

INTERSTATE COMMERCE COMMISSION
WASHINGTON

REPORT NO. 3363
LOUISVILLE AND NASHVILLE RAILROAD COMPANY
IN RE ACCIDENT
AT NORTH HOWELL, IND., ON
SEPTEMBER 10, 1950

SUMMARY

Date: September 10, 1950 .
Railroad: Louisville and Nashville
Location: North Howell, Ind.
Kind of accident: Derailment
Train involved: Passenger
Train number: 155
Engine number: 266
Consist: 7 cars
Estimated speed: 20 m. p. h.
Operation: Timetable, train orders and
automatic block-signal system
Tracks: Double; tangent; level
Weather: Raining
Time: 3:47 a. m.
Casualties: 2 killed
Cause: Damaged track resulting from previous
derailment

INTERSTATE COMMERCE COMMISSION

REPORT NO. 3363

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

LOUISVILLE AND NASHVILLE RAILROAD COMPANY

November 8, 1950

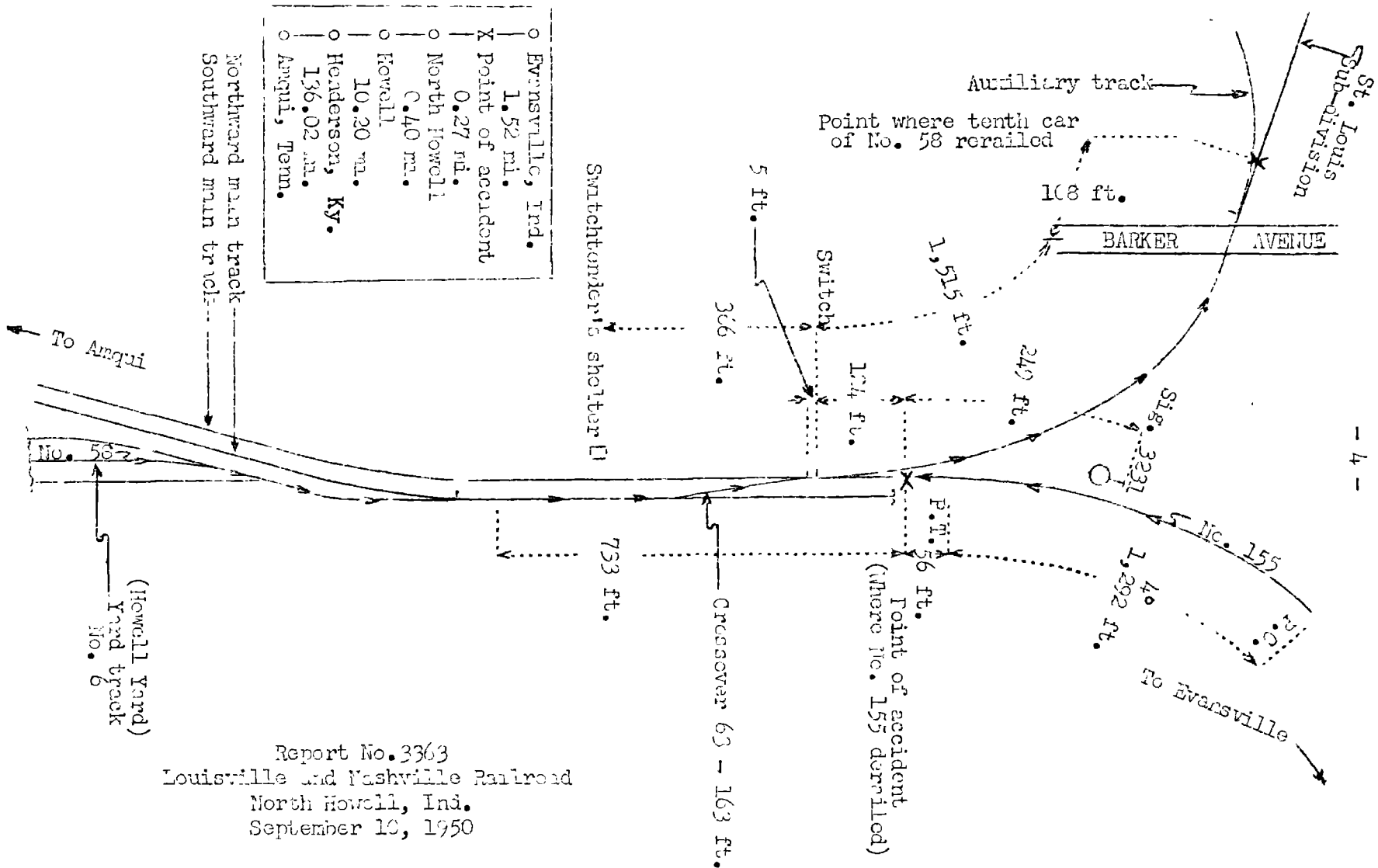
Accident at North Howell, Ind., on September 10, 1950,
caused by damaged track resulting from a previous
derailment.

