

RAILROAD ACCIDENT INVESTIGATION

Report No 3798

GULF, MOBILE AND OHIO RAILROAD COMPANY

RAMER, TENN

JANUARY 25, 1958

INTERSTATE COMMERCE COMMISSION

Washington

SUMMARY

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DATE	January 25, 1958
RAILROAD	Gulf, Mobile and Ohio
LOCATION	Ramer, Tenn
KIND OF ACCIDENT	Derailment
TRAIN INVOLVED	Passenger
TRAIN NUMBER	I C 10
LOCOMOTIVE NUMBER	C G diesel-electric units 812 and 811
CONSIST	16 cars
ESTIMATED SPEED	70 m p h
OPERATION	Timetable, train orders, and automatic block-signal system
TRACK	Single, tangent, level
WEATHER	Cloudy
TIME	12 47 a m
CASUALTIES	1 killed, 44 injured
CAUSE	Broken switch connecting rod

INTERSTATE COMMERCE COMMISSION

REPORT NO 3798

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

GULF, MOBILE AND OHIO RAILROAD COMPANY

August 20, 1958

Accident near Ramer, Tenn , on January 25, 1958, caused by a broken switch connecting rod

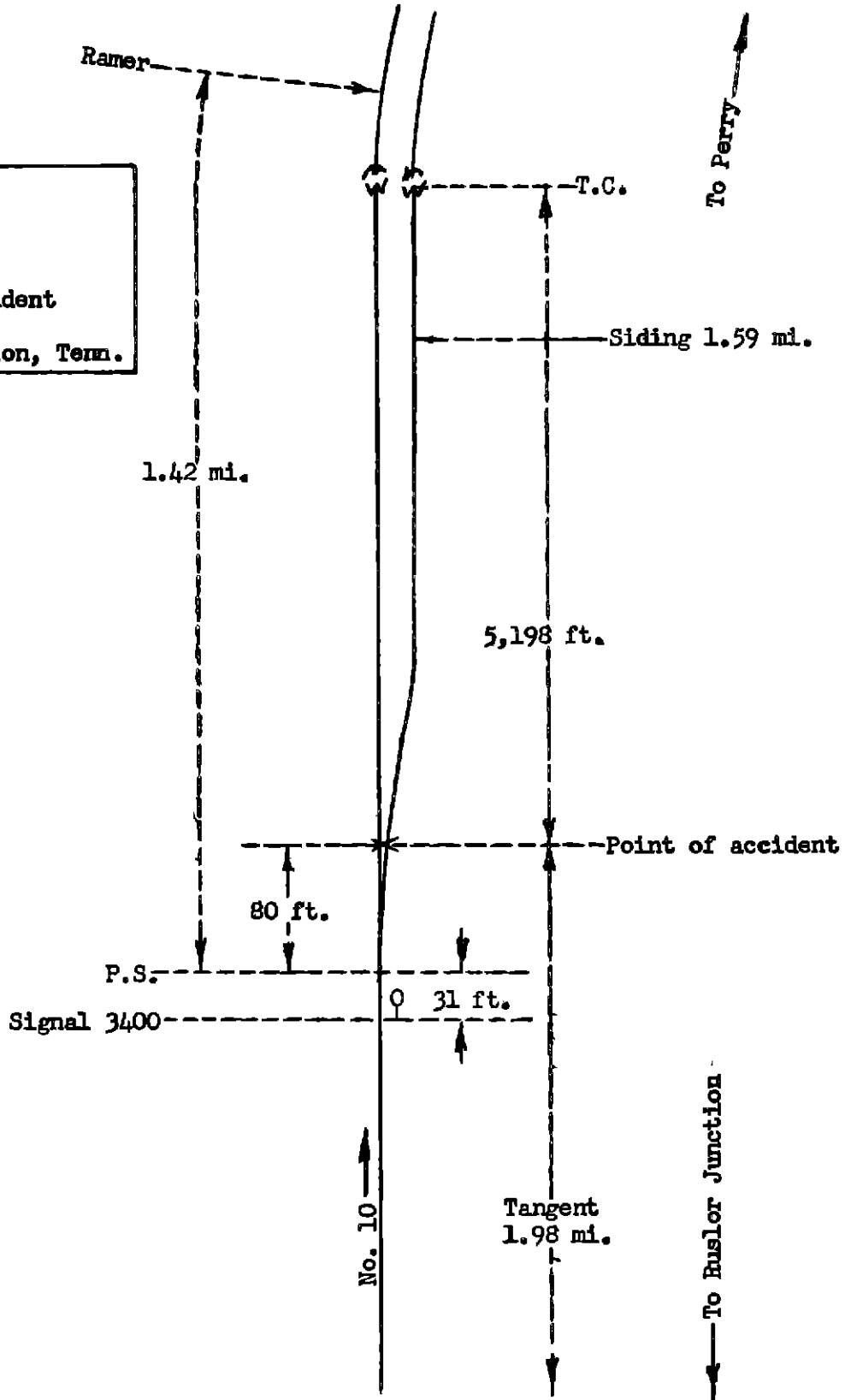
REPORT OF THE COMMISSION¹

TUGGLE, Commissioner

On January 25, 1958, there was a derailment of a passenger train on the Gulf, Mobile and Ohio Railroad at Ramer, Tenn , which resulted in the death of 1 train-service employee, and the injury of 36 passengers, 4 Pullman Company employees, 2 train porters, and 2 train service employees

¹ 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

- Perry, Tenn.
41.02 mi.
- Ramer
1.42 mi.
- X Point of accident
8.86 mi.
- Ruslor Junction, Tenn.



Gulf, Mobile and Ohio Railroad
 Ramer, Tenn.
 January 25, 1958

Location of Accident and Method of Operation

This accident occurred on that part of the Northern Division extending between Ruslor Junction and Perry, Tenn., 51.3 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. Trains of the Illinois Central Railroad are regularly operated over this track. Near Ramer, Tenn., 10.28 miles north of Ruslor Junction, a siding 1.59 miles in length parallels the main track on the east. The south switch of the siding is located 1.42 miles south of the station. The accident occurred on the main track at the frog of the south turnout of the siding 80 feet north of the point-of-switch. From the south the track is tangent throughout a distance of 1.98 miles to the point of accident and 5,198 feet northward. The grade is level at the point of accident.

