INTERSTATE COMMERCE COMMISSION

WASHINGTON

REPORT NO. 3704

ST. LOUIS-SAN FRANCISCO RAILWAY COMPANY

IN RE ACCIDENT

NEAR NETTLETON, MISS., ON

JUNE 25, 1956

Report No. 3704

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SUMMARY

Date:	June 25, 1956
Railroad:	St. Louis-San Francisco
Location:	Nettleton, Miss.
Kind of accident:	Collision
Equipment involved:	Track motor-car : Passenger train RC-1970
Train number:	: Extra 5047 North
Locomotive number:	: Diesel-electric units 5047 and 5046
Consist:	: 10 cars
Estimated speeds:	Standing : 35 m. p. h.
Operation:	Signal indications
Track:	Single; tangent; 1.10 percent ascending grade southward
Weather:	Clear
Time:	8а. т.
Casual ties:	l injured
Cause:	Operator of track motor-car assuming that a block indicator which indicated the approach of a train was actuated by a train which had already passed

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INTERSTATE COMMERCE COMMISSION

REPORT NO. 3704

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

ST. LOUIS-SAN FRANCISCO RAILWAY COMPANY

October 8, 1956

Accident near Nettleton, Miss., on June 25, 1956, caused by the operator of a track motor-car assuming that a block indicator which indicated the approach of a train was actuated by a train which had alreadypassed.

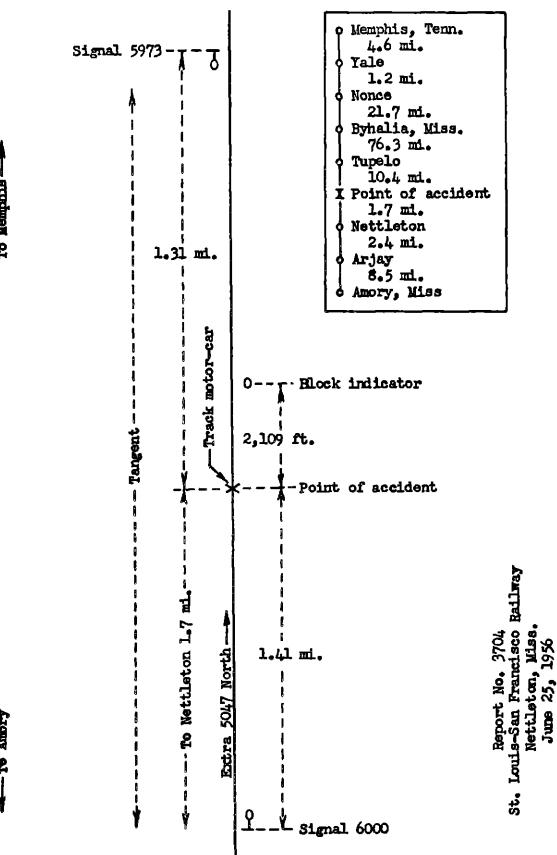
REPORT OF THE COMMISSION¹

CLARKE, Commissioner:

On June 25, 1956, there was a collision between a track motor-car and a passenger train on the St. Louis-San Francisco Railway near Nettleton, Miss., which resulted in the injury of one maintenance-of-way employee.

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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.



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Location of Accident and Method of Operation

This accident occurred on that part of the Southern Division extending between Memphis, Tenn., and Amory, Miss., 126.8 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 114.2 miles south of Memphis and 1.7 miles north of the station at Nettleton, Miss. The track is tangent throughout a distance of several miles on each side of the point of accident. Throughout a distance of 1,000 feet immediately north of the point of accident the grade averages approximately 0.80 percent ascending southward, and it is 1.10 percent ascending southward at that point. From the south the grade is, successively, an average of approximately 0.70 percent ascending a distance of 1,590 feet, practically level 281 feet, 0.73 percent descending 321 feet, and 1.10 percent descending 214 feet to the point of accident.

