

INTERSTATE COMMERCE COMMISSION  
WASHINGTON

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INVESTIGATION NO. 2891  
ATLANTIC COAST LINE RAILROAD COMPANY  
REPORT IN RE ACCIDENT  
NEAR KISSIMMEE, FLA., ON  
MAY 31, 1945

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SUMMARY

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Railroad: Atlantic Coast Line  
Date: May 31, 1945  
Location: Kissimmee, Fla.  
Kind of accident: Derailment  
Train involved: Passenger  
Train number: 91  
Engine number: Diesel-electric units  
512, 752 and 513  
Consist: 13 cars  
Speed: 57 m. p. h.  
Operation: Timetable and train orders  
Track: Single; tangent; 0.55 percent  
descending grade southward  
Weather: Clear  
Time: 3:03 p. m.  
Casualties: 43 injured  
Cause: Insecure condition of track

INTERSTATE COMMERCE COMMISSION

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INVESTIGATION NO. 2891

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

ATLANTIC COAST LINE RAILROAD COMPANY

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June 26, 1945.

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Accident near Kissimmee, Fla., on May 31, 1945, caused  
by insecure condition of the track.

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REPORT OF THE COMMISSION<sup>1</sup>

PATTERSON, Commissioner:

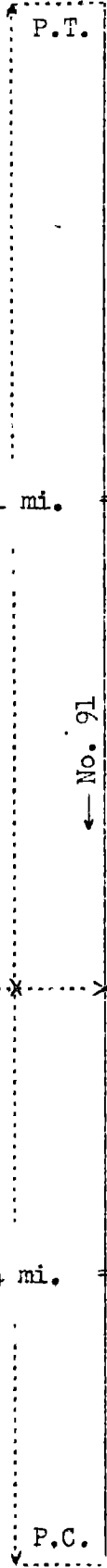
On May 31, 1945, there was a derailment of a passenger train on the Atlantic Coast Line Railroad near Kissimmee, Fla., which resulted in the injury of 36 passengers, 1 Pullman employee, 1 passenger representative, 4 train porters and 1 maid.

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<sup>1</sup>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.

To Sanford →

○ Sanford, Fla.	26.70 mi.
○ Pine Castle	12.18 mi.
X Point of accident	1.22 mi.
○ Kissimmee	83.60 mi.
○ Port Tampa, Fla.	



2.71 mi.

No. 91

Point of accident

0.74 mi.

To Kissimmee  
1.22 mi.

← To Port Tampa

P.C.

Inv. No. 2891  
Atlantic Coast Line Railroad  
Kissimmee, Fla.  
May 31, 1945

Location of Accident and Method of Operation

This accident occurred on that part of the Tampa District extending southward from Sanford to Port Tampa, Fla., 123.7 miles, a single-track line over which trains are operated by timetable and train orders. There is no block system in use. The accident occurred on the main track 38.88 miles south of Sanford, at a point 1.22 miles north of the station at Kissimmee. The main track is tangent throughout a distance of 2.71 miles north of the point of accident and 0.74 mile southward. The grade is 0.55 percent descending southward.

The track structure consists of 100-pound rail, 39 feet in length, laid in 1928 on an average of 22 ties to the rail length. It is fully tieplated, single-spiked, provided with 4-hole angle bars, and is ballasted with crushed rock to a depth of 6 inches. Rail anchors are not used. The gage varied between 4 feet 8-1/8 inches and 4 feet 8-1/2 inches.

Special rules read in part as follows:

SECTION FOREMEN

1064. They must never obstruct the track in any way whatever, without first conspicuously displaying stop signals at least 900 yards in both directions \* \* \*

1066. \* \* \* Anything that interferes with the safe passage of trains is an obstruction.

1067. They are permitted to use the track when making repairs to within fifteen minutes of the time of passenger trains, \* \* \* but invariably under protection of Stop Signals.

The maximum authorized speed for passenger trains is 60 miles per hour.