The track structure in the vicinity of the point of accident consists of 115-pound rail, 39 feet in length, laid new in 1950 on an average of 24 treated ties to the rail length. It is fully tie-plated with double-shoulder tie plates, single-spiked, and is provided with 6-hole 36-inch joint bars and an average of 36 rail anchors per rail. It is ballasted with slag. The south turnout of the siding consists of 115-pound reinforced switch rails 16 feet 6 inches in length, 115-pound rails, a No. 10 spring-rail frog, and one-piece guard rails.

The switch stand of the south switch of the siding is of the horizontal-throw intermediate-stand type and is located 9-feet 1-1/2 inches east of the centerline of the main track. When the switch is lined for entry to the siding a target consisting of two red discs 14 inches in diameter and each having an opening in the center 4 inches in diameter is displayed at right angles to the main track. When the switch is lined for movement on the main track the target is parallel to the track. Two operating-lever keepers are provided. One keeper secures the operating lever in normal position for movement on the main track and the other secures the operating lever in reverse position. The keepers are so designed that the operating lever can be secured in position by a switch lock. The connecting rod of the switch is 1-1/2 inches in diameter and is provided with a clevis at the switch-rod end. The clevis is attached to the switch rod by a 1-inch bolt applied vertically. The centerline of the bolt is located 1-3/16 inches from the end of the clevis.

Automatic signal 3400, governing northbound movements on the main track, is located 31 feet south of the south switch of the siding. The controlling circuit is so arranged that when the south switch of the siding is lined for entry to the siding the signal displays a Stop-and-Proceed aspect.

