

INTERSTATE COMMERCE COMMISSION
WASHINGTON

INVESTIGATION NO. 2973
LOUISVILLE AND NASHVILLE RAILROAD COMPANY
REPORT IN RE ACCIDENT
NEAR ALTRO, KY., ON
FEBRUARY 13, 1946

SUMMARY

Railroad: Louisville and Nashville
Date: February 13, 1946
Location: Altro, Ky.
Kind of accident: Derailment
Train involved: Freight
Train number: 81
Engine number: 1444
Consist: 92 cars, caboose
Estimated speed: 35 m. p. h.
Operation: Timetable and train orders
Track: Single; 8°40' curve; level
Weather: Raining
Time: 3:25 a. m.
Casualties: 2 killed; 1 injured
Cause: Train striking obstruction
on track

INTERSTATE COMMERCE COMMISSION

INVESTIGATION NO. 2973

IN THE MATTER OF MAKING ACCIDENT INVESTIGATION REPORTS
UNDER THE ACCIDENT REPORTS ACT OF MAY 3, 1910.

LOUISVILLE AND NASHVILLE RAILROAD COMPANY

February 28, 1946.

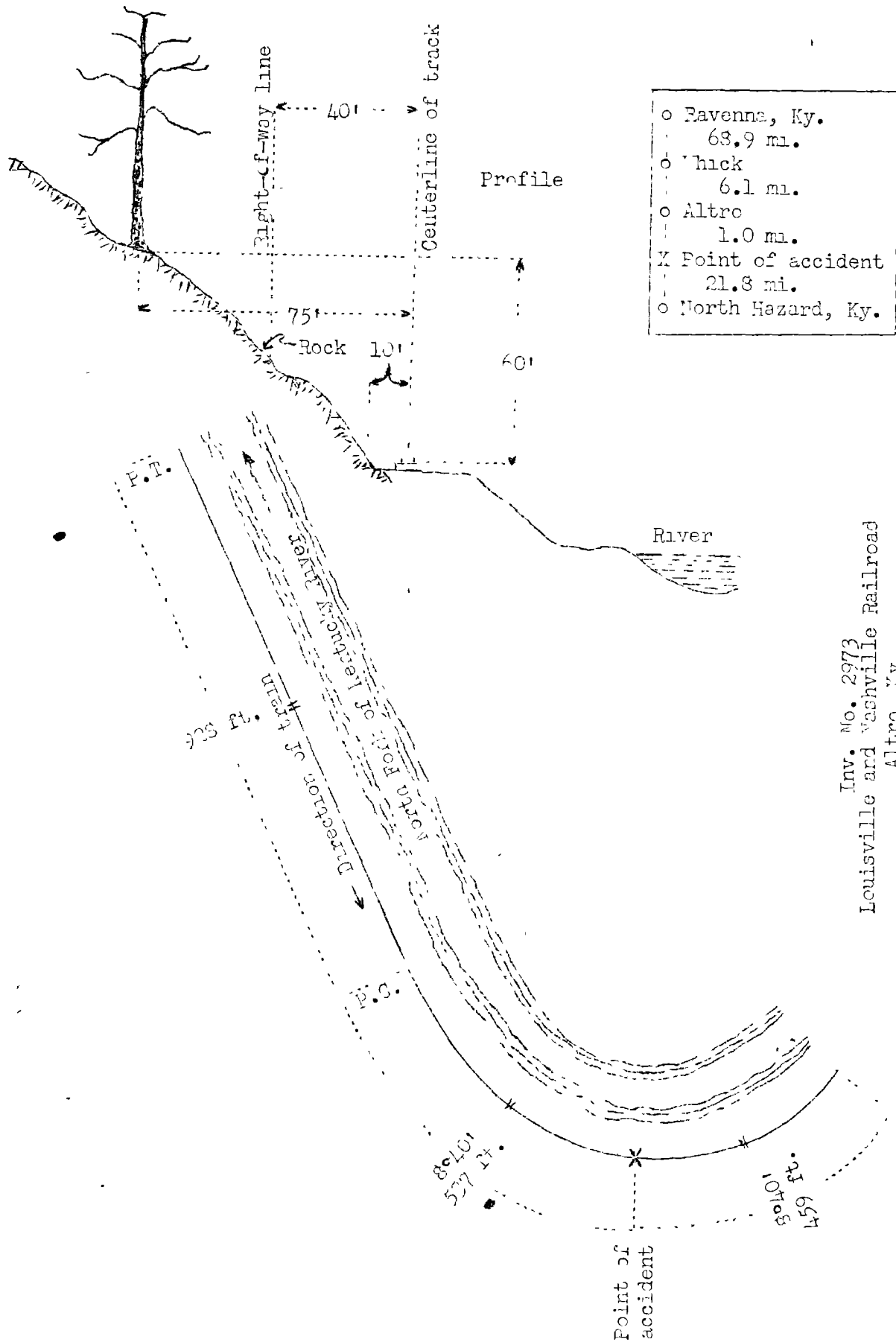
Accident near Altro, Ky., on February 13, 1946, caused by
a train striking an obstruction on the track.