Automatic signal 5973, governing south-bound movements, and automatic signal 6000, governing north-bound movements, are located, respectively, 1.31 miles north and 1.41 miles south of the point of accident. These signals are of the color-light type and are continuously lighted. They form part of a traffic-control system which extends between Nonco, Tenn., 5.8 miles south of Memphis, and Amory. The control circuits are so arranged that when the route is lined for a north-bound train to leave Nettleton or when a northbound train is between Nettleton and signal 5973, signal 5973 displays a red aspect. After a north-bound train passes the signal, the signal continues to display a red aspect until the train passes the next signal to the north, a distance of 3.25 miles.

A block indicator for the information of maintenanceof-way employees and the operators of track motor-cars is located 2,109 feet north of the point of accident. This indicator consists of an electric bulb enclosed in a case so located that it is visible from the track. The Block Clear indication is given by the illumination of the bulb, and the Block Occupied indication is given by the absence of a light. This indicator indicates Block Occupied from the time the route is lined for movement through the block in either direction until the train passes the first signal beyond the indicator. This carrier's rules for the operation of track 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 * * *

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 * * *

When practicable, line-up will be given by train dispatcher in a prescribed form, for stated period and specified territory, making copy in train order book as a matter of record as per the following example:

No.....(or Extra).....left (Station).....M. Other regular trains on time. Extra.....East leave (Station).....M This line-up for use between (Station) and (Station) and is void at.....M

Line-up will show passenger extras and all sections of passenger trains. Other trains shown will, unless otherwise indicated, be considered as freight trains operating at maximum speed of such trains.

* * *

* * * where practicable, dispatcher will issue a general line-up each morning, showing locations of trains at that time and as much information as possible as to trains to be called, and other line-ups at fixed periods throughout the day * * *

Block signals and block indicators may be used as supplemental protection and in conjunction with lineups. The use of such devices, however, is confined to the immediate area and only while their indication is visible to the track car operator.

The maximum authorized speed for the train involved was 65 miles per hour.

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Description of Accident

Track motor-car RC-1970, occupied by a section foreman and three sectionmen, departed south-bound from Tupelo, Miss., 103.8 miles south of Memphis, about 7:15 a.m. It was stopped and set off the track at a point 8.6 miles south of Tupelo to permit a north-bound freight train to pass. After this train passed, the track motor-car was replaced on the track and proceeded southward. It was stopped a second time at a point 10.4 miles south of Tupelo and 1.7 miles north of Nettleton and was then moved northward a distance of about 300 feet to a motor-car set-off. It was struck by Extra 5047 North before it could be removed from the track.

Extra 5047 North, a north-bound passenger train, consisted of Diesel-electric units 5047 and 5046, coupled in multiple-unit control, four sleeping cars, one dining car, five sleeping cars, and a caboose, in the order named. This train departed from Amory at 7:45 a. m., passed signal 6000, which indicated Proceed, and while moving at a speed of about 35 miles per hour it struck track motor-car RC-1970.

The track motor-car stopped 27 feet west of the track and 66 feet north of the point of accident. It was demolished. Extra 5047 North stopped with the front of the locomotive about 1,050 feet north of the point of accident. The front of the locomotive was slightly damaged.

The section foreman was injured.

The weather was clear at the time of the accident, which occurred at 8 a. m.

Track motor-car RC-1970, which was of the belt-drive type, was powered by a 1-cylinder 8 to 13 horsepower engine and was equipped with four-wheel brakes. It was provided with safety railings at each end. It weighed approximately 1,050 pounds and had seating capacity for six persons. It 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 13.86 trains.

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Discussion

On the day of the accident the section force at Tupelo reported for duty at 7 a.m. The foreman obtained a copy of a line-up which had been issued by the train dispatcher at 7:10 a.m. and which read as follows:

> This line-up for use between Amory and Nonco and is void at 10 a.m. No 135 left Tupelo 708 AM No 247 left Byhalia 708 AM Work Extra 604 called Yale 630 AM works Tenn Yard No 235 on time Extra 5215 South 133's conn called Yale 9 AM No 246 arrived Tupelo 628 AM there now No 136 called Amory 7 AM Extra 5047 North passenger train called Amory 710 AM