REPORT OF THE COMMISSION¹

PATTERSON, Commissioner:

On September 10, 1950, there was a derailment of a
passenger train on the Louisville and Nashville Railroad
at North Howell, Ind., which resulted in the death of two
employees.

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



Location of Accident and Method of Operation

This accident occurred on that part of the Evansville Division extending between Evansville, Ind., and Anqui, Tenn., 143.41 miles. In the vicinity of the point of accident this is a double-track line, over which trains are operated by timetable, train orders and an automatic block-signal system. From west to east the main tracks are designated as southward and northward. That part of the Evansville Division extending between North Howell and St. Louis, Ill., a single-track line, forms a junction with the southward main track at a point 1.35 miles south of Evansville. The junction switch is trailing-point for south-bound movements on the southward main track. Crossover 63 connects the northward and the southward main tracks, and the north switch is located 5 feet south of the junction switch. This crossover is 183 feet in length, and the switches are facing-point for movements with the current of traffic. The switches of crossover 63 and the junction switch, each of which is hand-operated, are in the charge of a switchtender stationed at North Howell. Yard tracks of Howell Yard are located east of the northward main track and south of crossover 63. The accident occurred on the southward main track at a point 124 feet north of the junction switch and 1.52 miles south of the station at Evansville. From the north there are, in succession, a 4° curve to the left 1,232 feet in length, and a tangent 16 feet to the point of accident and 733 feet southward. The grade varies between 0.2 percent and 1.17 percent descending southward 1,200 feet and then is practically level 100 feet to the point of accident.

The track structure of the southward main track consists of 100-pound rail, 39 feet in length, rolled in 1935 and laid in its present location in 1949 on an average of 22 treated ties to the rail length. It is fully tieplated with single-shoulder tieplates, single-spiked, and is provided with 4-hole 24-inch head-contact toeless joint bars, an average of 5 rail anchors per rail and 3 gage rods per rail length. It is ballasted with cinders to a depth of 12 inches below the bottoms of the ties.

Automatic block signal 3231, governing south-bound movements on the southward main track, is located 249 feet north of the point of accident. This signal is of the color-light type, displays three aspects, and is approach-lighted.

The maximum authorized speed for the train involved was 60 miles per hour.

Description of Accident

No. 155, a south-bound first-class passenger train, consisted of engine 266, two baggage cars, one baggage-express car, one baggage-mail-express car, two coaches and one sleeping car, in the order named. All cars were of all-steel construction except the fourth car, which was of steel-underframe construction. This train departed from Evansville at 3:44 a. m., 54 minutes late, and while moving on the southward main track at an estimated speed of 20 miles per hour it was derailed at a point 124 feet north of the junction switch at North Howell.

The engine and the tender, the first two cars and the front truck of the third car were derailed. The engine and the tender remained coupled, overturned to the left, and stopped diagonally across the northward main track and 238 feet south of the point of accident. A separation occurred between the tender and the first car. The first car leaned about 15 degrees to the east, and the south end was across the northward main track. The south end of the second car fouled the northward main track. The third car stopped in line with the tracks. The equipment sustained only slight damage.

The engineer and the fireman were killed.

A light rain was falling at the time of the accident, which occurred at 3:47 a. m.

Discussion

As No. 155 was approaching the point where the accident occurred the enginemen were in the cab of the engine, the conductor was in the sixth car, the brakeman was in the fifth car and the flagman was on the rear platform of the rear car. The surviving members of the crew said that when the train was approaching North Howell the speed was about 20 miles per hour. Before the accident occurred the cars of the train were riding smoothly and there was no indication of defective equipment or track nor of any obstruction having been on the track.

Examination of the equipment of No. 155 after the accident occurred disclosed no defective condition which could have contributed to the cause of the accident.

Examination of the southward main track north of the point of accident disclosed no material variation in the gage, surface, and alinement. Beginning a short distance south of the frog of the southward main track and the single track,

flange marks were found on the ties between the rails of the southward main track and corresponding marks were found east of the east rail of the single track. The marks indicated that a truck had been partially crosswise the track. The east wheels of the derailed truck apparently struck the west rail of the southward main track near the heel of the frog. Both the frog and the rail were displaced several inches westward but the rail bonds were not broken. The marks then continued northward on the single-track line a distance of about 1,600 feet, where the wheels were rerailed at the frog of an auxiliary-track switch. South of the point of accident the track was considerably damaged as a result of the derailment of No. 155.

