INTERSTATE COMMERCE COMMISSION

WASHINGTON

REPORT NO 3312

LOUISVILLE AND NASHVILLE RAILROAD COMPANY

IN RE ACCIDENT

NEAR LONG BEACH, MISS., ON

FEBRUARY 18, 1950

SUMMARY

Date.	February 18, 1950
Railroad	Louisville and Nashville
Location	Long Beach, Miss.
Kind of accident:	Derailment
Train involved:	Passenger
Train number:	99
Engine number.	Diesel-electric units 777 and 775
Consist.	19 cars
Estimated speed	55 m. p. h.
Operation:	Timetable, train orders, automatic block-signal, cab-signal and train-stop systems
Track:	Single, tangent; level
Weather	Hazy
Time:	7 a. m
Casualties	82 injured
Cause.	Broken rail

INTERSTATE COMMERCE COMMISSION

REPORT NO. 3312

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

LOUISVILLE AND NASHVILLE RAILROAD COMPANY

March 31, 1950

Accident near Long Beach, Miss., on February 18, 1950, caused by a broken rail.

REPORT OF THE COMMISSION[1]

PATTERSON, Commissioner:

On February 18, 1950, there was a derailment of a passenger train on the Louisville and Nashville Railroad near Long Beach, Miss , which resulted in the injury of 79 passengers and 4 dining-car employees.

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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.

Sketch showing broken rail - west side of track

Sketch of end views showing locations of transverse fissures

Report No. 1312
Louisville and Nashville Railroad
Long Beach, Miss.
February 13, 1950

Location of Accident and Method of Operation

The accident occurred on the west end of the Montgomery, New Orleans and Pensacola Division extending between [illegible], Ala., and New Orleans, La., 142.11 miles. In the vicinity of the point of accident this is a single-track line, over which trains are operated by timetable, train orders and the automatic block-signal system, supplemented by an automatic train-stop and cab-signal system of the continuous-inductive type. The accident occurred on the main track 60.2 miles south of Sibert and 2.05 miles south of the station of Long Beach. The main track is tangent throughout a distance of 5.28 miles immediately north of the point of accident and 5.05 miles southward. The grade is practically level.

In the vicinity of the point of accident the track structure is laid on a 4-foot fill, and consists of 132-pound rail, 39 feet in length, laid new in June, 1950, on an average of 22 treated ties to the rail length. It is fully tie-plated with single-shoulder tie plates, single-spiked, and is provided with 6-hole 24-inch joint bars and an average of 6 rail anchors per rail. It is ballasted with crushed slag to a depth of 18 inches below the tops of the ties.

Automatic signal 7441, governing south-bound movements, is located 2,904 feet north of the point of accident.

The maximum authorized speed for the train in this accident was 70 miles per hour.

Description of Accident

No. 59, a south-bound first-class passenger train, consisted of Diesel-electric units 777 and 775, coupled in multiple unit control, one baggage car, one mail car, one baggage car, one sleeping car, three coaches, five tourist cars, one dining car, two sleeping cars, one coach and three sleeping cars, in the order named. All cars were of steel construction. They were equipped with conventional type couplers except the seventh car, which was equipped with a tightlock coupler at each end. This train departed from Mobile, 78.46 miles north of Long Beach, at 8:15 a. m., 14 minutes late, departed from Gulfport, the last open office, 8.86 miles north of the point of accident, at

a.m., 1 hour 32 minutes late, passed automatic signal No. 39, which indicated Proceed, and while moving at an estimated speed of 55 miles per hour the third to the fourteenth cars, inclusive, were derailed.

Separations occurred at each end of the fifth, sixth and seventh cars. The Diesel-electric units and the first four cars stopped with the front end of the first Diesel-electric unit 1,867 feet south of the point of derailment. The third car remained upright on the roadbed. The fourth car stopped approximately 5 feet west of the center-line of the track and almost parallel to it. The fifth car stopped 65.4 feet south of the point of derailment, with its south end 15.5 feet and its north end 3 feet west of the track. The sixth car stopped on its side, against the north end of the fifth car, and at an angle of 80 degrees to the track. The seventh car stopped against the north end of the sixth car and at an angle of 75 degrees to the track. Its north end was 16 feet west of the track. The eighth to the nineteenth cars remained coupled and in line. The south end of the eighth car stopped 26.5 feet west of the track, and the north end of the twelfth car stopped on the roadbed. The tenth to the eleventh cars, inclusive, were considerably damaged, and the third, twelfth and thirteenth cars were slightly damaged.

The weather was hazy and it was daylight at the time of the accident, which occurred about 7 a. m.

Discussion

No. 39 was moving on tangent track at an estimated speed of 55 miles per hour, in territory where the maximum authorized speed was 70 miles per hour, when the derailment occurred. As the train was approaching the point where the accident occurred the enginemen were maintaining a lookout ahead from the control compartment of the first Diesel-electric unit. The conductor and the train porter were in the thirteenth car and the flagman was in the nineteenth car. Signal 7441, governing south-bound movements into the block in which the accident occurred, indicated Proceed. Before the derailment occurred the engine and the cars were riding smoothly, and there was no indication of defective equipment or track, nor of any obstruction having been on the track.

After the accident occurred a broken rail was found on the west side of the track. This rail was broken into many pieces, 22 of which were recovered. The first break occurred at a point 3.73 feet south of the receiving end of the rail. The second, third and fourth breaks occurred at points 2.10 feet, 3.32 feet and 4.52 feet, respectively, from break No. 1. Then 15.19 feet of the rail was broken into at least 15 pieces varying in length from 0.37 feet to 3.52 feet. At breaks Nos. 2 and 4 there were transverse fissures which covered, respectively, 35 percent and 25 percent of the cross-sectional area of the head of the rail. Neither of these fissures extended to the surface of the rail. The other breaks were new and apparently occurred as a result of the derailment. Apparently the rail failed when the front portion of the train passed over it, then the broken pieces became displaced and the derailment followed. This rail was manufactured by the Tennessee Coal, Iron and Railroad Company in April, 1930. The heat number was 837204, Letter A, Ingot No. 12.

The track in this vicinity was last inspected by the track supervisor and by the section foreman from a track motor-car about 22 hours before the accident occurred, and no defective condition was observed. A rail-defect detector car was operated over this line on September 16, 1949. No defective condition was indicated in the rail in question or any other rail bearing the same heat number.

Cause

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

Dated at Washington, D. C., this thirty-first day of March, 1950.

By the Commission, Commissioner Patterson.

(SEAL)

W. P. BARTEL,

Secretary.