INTERSTATE COMMERCE COMMISSION WASHINGTON

INVESTIGATION NO. 3262
SOUTHERN RAILWAY COMPANY
REPORT IN RE ACCIDENT
AT GODWINSVILLE, GA., ON
JUNE 29, 1949

SUMMARY

Date:

June 20, 1949

Railroad:

Southern

Location:

Godwinsville, Ga.

Kind of accident:

Derailment

Train involved:

Passenger

Train number:

7

Engine numbers:

Diesel-electric units

2901 and 2951

Consist:

10 cars

Speed:

55 m. p. h.

Operation:

Timetable and train orders

Track:

Single; tangent; 0.33 percent descending grade southward

Weatner:

Clear

Time:

3:20 a. m.

Casualties:

4 injured

Cause:

Broken rail

INTERSTATE COMMERCE COMMISSION

INVESTIGATION NO. 3262

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

SOUTHERN RAILWAY COMPANY

August 17, 1949

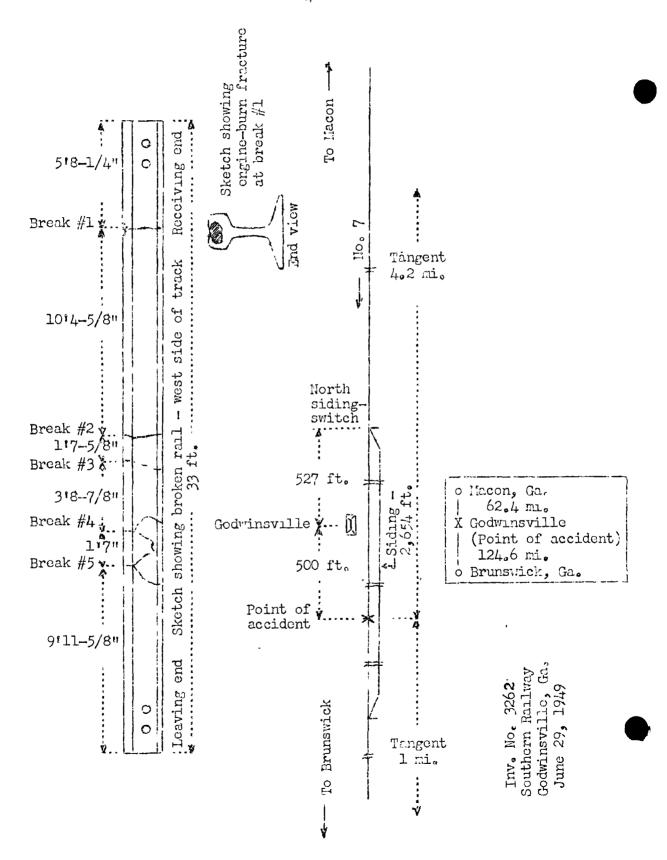
Accident at Godwinsville, Ga., on June 29, 1949, caused by a broken rail.

REPORT OF THE COMMISSION

PATTERSON, Commissioner:

On June 29, 1949, there was a derailment of a passenger train on the Southern Railway at Godwinsville, Ga., which resulted in the injury of four railway-mail clerks.

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.



Location of Accident and Method of Operation

- 5 -

This accident occurred on that part of the Atlanta Division extending between Macon and Brunswick, Ga., 187 miles, a single-track line, over which trains are operated by timetable and train orders. There is no block system in use. At Godwinsville, 62.4 miles south of Macon, a siding 2,654 feet in length parallels the main track on the east. The north switch of this siding is located 527 feet north of the station. The accident occurred on the main track at a point 500 feet south of the station. The main track is tangent throughout a distance of 4.2 miles immediately north of the point of accident and 1 mile southward. The grade for south-bound trains varies between 0.29 and 0.76 percent descending throughout a distance of 1 mile immediately north of the point of accident, and is 0.33 percent descending at the point of accident.