The maximum authorized speed for passenger trains in the vicinity of the point of accident is 70 miles per hour.

Description of Accident

No. 10, a northbound first-class Illinois Central passenger train, consisted of Central of Georgia Railway diesel-electric units 812 and 811, coupled in multiple-unit control, 1 express-refrigerator car, 1 baggage car, 1 express-refrigerator car, 1 baggage car, 1 mail-baggage car, 3 baggage cars, 5 coaches, 1 dining car, and 2 sleeping cars, in the order named. The 3rd car was of steel-underframe construction, and the other cars were of conventional all-steel construction. The 9th, the 11th, and the 13th cars were equipped with tightlock couplers. This train passed Ruslor Junction, the last open office, at 12:34 a.m. 1 hour 26 minutes late, and while moving at an estimated speed of 70 miles per hour the 11th to the 16th cars, inclusive, were derailed at the south turnout of the siding at Ramer.

The locomotive stopped with the front end 3,095 feet north of the point of accident. Separations occurred at both ends of the 13th to the 15th cars, inclusive. The 11th and 12th cars stopped upright and in line with the front end of the 11th car on the main track and the rear end of the 12th car on the siding. The 13th to the 16th cars, inclusive, stopped approximately in line, with the front end of the 13th car 520 feet north of the point of accident and approximately 45 feet east of the main track. The rear end of the 16th car stopped on the siding. The 13th and the 16th cars stopped upright. The 14th car leaned to the east at an angle of about 40 degrees, and the 15th car stopped on its side. The 13th to the 15th cars, inclusive, were heavily damaged. The 11th car, the 12th car, and the 16th car were considerably damaged.

The flagman of No. 10 was killed. The conductor and the baggageman were injured.

The weather was cloudy at the time of the accident, which occurred at 12:47 a. m.

Discussion

As No. 10 was approaching the point where the accident occurred the enginemen were in the control compartment of the first diesel-electric unit and were maintaining a lookout ahead. The conductor was in the 11th car and the flagman and baggageman were in the 14th car. The brakes of this train had been tested and had functioned properly en route. The headlight was lighted brightly. The members of the crew said that before the derailment occurred the locomotive and cars were riding smoothly and that there was no indication of defective track or equipment. Signal 3400 indicated Proceed and the position of the target of the south siding-switch indicated that the switch was lined for movement on the main track. The engineer said that after the locomotive passed the switch there appeared to be unusual slack action in the train. He said he then observed fire flying at the rear of the train and that the brake-pipe gauge indicated that brake-pipe pressure was decreasing. He immediately initiated an emergency application of the brakes. The first the members of the train crew became aware of anything being wrong was when the derailment occurred.

Examination of the track throughout a considerable distance south of the point of derailment disclosed no indications of defective track or dragging equipment.

Examination of the south turnout of the siding after the accident occurred disclosed that the point-of-frog was damaged by a heavy blow. A flange mark appeared on the top of the point rails of the frog and on the heel-riser block, and a corresponding flange mark appeared on the top of the east guard rail indicating that a truck had entered the siding and had become derailed at the frog. The siding was destroyed throughout a distance of approximately 500 feet.

Examination of the switch stand disclosed that the operating lever was lined for movement on the main track and was secured in the keeper by a lock. Examination of the switch operating mechanism disclosed that the top and bottom portions of the clevis of the operating rod had broken at locations 2-1/8 inches and 3-1/2 inches, respectively, from the end of the clevis permitting the switch rails to move under the train. The surfaces of the break of the bottom portion were battered and showed old break. Approximately 90 percent of the surfaces of the break of the top portion showed progressive fracture.

The switch was inspected on December 10, 1957, by a track supervisor, and on January 23, 1958, by a section foreman and no exceptions were taken.

After the accident occurred the carrier initiated a program for the inspection of the connecting rods of all main-track switches. The clevises of 8 connecting rods which were installed in 1952 were found cracked.

Cause

This accident was caused by a broken switch connecting rod.

Dated at Washington, D. C., this twentieth day of August, 1958.

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**



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