Description of Accident

No. 91, a south-bound first-class passenger train, consisted of Diesel-electric units 512, 752 and 513, one baggage-mail car, one passenger-baggage car, five coaches, one dining car and five Pullman sleeping cars, in the order named. All cars were of steel construction. This train passed Pine Castle, 13.4 miles north of Kissimmee and the last open office, at 2:51 p. m., 2 hours 9 minutes late, and while it was moving at a speed of 57 miles per hour, according to the tape of the speed recorder, the Diesel-electric units, the first seven cars and the front truck of the eighth car were derailed.

The Diesel-electric units stopped on their left sides with the front end of the first unit about 558 feet south of the point of derailment. The first to the fifth cars, inclusive, stopped in various positions across the main track. The sixth and the seventh cars remained upright and practically in line with the track. The Diesel-electric units and the first to the seventh cars, inclusive, were badly damaged.

The weather was clear at the time of the accident, which occurred about 3:03 p. m.

### Discussion

No. 91 was moving at a speed of 57 miles per hour in territory where the maximum authorized speed was 60 miles per hour. The enginemen were maintaining a lookout ahead from the control compartment of the first Diesel-electric unit. Prior to the time of the accident the engine and the cars were riding smoothly, and there was no indication of defective equipment or of any obstruction having been on the track. When the engine was in the vicinity of the point where the derailment occurred, the engineer saw members of a crew of a track force, but no warning signals were seen or heard. When the engine passed over the point where the derailment occurred the enginemen felt an unusual movement of the first unit of the engine. Then the engineer observed that 75 or 80 feet of the east rail immediately in front of the engine was deflected eastward from 4 to 6 inches, and he immediately moved the brake valve to emergency position.

The first marks of derailment were an abrasion on the gage side of the east rail about 10 feet north of an angle bar on the gage side and batter marks on the north end of this angle bar and the angle-bar bolts. The next rail southward was forced out of line to the east and flange marks appeared on the ties inside this rail. South of this point the track was torn up to the point where the engine stopped. Marks on the side of the tread of the left front wheel of the first Diesel-electric unit indicated that it had been in contact with the gage side of the east rail. In the immediate vicinity of the point of derailment, repairs to the track were in progress and there were 49 ties from which the spikes had been removed by a clawbar. Of these ties, 2 were immediately north and 4 were immediately south of the point of derailment, and the remainder were at various locations throughout a distance of about 350 feet immediately north of this point.

The investigation disclosed that when the accident occurred the members of a crew of a track force, consisting of a foreman and seven laborers, were engaged in replacing defective ties, raising the track and resurfacing the ballast in the vicinity of the point where the accident occurred. The foreman had marked

the ties to be removed from the track and, because six of the laborers were inexperienced, he had instructed the only experienced laborer of the force to supervise the placing of new ties and to spike the rail at those points. The roadmaster said the instructions to foremen provided that spikes should not be removed from more than one tie at a time while performing work such as was being done on the day of the accident, but the foreman of the section involved said that it is his practice to remove spikes from two ties at one time. He was not aware that one of the laborers had removed an unusual number of spikes until after the accident occurred.

No train order had been issued to restrict the speed of No. 91 in this territory, nor was any flag protection provided to restrict the speed of this train. However, the investigation disclosed that it is not customary to restrict the speed of trains while work of this character is being performed, nor for section forces to provide flag protection. Section foremen depend upon a line-up of the expected arrival of trains at the point where work is performed, and plan the work so that the track may be made secure for any train. The line-up had by the foreman of the section involved did not include No. 91. However, he knew that No. 91 was overdue, and thought the track was safe for the passage of that train.

On the day of the accident the highest temperature at Kissimmee was 101 degrees. The loosened rails were on a descending grade of 0.55 percent and the point of derailment was 577 feet north of the north end of 400 feet of level track, which was followed by a 0.34-percent ascending grade. Evidently the high temperature, the loosened condition of the rails and the lack of rail anchors resulted in the rails creeping southward on the descending grade until they met resistance on the ascending grade. When the rail could not move farther southward, the east rail shifted outward sufficiently for the left wheels of the first unit to drop inside that rail.

Cause

It is found that this accident was caused by insecure condition of the track.

Dated at Washington, D. C., this twenty-sixth day of June, 1945.

By the Commission, Commissioner Patterson.

(SEAL)

W. P. BARTEL,  
Secretary.