INTERSTATE COMMERCE COMMISSION

WASHINGTON

INVESTIGATION NO. 2676

THE CENTRAL OF GEORGIA RAILWAY COMPANY

REPORT IN RE ACCIDENT

AT LORANE, GA., ON

FEBRUARY 15, 1943

SUMMARY

Railroad:	Central of Georgia
Date:	February 15, 1943
Location:	Lorane, Ga.
Kind of accident:	Derailment
Train involved:	Passenger
Train number:	Second 18
Engine number:	476
Consist:	11 cars
Speed:	55 m. p. h.
Operation:	Timetable, train orders and automatic block-signal system
Track:	Single; tangent; 0.32 percent ascending grade eastward
Weather:	Clear
Time:	About 4:09 p. m.
Casualties:	1 killed; 42 injured
Cause:	Accident caused by broken journal

INTERSTATE COMMERCE COMMISSION

INVESTIGATION NO. 2676

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

THE CENTRAL OF GEORGIA RAILWAY COMPANY

March 31, 1943.

Accident at Lorane, Ga., on February 15, 1943, caused by a broken journal.

REPORT OF THE COMMISSION[1]

PATTERSON, Commissioner:

On February 15, 1943, there was a derailment of a passenger train on the Central of Georgia Railway at Lorane, Ga., which resulted in the death of 1 passenger, and the injury of 41 passengers and 1 employee.

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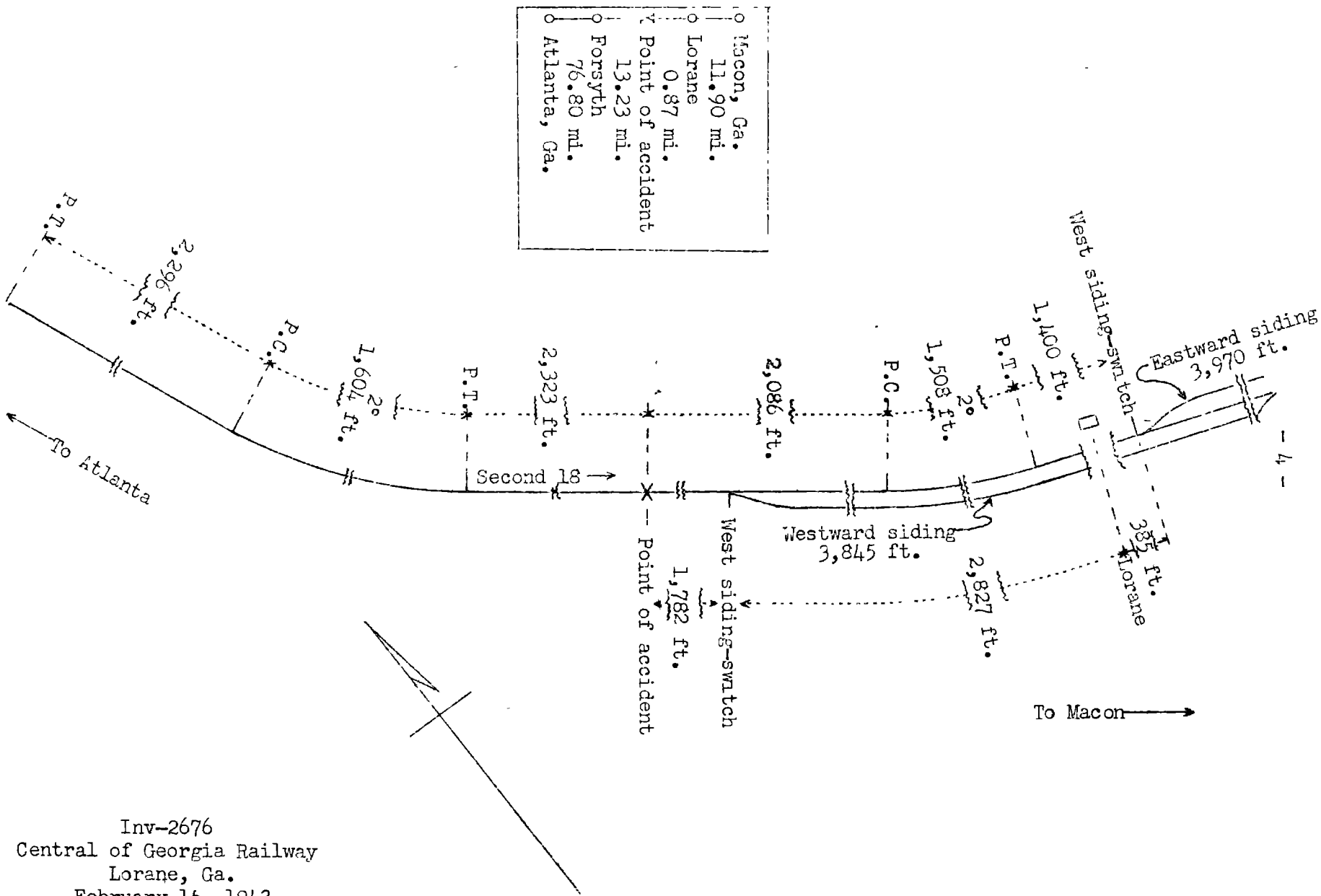
[1]Under authority of section 17 (2) of the Interstate Commerce Act the above-entitled proceeding was referred by the Commission to Commissioner Patterson for consideration and disposition.