The last movement over crossover 63 before No. 155 was derailed was that of No. 58, a north-bound second-class freight train, en route to St. Louis. This train consisted of engine 1577, 40 cars, a caboose, and a Diesel-electric helper engine in backward motion, in the order named. About 3:10 a. m. it departed from a yard track of Howell Yard, east of the northward main track. While this train was moving through crossover 63 and the junction switch and throughout a considerable distance northward on the single track, the engineer and the front brakeman were in the cab of the engine, the conductor and the flagman were in the caboose, and the crew of the helper engine, except the flagman, were in the cab of the helper engine. The flagman alighted south of crossover 63. After No. 58 departed from North Howell, the switchtender lined the north switch of crossover 63 and the junction switch to their normal positions, and the flagman lined the switches in the northward main track to their normal positions, then both proceeded to the switchtender's booth located 361 feet south of the junction switch. The flagman remained at this point to protect the return movement of the helper engine.

While No. 58 was passing over Barker Avenue, about 900 feet north of the junction switch, a motorist stopped his car east of the crossing and waited for the train to clear the crossing. He observed that a car near the front of the train was derailed. While standing on Barker Avenue near the track he shouted a warning to the employees on the helper engine but was unable to attract their attention. After the train passed he immediately proceeded to a restaurant several blocks from the crossing and, about 3:20 a. m., reported the derailment by telephone to the yardmaster's office. The assistant yardmaster said that a few minutes later he called the switchtender at North Howell by telephone and inquired if he had observed anything unusual in the movement of No. 58.

The switchtender informed him that the movement of that train was normal when leaving the yard, then the assistant yardmaster called the train dispatcher by telephone and was informed by the dispatcher that nothing concerning No. 58 had been reported. The switchtender heard the conversation between the assistant yardmaster and the dispatcher, and said that the assistant yardmaster then informed him that someone had reported that one of the cars of No. 58 was derailed when that train passed Barker Avenue. He was instructed by the assistant yardmaster to make an inspection of the track north of the junction switch. He immediately proceeded toward the junction switch and, about the same time, he observed No. 155 approaching on the southward main track. The headlight was lighted brightly. When the engine was closely approaching signal 3231, two short blasts were sounded on the engine whistle. The derailment occurred immediately afterward.

The members of the crew of both No. 58 and the helper engine said they observed nothing unusual in the movement of the train. The helper engine was detached from No. 58 at Belknap, 5.28 miles north of North Howell, while the train was moving, and this engine immediately returned to North Howell. It was stopped a short distance north of the junction switch about 3:40 a. m. Each member of the crew said he did not hear the warning called by the motorist at Barker Avenue and did not see anyone giving stop signals at that point. Soon after the engine stopped at North Howell, the flagman proceeded from the switchtender's booth to the engine and informed the other members of the crew that a car of No. 58 had been derailed. However, No. 155 was derailed before an inspection of the track was made.

Examination of the equipment of No. 58 several hours after the accident occurred disclosed that the front truck of the tenth car had been derailed. This car was an all-steel box car, 42 feet 9 inches in length, and weighed 47,400 pounds. The load limit was 121,600 pounds. This car was loaded with phosphate rock in bags, which were evenly distributed over the floor of the car. The cargo weighed 60,400 pounds. The car was equipped with roller-type bottom side bearings, and the one on the right side of the rear truck was 4 inches in diameter. Some time before the day of the accident this bearing had been substituted for a bearing with a 3-inch roller, which was standard for the car. As a result, there was no side-bearing clearance on the rear end of the car, and a considerable portion of the weight was concentrated on the right rear and the left front side bearings.

Apparently, insufficient side-bearing clearance on the rear truck and the consequent unequal weight distribution prevented the truck from swiveling properly on the curved track and resulted in the derailment of this car. Because of damage to the track as a result of the derailment of No. 155, the exact point where the tenth car of No. 58 was derailed could not be determined.

The displacement outward of the west rail of the southward main track caused by the derailment of the tenth car of No. 58 resulted in the gage of that track being too wide for No. 155.

Cause

It is found that this accident was caused by damaged track resulting from a previous derailment.

Dated at Washington, D. C., this eighth day of November, 1950.

By the Commission, Commissioner Patterson.

(SEAL)

W. P. BARTEL,
Secretary.