# INTERSTATE COMMERCE COMMISSION WASHINGTON

REPORT NO. 3758

GULF, MOBILE AND OHIO RAILROAD COMPANY

IN RE ACCIDENT

AT TRENTON, TENN., ON

MAY 20, 1957

#### SUMMARY

Date:

May 20, 1957

Railroad:

Gulf, Mobile and Ohio

Location:

Trenton. Tenn.

Kind of accident:

Derailment

Train involved:

Freight

Train number:

31

Locomotive number:

Diesel-electric units 753, B28,

B26, and 734

Consist:

79 cars, caboose

Speed:

40 m. p. h.

Operation:

Timetable and train orders

Track:

Single; tangent; 0.55 percent

ascending grade southward

Weather:

Foggy

Time:

4:50 a. m.

Casualties:

None

Cause:

Broken rail

#### INTERSTATE COMMERCE COMMISSION

#### REPORT NO. 3758

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

GULF, MOBILE AND OHIO RAILROAD COMPANY

#### August 19, 1957

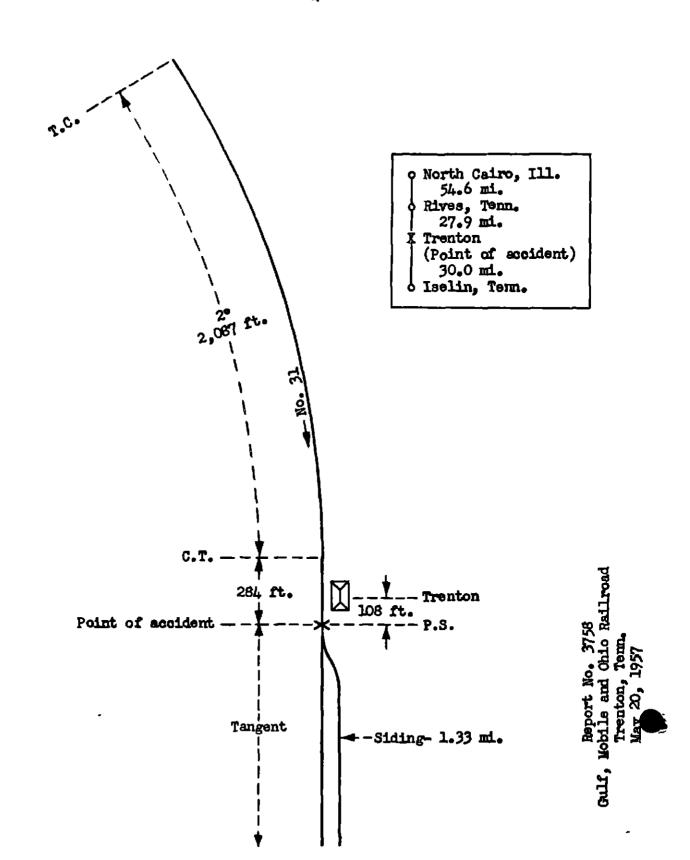
Accident at Trenton, Tenn., on May 20, 1957, caused by a broken rail.

## REPORT OF THE COMMISSION1

## TUGGLE, Commissioner:

On May 20, 1957, there was a derailment of a freight train on the Gulf, Mobile and Ohio Railroad at Trenton, Tenn....
There were no casualties.

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



### Location of Accident and Method of Operation

This accident occurred on that part of the Northern Division extending between North Cairo, Ill., and Iselin, Tenn., 112.5 miles. In the vicinity of the point of accident this is a single-track line, over which trains are operated by timetable and train orders. There is no block system in use. At Trenton, Tenn., 82.5 miles south of North Cairo, a siding 1.33 miles in length parallels the main track on the east. The north switch of this siding is 108 feet south of the station. The accident occurred on the main track at the north switch of the siding at Trenton. From the north there is a 2° curve to the right 2,087 feet in length and a tangent 284 feet to the point of accident and a considerable distance southward. The grade for southbound trains is 0.55 percent ascending at the point of accident.

In the immediate vicinity of the point of accident the track structure consists of 90-pound rail, 39 feet in length, laid new in 1939 on an average of 24 treated ties to the rail length. It is fully tieplated, spiked with two spikes per tie plate, and is provided with 4-hole 24-inch joint bars and an average of 14 to 16 rail anchors per rail. It is ballasted with chatts and gravel to a depth of 20 inches below the bottoms of the ties.

