# INTERSTATE COMMERCE COMMISSION

WASHINGTON

REPORT NO. 3719

ST. LOUIS-SAN FRANCISCO RAILWAY COMPANY

IN RE ACCIDENT

NEAR CRITCO, ARK., ON

NOVEMBER 5, 1956

## SUMMARY

-----

Date:	November 5, 1956	
Railroad:	St. Louis-San Francisco	
Location:	Critco, Ark.	
Kind of accident:	Rear-end collision	
Equipment involved:	Track motor-car RC-2009	: Freight train
Train number:		: 133
Locomotive number:		: Diesel-electric units 5214, 5128, 5101, and 5025
Consist:		: 67 cars, caboose
Speeds:	Undetermined	: 46 m. p. h.
Operation:	Signal indications	
Track:	Single; tangent; level	
Weather:	Clear	
Time:	11:20 a. m.	
Casual ties:	2 killed; l injured	
Cause:	Failure to take required precautions in operation of track motor-car	

- 3 -

INTERSTATE COMMERCE COMMISSION

#### REPORT NO. 3719

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

ST. LOUIS-SAN FRANCISCO RAILWAY COMPANY

December 20, 1956

Accident near Critco, Ark., on November 5, 1956, caused by failure to take required precautions in operation of a track motor-car.

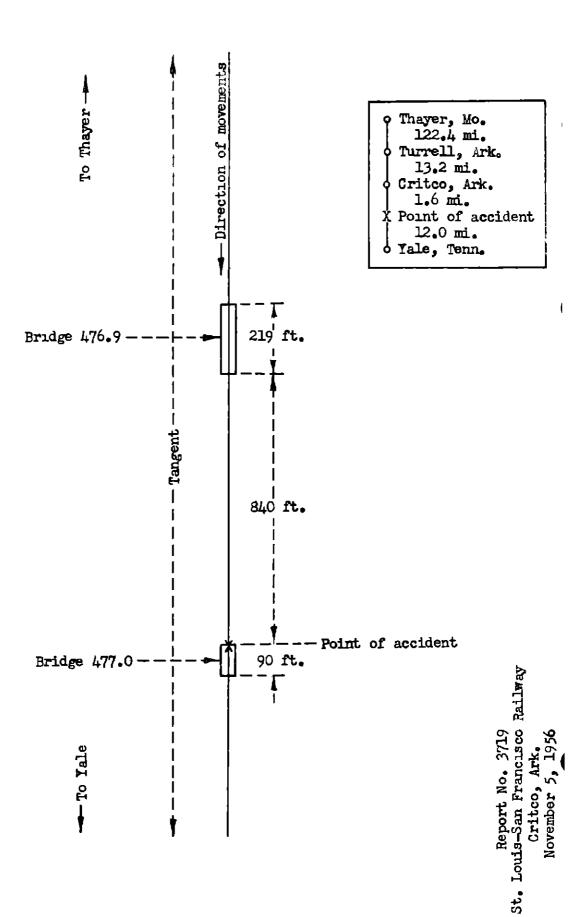
REPORT OF THE COMMISSION1

CLARKE, Commissioner:

On November 5, 1956, there was a rear-end collision between a track motor-car and a freight train on the St. Louis-San Francisco Railway near Critco, Ark., which resulted in the death of one maintenance-of-way employee and one bridge and building employee, and the injury of one maintenance-of-way employee.

1

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



- 4 -

## Location of Accident and Method of Operation

This accident occurred on that part of the Eastern Division extending between Thayer, Mo., and Yale, Tenn., 149.2 miles. In the vicinity of the point of accident this is a single-track line, over which trains are operated by signal indications. The accident occurred on the main track at a point 137.2 miles south of Thayer and 1.6 miles south of Critco, Ark. The track is tangent throughout a distance of 2.7 miles immediately north of the point of accident and a considerable distance southward. The grade is level.

In the vicinity of the point of accident the track is laid on a fill approximately 8 feet in height. The south end of Bridge 476.9, an open-deck pile trestle 219 feet in length, is located 840 feet north of the point of accident. The accident occurred at the north end of Bridge 477.0, an open-deck pile trestle 95 feet in length.