Byhalia and Yale are located, respectively, 76.3 miles and 99.2 miles north of Tupelo. The foreman placed the line-up in his pocket without reading it. He then left the station, and he and the three sectionmen departed for Arjay. 14.5 miles south of Tupelo, on the track motor-car. He said that a block indicator at Tupelo indicated that the block was clear at the time the track motor-car departed, and after leaving the station it did not occur to him to read the line-up or to show it to the sectionmen. After reaching a point about 4 miles south of Tupelo the foreman found that the line-up had been lost. The track is tangent in this vicinity and an approaching train is visible throughout a distance of several miles, and the foreman considered that there was no hazard in proceeding without securing information concerning train movements. When the track motor-car reached a point about 8,6 miles south of Tupelo the occupants saw No. 136, a north-bound freight train, approaching. The track motor-car was set off the track at a point 2,816 feet north of signal 5973, and after No. 136 passed it again proceeded southward. The foreman said that signal 5973 was displaying a red aspect at the time the track motor-car passed it and that the block indicator 4,829 feet south of the signal indicated Block Occupied. He thought these aspects were displayed because No. 136 had not yet cleared When the car reached a point about 10.4 miles the block. south of Tupelo the occupants saw Extra 5047 North approaching at a distance which they thought was at least a mile. The foreman immediately stopped the car and then backed it to a motor-car set-off about 300 feet north of the point at which it had stopped. He said that because of oil on

the rails the car stopped a short distance north of the point at which he intended to stop at the set-off. The occupants immediately alighted and turned the car in order to remove it from the track. When they did this the left front wheel dropped between the rails. They made two or three unsuccessful attemps to pull the wheel over the rail before the car was struck by the train. They said they could have cleared the train easily if they had not experienced difficulty in removing the car from the track. When the collision occurred the foreman was struck by one of the handles of the car.

As Extra 5047 North was approaching the point where the accident occurred the enginemen and a road foreman of equipment were maintaining a lookout ahead from the control compartment at the front of the locomotive, the front brakeman was in the control compartment at the rear of the loco-motive, and the conductor and the flagman were in the cars of the train. The brakes of this train had been tested and had functioned properly when used en route. The employees at the front of the locomotive said that when the locomotive was in the vicinity of a rail-highway grade crossing 1,452 feet south of the point where the accident occurred they saw the members of the section force ahead over the top of the grade. At first it appeared that the members of the The engisection force were performing maintenance work. neer sounded a series of warning blasts on the horn. He then saw that the track was obstructed by the track motorcar, and he immediately made an emergency application of the brakes. He thought that at this time the track motorcar was about 1,200 feet distant, According to the tape of the speed-recording device the speed was 58 miles per hour when the brake application became effective, and the train stopped within a distance of approximately 2,300 feet. The speed was approximately 35 miles per hour when the collision occurred.

On the line on which this accident occurred block indicators are installed at points from which the view of an approaching train is obstructed. The communications and signals supervisor said that as a track motor-car moves over any portion of the subdivision either a block indicator or a signal is within the operator's range of vision at all times. He thought that a track motor-car could be operated with safety even though the operator had no information concerning expected train movements. Officials of the carrier said that the operators of track motor-cars are required to secure line-ups when practicable as an additional safety precaution. In the instant case the section

foreman lost his line-up before he had read it, and he had no knowledge that Extra 5047 North was closely following No. 136. He said he had been instructed that he was not to call the train dispatcher directly in securing information concerning train movements for use in the operation of his track motor-car, and after his line-up was lost he did not ask for further information. He understood the aspects of the signals and block indicators, but at the time the accident occurred he did not know the limits of the blocks in which a north-bound train would actuate signal 5973 or the block indicator south of that signal. After No. 136 passed signal 5973. this train no longer actuated the block indicator. At the time the section foreman passed the block indicator it indicated Block Occupied because the route had been lined for the movement of Extra 5047 North through the block.

During the past 10 years the Commission has investigated 61 collisions, including the present case, in which track motor-cars were involved. These accidents resulted in the death of 86 persons and the injury of 181 persons.

<u>Cause</u>

This accident was caused by the operator of a track motor-car assuming that a block indicator which indicated the approach of a train was actuated by a train which had already passed.

Dated at Washington, D. C., this eighth day of October. 1956.

By the Commission, Commissioner Clarke.

(SEAL)

HAROLD D. MCCOY.

Secretary.