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REPORT OF THE COMMISSION

PATTERSON, Commissioner:

On February 13, 1946, there was a derailment of a freight train on the Louisville and Nashville Railroad near Altro, Ky., which resulted in the death of two train-service employees, and the injury of one train-service employee.

¹Under 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.



Inv. No. 2973
 Louisville and Nashville Railroad
 Altro, Ky.
 February 13, 1946

Location of Accident and Method of Operation

This accident occurred on that part of the Eastern Kentucky Division extending between Ravenna and North Hazard, Ky., 97.8 miles, a single-track line in the vicinity of the point of accident, over which trains are operated by timetable and train orders. There is no block system in use. The accident occurred on the main track 76 miles south of Ravenna, at a point 1 mile south of the station at Altro. From the north there is a tangent 928 feet in length, which is followed by an 8°40' curve to the left 537 feet to the point of accident and 459 feet southward. The grade is level.

In the vicinity of the point of accident the track parallels the west bank of the North Fork of the Kentucky River, and is laid on a hillside cut. West of the track the wall of the cut slopes upward at an angle of about 60 degrees. The toe of the hillside cut is 10 feet west of the centerline of the track. At a point 60 feet above the level of the tops of the rails the wall is 75 feet horizontally distant from the centerline of the track. Eastward from the track the hillside slopes downward at an angle of about 45 degrees to the west bank of the river, which is about 20 feet below the level of the track. The formation of the slope consists mostly of rock.

On the curve the track structure consists of 100-pound rail, 39 feet in length, laid on an average of 24 ties to the rail length. It is fully tieplated, single-spiked inside and outside the high rail and double-spiked inside and outside the low rail, provided with an average of 4 gage rods and 4 rail anchors per rail length, and is ballasted with crushed rock to a depth of about 2 feet.

The maximum authorized speed for the train involved was 40 miles per hour.

Description of Accident

No. 81, a south-bound second-class freight train, consisting of engine 1444, 82 cars and a caboose, departed from Whick, the last open office, 6.1 miles north of Altro, at 2:59 a. m., 7 hours 9 minutes late, passed Altro and while moving at an estimated speed of 35 miles per hour the engine struck a tree which had fallen on the track about 1 mile south of Altro, and the engine and the first eight cars were derailed.

Engine 1444 stopped on its left side 60 feet east of the track, with the front end 280 feet south of the point of derailment. The derailed equipment was considerably damaged.

It was raining at the time of the accident, which occurred about 3:25 a. m.

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

Discussion

No. 81 was moving on an 8°49' curve to the left at a speed of about 35 miles per hour, in territory where the maximum authorized speed was 40 miles per hour, when the engine and the first eight cars were derailed. There was no defective condition of the engine prior to the accident, and there was no indication of dragging equipment. As No. 81 was approaching the point where the accident occurred, the headlight was lighted brightly. The enginemen and the front brakeman were maintaining a lookout ahead. Because of the 8°40' curve to the left the engineer could not see any portion of the track ahead of the engine. The first he was aware of anything being wrong was when he felt a sudden impact. Then he moved the brake valve to emergency position, but the derailment occurred before the train could be stopped. The fireman and the front brakeman were killed.

After the accident, two portions of the trunk of a tree were found near the track in the vicinity of the point of accident. One portion was 15 feet long, 36 inches in diameter at one end and 24 inches at the other end. The second portion was 30 feet long, 24 inches in diameter at one end and 15 inches at the other end. The right side of the front footboard of the engine was bent inward under the pilot beam. Marks on the footboard, the tree and the track indicated that the tree was obstructing the track when it was struck by the engine. The front of the engine was raised high enough for the flange of the left front engine-truck wheel to be in contact with the top surface of the head of the rail.

The tree involved had grown from a cleft in the slope of the rock wall west of the track, at a point 35 feet outside the railroad right-of-way line, 60 feet above the level of the tops of the rails and 75 feet horizontally distant from the centerline of the track. The division engineer said that, because of sparse soil, the root system of the tree was insecure. The greater portion of the root system had rested upon a rock bench, and only the tap root extended into the rock cleft. The tap root had become decayed, then the remainder of the root system was unable to provide sufficient bracing to prevent the tree from falling. There was considerable decay throughout the tree. There was no evidence of washing or scouring of the rock wall by water, and no rock slide accompanied the fall of the tree. Prior to the accident the track-maintenance force had not observed the decayed condition of the tree or that its location was hazardous to the track.

Cause

It is found that this accident was caused by a train striking an obstruction on the track.

Dated at Washington, D. C., this twenty-eighth day of February, 1946.

By the Commission, Commissioner Patterson.

(SEAL)

W. P. BARTEL,
Secretary.