The signals in the vicinity of the point of accident form part of a traffic-control system operated by the operator at Turrell, Ark., 13.2 miles north of Critco. These signals are of the searchlight type and are continuously lighted. The intermediate signals normally display aspects to proceed. When the route is lined for a movement between controlled points, each opposing intermediate signal between those points displays a red aspect. Intermediate signals governing movements in the direction in which the movement is to be made give no indication that a route has been lined or that a train is approaching. There is no northward intermediate signal so located that the aspect is visible from the point of accident. Block indicators for the information of the operators of track motor-cars are located at various points on this line, but there are none in the immediate vicinity of the point of accident.

This carrier's rules governing the operation of track motor-cars read in part as follows:

229. Operation. Employes operating track cars \* \* \* will be required to exercise sufficient caution to avoid being struck by a train. flagging curves and other obscure places when necessary, taking every precaution to avoid accidents of any kind.

\* \* \*

230. Train Information. When practicable, track cars will not be placed or moved on main track unless current line-up has been received by the track car operator \* \* \*

240. Cars Not To Be Left On Main Track. Cars must be removed from the track or protected by flagman when not in use. \* \* \*

The maximum authorized speed for freight trains in the vicinity of the point of accident is 60 miles per hour.

### Description of Accident

Track motor-car RC-2009, occupied by a section foreman and three sectionmen, departed south-bound from Turrell about 10:15 a. m. It was stopped on Bridge 476.9 about 11 a. m. About 20 minutes later the foreman, one sectionman, and a bridge and building carpenter boarded the car, and the car was started southward. While it was moving at an undetermined rate of speed it was struck by No. 133. The accident occurred at the north end of Bridge 477.0, 1.6 miles south of Critco.

No. 133, a south-bound second-class freight train, consisted of Diesel-electric units 5214, 5128, 5101, and 5025, coupled in multiple-unit control, 67 cars, and a caboose. This train departed from Thayer at 8:05 a. m., 5 hours 35 minutes late, and passed Turrell, the last open office, at 11:01 a. m., 5 hours 27 minutes late. While it was moving at a speed of 46 miles per hour it struck track motor-car RC-2009.

The track motor-car was considerably damaged but was not derailed. No. 133 stopped with the front of the locomotive about 2,900 feet south of the point of accident. The front of the locomotive was slightly damaged.

The section foreman and the bridge and building carpenter who were on the track motor-car were killed. One sectionman was injured.

The weather was clear at the time of the accident, which occurred about 11:20 a. m.

Track motor-car RC-2009, which was of the belt-drive type, was powered by a 1-cylinder 8 to 13 horsepower engine. It weighed 935 pounds and had seating capacity for six persons. It was provided with a windshield at the front and was insulated to prevent the shunting of track circuits.

During the 30-day period preceding the day of the accident the average daily movement in the vicinity of the point of accident was 25.33 trains.

#### Discussion

The section force at Turrell reported for duty at 7:30 a. m. on the day of the accident. The foreman obtained a copy of a line-up which had been issued by the train dispatcher at 6 a. m. This line-up was for use between Turrell and Thayer and contained the information that No. 133 should leave Thayer at 7:30 a. m. The section force proceeded to the north limit of the section, about 9 miles north of Turrell, and then proceeded southward to Bridge 476.9 on their track motor-car. On the south-bound trip they stopped at the station at Turrell, According to the statement of the operator, he told the foreman that First 134, a northbound freight train, was approaching a station 20.9 miles south of Turrell and that No. 133 would meet First 134 at The foreman did not give this information to the . The section force met First 134 about 9 miles Turrell. sectionmen. south of Turrell. When they reached Bridge 476.9, a bridge foreman who was working at that point requested the section foreman to line the track at the south end of the bridge at some time during the day. The section foreman told him that he would do it immediately. The bridge foreman reminded the section foreman that No. 242, a north-bound local freight train, had not passed. The section foreman replied that he would watch a southward signal a short distance south of the bridge, and if the train approached before the work was completed he would remove the track motor-car from the track at the nearest unoccupied motorcar set-off, 1,874 feet south of the bridge. The section foreman also said that No. 133 had not left Thayer until about 8 a. m. and would not reach the bridge for some time. The section force unloaded their tools at the south end of the bridge, and the foreman then pushed the track motor-car northward about 60 feet. At this time a bridge and building force consisting of five men was working at Bridge 476.9, and a second bridge and building force consisting of nine men was working between Bridge 476.9 and Bridge 477.0.

