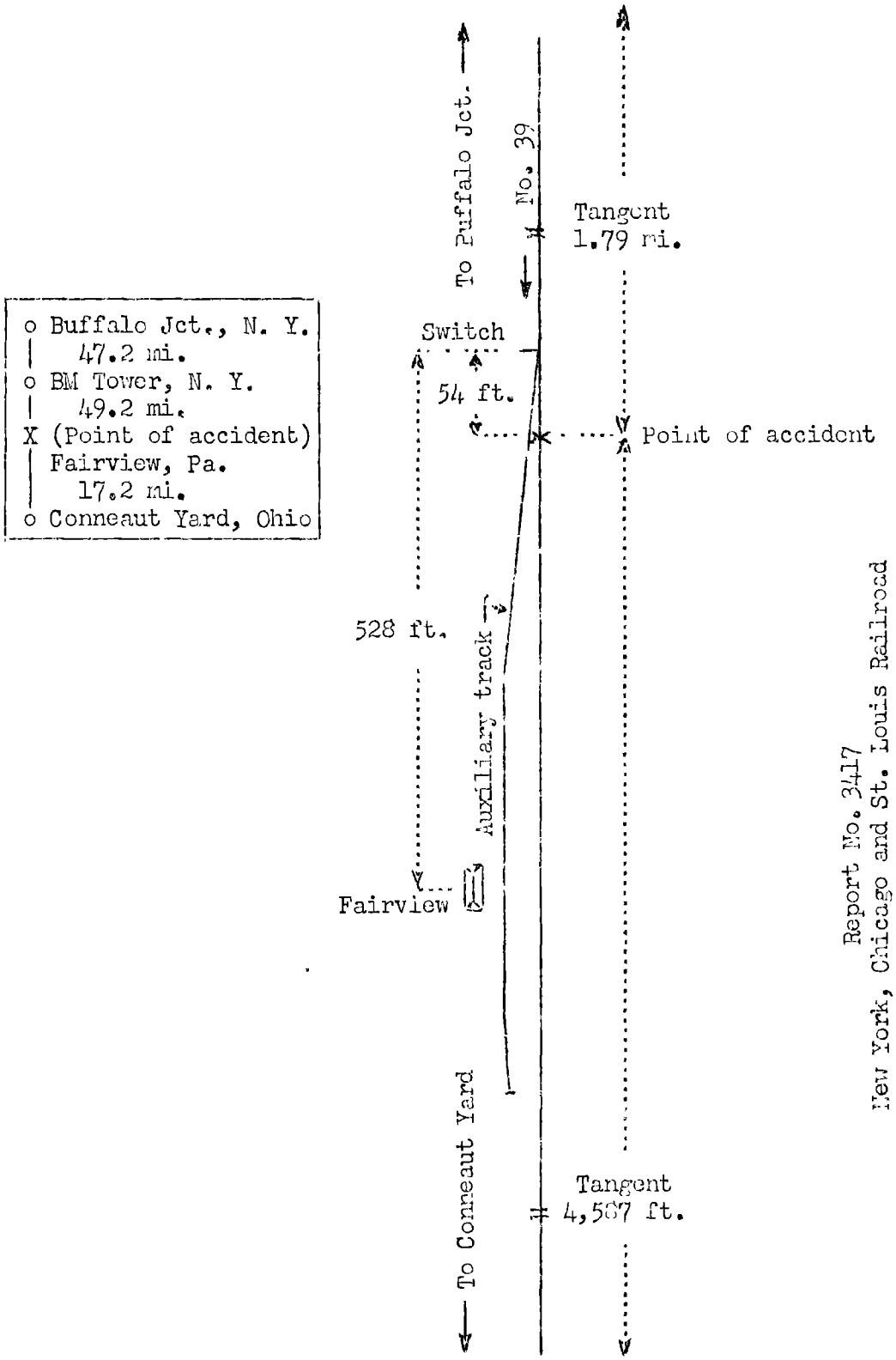
[1] Under authority of section 17 (2) of the Interstate Commerce Act the above-entitled proceeding was referred by the Commission to Commissioner Patterson for consideration and disposition.



Report No. 3417
New York, Chicago and St. Louis Railroad
Fairview, Pa.
July 8, 1951

Location of Accident and Method of Operation

This accident occurred on that part of the Buffalo Division extending between Buffalo Jct., N. Y., and Conneaut Yard, Ohio, 113.6 miles. In the vicinity of the point of accident this is a single-track line, over which trains are operated by signal indications. At Fairview, 96.4 miles west of Buffalo Jct., an auxiliary spur track parallels the main track on the north. The switch of this track is 528 feet east of the station at Fairview and is facing-point for west-bound movements. The accident occurred on the main track at a point 54 feet west of the switch. From the east there is a tangent 1.79 miles to the point of accident and 4,537 feet westward. In the vicinity of the point of accident the grade is 0.3 percent descending westward.

The track structure consists of 131-pound rail, 39 feet in length, laid on an average of 24 ties to the rail length. It is fully tieplated with double-shoulder tieplates, single-spiked, and is provided with 6-hole 36-inch toeless joint bars. It is ballasted with slag.

This carrier's operating rules read in part as follows:

ENGINEMEN.

* * *

They will, when running look back frequently for defects on cars in their trains, and to see that no portion of the train has become detached or derailed.

* * *

OPERATORS * * *

* * *

They will station themselves on station platform or outside of tower and observe cars in all passing trains for * * * defects, exchanging signals with trainmen on rear of train.

* * *

The maximum authorized speed for freight trains was 60 miles per hour.