In the vicinity of the point of accident the track is laid on a fill having a maximum height of eight feet. The track structure consists of 85-pound rail, 33 feet in length, rolled in 1914 and re-laid in its present location in 1928 on an average of 20 ties to the rail length. It is fully tieplated, single-spiked, and is provided with 4-hole 24-inch 100-percent joint bars, and an average of 8 rail anchors per rail length. It is ballasted with cinders to a depth of 12 inches below the ties. The involved rail section was manufactured by the Tennessee Coal, Iron and Railroad Company in August, 1914. The heat No. was 53504, letter A. An ingot number was not found.

The maximum authorized speed for the train involved was 55 miles per hour.

Description of Accident

No. 7, a south-bound first-class passenger train, consisted of Diesel-electric units 2901 and 2951, coupled in multiple-unit control, one coach, one baggage-mail car, one baggage-express car, two coaches, four sleeping cars and one box-refrigeretor-express car, in the order named. All cars were of all-steel construction except the last car, which had a steel underframe. Only the Diesel units were equipped with tight-lock couplers. This train departed from Macon, the last open office, at 1:47 a.m., 47 minutes late, and while it was moving at an estimated speed of 55 miles per hour the first to the seventh cars, inclusive, and the front truck of the eighth car were derailed.

The Diesel-electric units stopped with the front of the first unit 775 feet south of the point of derailment. The first car remained coupled to the second Diesel-electric unit and stopped with the north and 17 feet west of the track. A separation occurred between the first and second cars. The second car stopped on its west side, at the bottom of the fill, approximately parallel to the track, 80 feet 8 inches behind the first car and 35 feet west of the track. The third and fourth cars stopped upright and in line with the second car. The fifth car stopped with the south end 34 feet and the north end 4 feet 6 inches west of the center-line of the track. The sixth car stopped parallel to and 4 feet 6 inches west of the track. The seventh car The seventh car stopped with the south end 4 feet 10 inches and the north end 1 foot west of the track. The south truck of the eighth car was derailed. The first, second, fourth, fifth and sixth cars were considerably damaged, and the third and seventh cars were slightly damaged. The track was badly damaged throughout a distance of 635 feet.

The weather was clear at the time of the accident, which occurred at 3:20 a.m.

Discussion

No. 7 was moving on tangent track at a speed of about 55 miles per hour, in territory where the maximum authorized speed was 55 miles per hour, when the derailment occurred. The brakes of this train had been tested and had functioned properly when used en route. The headlight was lighted brightly, and the engineer and the fireman were maintaining a lookout ahead from the control compartment of the first Diesel-electric unit. The conductor and the flagman were in the fourth car and the baggageman was in the third car. When the first Diesel-electric unit passed the point where the derailment occurred, the engineer immediately moved the brake valve to the emergency position, but the derailment occurred before the train could be stopped. Prior to the time of the derailment, 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 seven pieces. There were five complete breaks through the head, web and base of the rail. These breaks occurred at points 5 feet 8-1/4 inches, 16 feet 7/8 inch, 17 feet 8-1/2 inches,

21 feet 5-3/8 inches and 23 feet 3/8 inch from the receiving end of the rail. The section of rail between the fourth and fifth breaks was broken horizontally through the web into two pieces. At break Po. 1 there was an engine-burn on the top surface of the rail approximately 1 square inch in area and 1/16-inch deep. Beneath this burn there was a progressive fracture, which covered about 40 percent of the cross-sectional area of the head of the rail. Apparently the failure occurred when the front truck of the first Diesel-electric unit passed over this fracture, then the rail became displaced and the derailment followed. All of the other breaks were new, and they occurred as a result of the derailment.

The track in this vicinity was last inspected by the track supervisor and by the section foreman on June 25, about 3-1/2 days before the derailment occurred, and no defective condition was observed. The fracture was not visible, and it had not been thought necessary to remove the rail because of the engine-burn. There was no corresponding engine-burn on the east rail. Therefore, it is probable that the engine-burn on the rail in question existed when the rail was re-laid in the track. This rail was last tested by a rail-defect detector car on August 26, 1948, and no defective condition was indicated. At the time of the accident a rail-defect detector-car was being operated on this division, and the involved rail would have been tested on the day of the accident.

Cause

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

Dated at Washington, D. C., this seventeenth day of August, 1949.

By the Commission, Commissioner Patterson.

(SEAL)

W. P. BARTEL,

Secretary.