The maximum authorized speed for freight trains in the vicinity of the point of accident is 40 miles per hour.

## Description of Accident

No. 31, a south-bound second-class freight train, consisted of diesel-electric units 753, B28, B26, and 734, coupled in multiple-unit control, 79 cars, and a caboose. This train passed Rives, Tenn., 27.93 miles north of Trenton, the last open office, at 4:07 a.m., 1 hour 12 minutes late, and while moving at an estimated speed of 40 miles per hour the 15th to the 26th and the 30th to the 60th cars, inclusive, were derailed at the north switch of the siding at Trenton.

The derailed cars stopped in various positions on or near the track between the north siding-switch and a point 1,375 feet south of the switch. They were badly damaged.

Five oil storage tanks and a building owned by an oil company are located along the west side of the track and south of the station. Several of the derailed cars demolished the building and stopped in the vicinity of the oil tanks. A pump was located in the building. The electric wires leading to this pump were torn off, starting a small fire. A warehouse south of the oil tanks was also damaged by derailed cars.

It was foggy at the time of the accident, which occurred at 4:50 a. m.

#### Discussion

As No. 31 was approaching the point where the accident occurred the speed was about 40 miles per hour, as estimated by the engineer. The enginemen and the front brakeman were in the control compartment of the first diesel-electric unit, and the conductor and the flagman were in the caboose. The fireman, a qualified engineer, was operating the locomotive. The enginemen said that the locomotive was riding smoothly as they approached and passed the north siding-switch at Trenton, and they were unaware of anything being wrong until the brakes became applied in emergency as a result of the derailment.

An examination of the locomotive and the cars after the accident occurred disclosed no condition which could have caused or contributed to the cause of the accident. Examination of the track structure north of the point of derailment disclosed no indication of dragging equipment nor of an obstruction having been on the track.

Examination of the track structure after the accident occurred disclosed that the west stock rail at the north siding-switch was broken into a number of pieces. The first break occurred at a point 9 feet 11 inches south of the receiving end of the rail and adjacent to the switch point. South of this break the rail was broken into pieces of the following lengths, measured along the head: 6 inches, 14-1/2 inches, 5-5/8 inches, 8 inches, 7 inches, and 14 feet 9-3/4 inches. A 10-foot 10-1/8-inch portion of the rail was not found. On the 6-inch piece a crack was found under the head. on the 14-1/2-inch piece the head was broken from the web and the broken edge of the web was marked by wheels. Indications of old defect were found in the broken part of the head where it attached to the web. The heads were missing from webs of the next two pieces and were not found. There was evidence of some previous defect in the webs of these pieces

of rail. The next 7-inch piece had the head broken from the web. The 14-foot 9-3/4-inch piece was intact. Evidently there was a head and web separation in the vicinity of the 14-1/2-inch piece, and a portion of the head broke off allowing wheels to drop onto the web section and break the remainder of the rail. After the first break the remaining portion of the rail was struck with sufficient force to cause the additional pieces to break off.

A rail-defect detector car was operated over the involved portion of the track on May 13, 1957. In interpreting the detector-car tape, an official of the company which operates the car stated that the tape indication at the point of failure is not unusual, is similar to the pattern normally expected at such locations and does not suggest the presence of any defect. He said that the indications are similar to those received on east switches preceding and following the switch at which the failure occurred. A weekly inspection is made of all switches in this territory. The last inspection prior to the time of the accident was made on May 17, 1957. At this time no defects were discovered. The last train to pass the point of accident prior to the time the accident occurred was a north-bound passenger train which passed at 2:27 a. m. The crew of this train said that there was no indication of the track being defective.

## Cause

This accident was caused by a broken rail.

Dated at Washington, D. C., this nineteenth day of August, 1957.

By the Commission, Commissioner Tuggle.

(SEAL)

HAROLD D. McCOY,

Secretary.

Interstate Commerce Commission
Washington 25, D C
OFFICIAL BUSINESS

RETURN AFTER FIVE DAYS

POSTAGE AND FEES PAID INTERSTATE COMMERCE COMMISSION