Description of Accident

No. 39, a west-bound third-class freight train, consisted of engine 779, 73 cars and a caboose. This train departed from Buffalo Jct. at 11:10 p. m., 6 hours 10 minutes late, and passed BM Tower, the last open office, 49.2 miles east of Fairview, at 12:37 p. m., 6 hours 17 minutes late. While it was moving at a speed of 48 miles per hour the thirty-eighth to the fifty-eighth cars, inclusive, were derailed in the vicinity of the auxiliary-track switch at Fairview.

The thirty-eighth to the fifty-sixth cars, inclusive, were overturned and stopped in various positions on or adjacent to the track. The other two derailed cars stopped upright and in line with the track. The thirty-eighth, thirty-ninth, forty-fifth, forty-eighth, and the fifty-first to the fifty-fourth cars, inclusive, were destroyed. The other derailed cars were badly damaged except the fifty-eighth car, which was not damaged.

The weather was clear at the time of the accident, which occurred about 2:10 a. m.

The thirty-eighth car, P.R.R. 863118, was a gondola with steel underframe and wooden superstructure. It was built in 1912. It was 43 feet in length over the end sills, 10 feet 7/8 inch wide and 6 feet 4-11/16 inches high. Its stencilled lightweight and load limit were, respectively, 45,600 pounds and 123,400 pounds. When the accident occurred the lading consisted of pig-iron, and the total weight of the car and lading was 160,820 pounds. The trucks were of the 4-wheel type, having 5-1/2-inch by 10-inch journals, steel wheels, and cast steel U-section side frames.

Discussion

As No. 39 was approaching the point where the accident occurred the speed was 48 miles per hour in territory where the maximum authorized speed was 60 miles per hour. The enginemen and the front brakeman were in the cab of the engine. The conductor, the flagman and the swing brakeman were in the caboose. The train was riding smoothly when the brakes became applied in emergency as a result of the derailment.

Examination of the track disclosed that throughout a distance of about 4,700 feet east of the point of derailment, spikes, joint bars and the tops of ties were marked at irregular intervals. The first flange mark appeared on a tie inside the south rail at a point 54 feet west of the auxiliary-track switch. The ties then were flange marked diagonally toward the north rail a distance of 130 feet and then westward inside the north rail a distance of 72 feet to the point where the general derailment occurred. From this point westward the main track was destroyed throughout a distance of 312 feet. The north rail of the auxiliary-track turnout had been struck at a point 54 feet west of the switch and was displaced westward.

Examination of the equipment after the accident occurred disclosed that the right front journal of the front truck of the thirty-eighth car was broken, and that the truck side had dropped sufficiently to be in contact with the north rail. At the time of the examination, about 2 hours after the accident occurred, the journal was not hot and the packing was not burned. No other defective condition which could have caused the derailment was found.

The failure of the journal involved consisted of an irregular break at a point 7-5/8 inches inward from the collar. A circumferential seam, apparently caused by overheating at some previous time, was found at the point of fracture. The axle involved was provided with 5-1/2 by 10-inch journals. The diameter of the journal adjacent to the collar was 5-9/32 inches, and at the point of failure it was 5-3/8 inches. The end of the journal remaining attached to the wheel assembly was worn smooth by contact with the journal box. The top of the journal box showed corresponding wear and distortion from friction-generated heat. Examination of the companion journal disclosed a circumferential seam 1-1/2 inches in length at a point 3-3/4 inches inward from the collar. There were no available records to indicate when the wheels and the axle involved were applied to the car. The outer portion of the failed journal bore the marking, "2-07-Buff." There was no other mark on the axle and no available record of the carrier to indicate the date or place of manufacture.

The thirty-eighth car of No. 39, P.R.R. 863118, was loaded at Palmerton, Pa., about 439 miles east of the point of accident, on June 27, 1951. It was destined to Massillon, Ohio, via the Chestnut Ridge Railway, the Lehigh and New England Railroad, the Delaware, Lackawanna and Western Railroad and the New York, Chicago and St. Louis Railroad. The lading consisted of pig iron. On July 1, while on the D.L.& W. the journal which later failed became overheated

and the car was detached from the train for repairs at East Bethany, N. Y., 41 miles east of Buffalo. An inspection by a member of the mechanical force disclosed that the bearing metal had disintegrated and that the packing had burned as a result of overheating. A new journal bearing was applied and the journal box was repacked and lubricated. The employee who made these repairs said that the journal appeared to be rough. The car was then moved to the D.L.& W. shops at East Buffalo, the nearest repair point, for repairs. At the D.L.& W. shops the journal bearing was removed and the journal was inspected by members of the mechanical force. No defective condition was found. The journal bearing was re-applied and the journal box repacked and lubricated before the car was released. The car was accepted in interchange by the N.Y.C.& St.L. at Buffalo, at 7:35 a. m., July 6. The records of this carrier indicate that this car was inspected by members of the mechanical force of the N.Y.C.& St.L., who found an improper side-bearing clearance. The car was then moved to a repair track where center-plate liners were applied. While the car was on the repair track, the journals and the packing were inspected and no defective condition was found. The car was released after the repairs were completed at noon, July 7. Later that day it was assembled in the train of No. 39 and was last inspected a short time before No. 39 departed from Buffalo Jct. at 11:10 p. m., at which time no defective condition was found.

The members of the crew of No. 39 said that they made frequent observations of the equipment throughout the trip, and observed no defective condition. The operators at seven offices located between Buffalo Jct. and the point of accident were observed by the members of the crew to be inspecting the train as it passed their respective offices. None of the operators gave signals to members of the crew of No. 39 to indicate any defective condition of the train.

Cause

It is found that this accident was caused by a broken journal.

Dated at Washington, D. C., this twenty-eighth day of September, 1951.

By the Commission. Commissioner Patterson.

(SEAL)

W. P. BARTEL

Secretary.