Inv-2676
Central of Georgia Railway
Lorane, Ga.
February 15, 1943

Location of Accident and Method of Operation

This accident occurred on that part of the Macon Division designated as the Atlanta District and extending between Atlanta and Macon, Ga., 102.8 miles. In the vicinity of the point of accident this is a single-track line over which trains are operated by timetable, train orders and an automatic block-signal system. At Lorane a siding 3,845 feet in length, designated as the westward siding, parallels the main track on the south. A siding 3,970 feet in length, designated as the eastward siding, parallels the main track on the north. The west switches of these sidings are located, respectively, 2,327 feet west and 385 feet east of the station. The accident occurred on the main track at a point 1,782 feet west of the west switch of the westward siding and the general derailment occurred at the west switch of the eastward siding. Approaching from the west there are, in succession, a tangent 2,295 feet in length, a 2° curve to the left 1,604 feet, and a tangent 2,323 feet to the point of accident and 2,086 feet beyond, then there are, in succession a 2° curve to the left 1,508 feet in length and a tangent 1,400 feet to the west switch of the eastward siding. The grade for east-bound trains is, successively, 0.66 percent descending a distance of 5,644 feet, 0.32 percent ascending 1,041 feet to the point of accident and 1,057 feet beyond, then it is, successively, 0.36 percent descending 2,500 feet and 0.43 percent ascending 1,437 feet to the west switch of the eastward siding.

The track structure consists of 112-pound rail, 39 feet in length, laid on 22 treated ties to the rail length; it is fully tieplated, single-spiked, equipped with six rail anchors to each rail, and is ballasted with slag to a depth of 12 inches.

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

Description of Accident

Second 18, an east-bound first-class passenger train, consisted of engine 476, of the 4-8-2 type, three express cars, two coaches, four Pullman sleeping cars, one dining car and one Pullman sleeping car, in the order named. The first car was of steel-underframe construction and the remainder were of all-steel construction. After a terminal air-brake test was made this train departed from Atlanta, 90.9 miles west of Lorane, at 2:09 p. m., according to the dispatcher's record of movement of trains, 3 hours 34 minutes late, passed Forsyth, 14.1 miles west of Lorane and the last open office, at 3:53 p. m., 3 hours 35 minutes late, and while moving at an

estimated speed of 55 miles per hour it was derailed at a point 4,609 feet west of the station at Lorane.

Engine 476 was not derailed but was separated from the first car and stopped with its front end 6,112 feet east of the point of accident. The first nine cars were derailed and considerably damaged. The front truck of the tenth car was derailed. The first car stopped on its left side on the eastward siding with its front end 320 feet west of the engine. The second and third cars stopped practically upright and behind the first car. The fourth to the tenth cars, inclusive, stopped in various positions but practically upright.

It was clear at the time of the accident, which occurred about 4:09 p. m.

The employee injured was the train porter.

Discussion

Second 18 was moving at a speed of about 55 miles per hour in territory where the maximum authorized speed was 60 miles per hour when the train became derailed. Prior to the time of the accident, the engine and the cars were riding smoothly, and there was no indication of defective track or equipment. The enginemen were maintaining a lookout from their respective seatboxes. As the train was approaching the west switch of the eastward siding, the engineer was looking toward the rear of his train and observed ballast being thrown from underneath the front cars. He immediately moved the brake valve to emergency position, then the first car became separated from the engine and the general derailment occurred.

After the accident it was found that the left front journal of the rear truck of Soo Line 4214, the first car of the train, was broken off. Starting at a point 1,782 feet west of the west switch of the westward siding and continuing to the switch, flange marks appeared on the ties 8 inches inside the south rail and outside the north rail. At a point 90 feet east of the west switch of the westward siding these marks again appeared and continued a distance of 3,122 feet to the west switch of the eastward siding, beyond which the eastward siding was damaged a distance of about 800 feet. Apparently the front pair of wheels of the rear truck of the first car became derailed as a result of the broken journal at the point where the first marks appeared and then the wheels moved on the ties and in line with the rails to the west switch of the westward siding where the wheels became derailed and continued on the main track to a point 90 feet east of the

switch. At that point the wheels again became derailed and moved on the ties to the west switch of the eastward siding, then the front truck of the first car continued on the main track, and the rear truck and the following cars entered the eastward siding.

Soo Line 4214 was a refrigerator car equipped with 5-1/2 by 10-inch journals. The truck side-frames were of one-piece cast-steel construction. According to the stencilling on the car, the light weight was 86,700 pounds, the capacity was 100,000 pounds, and the journal boxes were repacked by the Soo Line at AX 8-19-42. The car was loaded to about 50 percent of its capacity. The break in the journal was irregular and measured from 6-7/8 to 8-1/2 inches inward from the end collar. The end of the journal remaining attached to the wheel assembly was badly worn by contact with the journal wedge, and the top section of the journal box was worn through. The general foreman of the car department examined the journal about 2-1/2 hours after the accident and said there was no packing in the journal box at that time. No evidence of the packing having become ignited was found. The journal was warm but not hot enough to indicate that it had been overheated recently, and there was no evidence of cutting on the bearing surface. The engineer of tests said a photomicrograph of the broken parts of the journal indicated that the journal had become broken as a result of overheating. The master mechanic said that in his opinion the journal had become overheated some time prior to the day of the accident, and had cracked as a result of using water to cool it. During the trip no member of the crew observed any condition indicating the presence of an overheated journal. The equipment was inspected by mechanical forces at Atlanta about 2 hours before the accident occurred and no defective condition was found.

Cause

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

Dated at Washington, D. C., this thirty-first day of March, 1943.

By the Commission, Commissioner Patterson.

W. P. BARTEL,

(SEAL)

Secretary.