- 7 -

About 20 minutes after the section force arrived at the bridge one of the sectionmen heard the sound of a locomotive horn and saw No. 133 approaching. He called a warning, and the members of the force immediately proceeded to the track motor-car. The estimates of the employees on the bridge as to the distance at which they first saw No. 133 varied from 1/2 mile to 1-1/2 miles. Several employees pushed the car southward in order to start the engine. The engine started immediately, but as it started the car became derailed. As these employees were re-railing the car the bridge foreman suggested that it be dropped off the bridge or removed from the track on the fill at the south end of the bridge, but the section foreman said he would have sufficient time to remove it from the track at the set-off south of the bridge. Immediately after the car was re-railed the section foreman started it southward. and one of the sectionmen ran northward and gave stop signals with a red flag. The locomotive of No. 133 passed the sectionman a few seconds after he had reached the north end of the bridge. One sectionman and one bridge and building carpenter boarded the track motor-car as the foreman started it southward. The carpenter apparently planned to assist in removing the car from the track at the set-off. The sectionman said that after the car started he saw that it would be struck by No. 133. He warned the foreman and then alighted from the car between the two bridges. The foreman and the carpenter remained on the car. The sectionman said he thought that if the car had not derailed when it was being started there would have been sufficient time to have reached the set-off and removed the car from the track before No. 133 passed. The cause of the derailment of the car was not determined.

- 8 -

As No. 133 was approaching the point where the accident occurred the enginemen and the front brakeman were in the control compartment at the front of the locomotive, the swing brakeman was in the control compartment at the rear of the locomotive, and the conductor and the flagman were in the caboose. The headlight was lighted. The brakes of the train had been tested and had functioned properly when used en route. The employees on the locomotive said that the grade-crossing whistle signal was sounded for two rail-highway grade crossings located, respectively, 1.12 miles and 3,495 feet north of Bridge 476.9. The enginemen said that when the locomotive reached a point between 3/4 mile and 1/2 mile north of the bridge they saw a number of men on or near the track in the vicinity of the bridge. They expected that the men would step off the track as the train approached, but as the locomotive was closely approaching the bridge they saw a man running toward them giving stop signals with a red flag. When the engineer saw the signals he initiated a service application of the brakes. He then saw the track motor-car ahead, and he made an emergency application of the brakes. According to the tape of the speed-recording device the speed of the train was 54 miles per hour when the brake application became effective and approximately 46 miles per hour when the collision occurred.

The rules of this carrier provide that when practicable the operator of a track motor-car must obtain a lineup before placing the car on the main track, but the roadmaster said that line-ups are not ordinarily issued for use in the traffic-control territory south of Turrell. He said that because of the difficulty in obtaining information as to the approximate leaving time of north-bound freight trains at Yale the information contained in a lineup would be indefinite and of little value. There are telephones at various points in this territory with which the operators of track motor-cars can communicate with the operators at Turrell or Kentucky Street, 21.7 miles south of Turrell. The roadmaster said it is considered that by use of these telephones, together with the block indicators, signals, and sight distances on tangent track, track motorcars can be operated safely without the use of line-ups.

The rules also provide that the operators of track motor-cars must exercise sufficient caution to avoid being struck by a train, and that track motor-cars must be removed from the track or protected by flagman when not in use. In the instant case the track was tangent throughout a distance of 2.7 miles north of the point at which the track motor-car was standing, but none of the sectionmen had been specifically instructed to watch for approaching trains. No flag protection was provided until the train was closely approaching.

During the past 10 years the Commission has investigated 66 collisions, including the present case, in which track motor-cars were involved. These accidents resulted in the death of 93 persons and the injury of 191 persons. This accident was caused by failure to take required precautions in the operation of a track motor-car.

Dated at Washington, D. C., this twentieth day of December, 1956.

By the Commission, Commissioner Clarke.

(SEAL)

HAROLD D. MCCOY,

Secretary.