

INTERSTATE COMMERCE COMMISSION  
WASHINGTON

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REPORT NO. 3716  
SOUTHERN PACIFIC COMPANY  
IN RE ACCIDENT  
NEAR ERICKSON, CALIF., ON  
OCTOBER 22, 1956

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- 2 -

## SUMMARY

Date: October 22, 1956

Railroad: Southern Pacific

Location: Erickson, Calif.

Kind of accident: Head-end collision

Equipment involved: Track motor-car : Passenger train  
with trailer

Train number: : 9

Locomotive number: : Diesel-electric  
units 6015, 5914,  
and 6007

Consist: : 9 cars

Estimated speeds: Undetermined : 45 m. p. h.

Operation: Timetable, train orders, and automatic  
block-signal system

Track: Single; spiral; 0.90 percent descending  
grade eastward

Weather: Clear

Time: 3:35 p. m.

Casualties: 2 killed; 2 injured

Cause: Failure to take required precautions  
in operation of track motor-car

INTERSTATE COMMERCE COMMISSION

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REPORT NO. 3716

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

SOUTHERN PACIFIC COMPANY

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December 17, 1956

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Accident near Erickson, Calif., on October 22, 1956, caused  
by failure to take required precautions in the operation  
of a track motor-car.

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

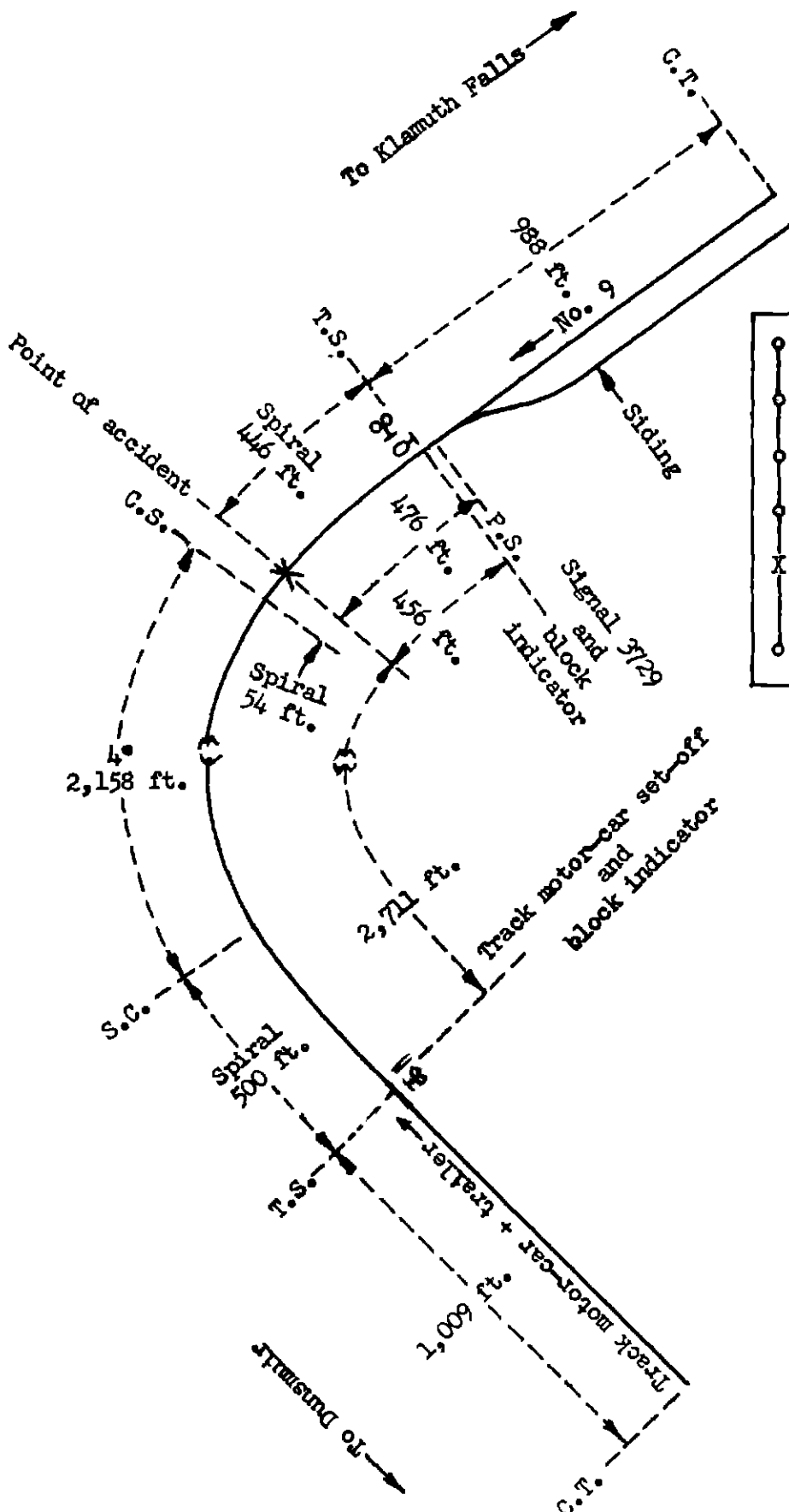
CLARKE, Commissioner:

On October 22, 1956, there was a head-end collision between a track motor-car with trailer and a passenger train on the line of the Southern Pacific Company near Erickson, Calif., which resulted in the death of two maintenance-of-way employees, and the injury of two maintenance-of-way employees.

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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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|---|---------------------------------|----------|
| ○ | Klamath Falls, Oreg.            | 32.8 mi. |
| ○ | Macdoel, Calif.                 | 14.8 mi. |
| ○ | Bray                            | 4.7 mi.  |
| ○ | Penoyer                         | 4.1 mi.  |
| X | Erickson<br>(Point of accident) | 51.0 mi. |
| ○ | Dunsmuir, Calif.                |          |

Report No. 3716  
 Southern Pacific Company  
 Erickson, Calif.  
 October 22, 1956

### Location of Accident and Method of Operation

This accident occurred on that part of the Shasta Division extending between Dunsmuir, Calif., and Klamath Falls, Oreg., 107.4 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 Erickson, Calif., 51.0 miles east of Dunsmuir, a siding parallels the main track on the south. The accident occurred on the main track at a point 476 feet west of the west siding-switch at Erickson. From the west there are, in succession, a tangent 1,009 feet in length, a spiral 500 feet, a 4° curve to the right 2,158 feet, and a spiral 54 feet to the point of accident and 446 feet eastward. From the east there is a tangent 988 feet in length and the spiral on which the accident occurred. The grade is 0.90 percent descending eastward at the point of accident.

Automatic signal 3729, governing west-bound movements on the main track, is located 456 feet east of the point of accident. The signals in this vicinity are of the search-light type, and, with the exception of the leaving signals at the ends of sidings, they are approach lighted.

A motor-car set-off is located 2,711 feet west of the point of accident. Block indicators for the information of maintenance-of-way employees and the operators of track motor-cars are located near this set-off and also near signal 3729. These indicators consist of small lower-quadrant semaphores enclosed in cases so located that they are visible from the track. An indicator is provided for indicating track occupancy in each direction. The indicator which indicates track occupancy east of the motor-car set-off indicates Block-occupied if the main track is occupied at any point throughout a distance of 4.2 miles immediately east of the indicator.

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

1101. Track cars must be kept clear of main track for all trains unless line-up provides sufficient time on all trains to permit safe movement, or in an emergency adequate flag protection is provided.

In block system limits, when block signal or track occupancy indicator indicates approach of a train, track car must be immediately stopped and removed from track and kept off track unless it can be seen or is known that it is safe to proceed.

Track cars shall be operated only by duly authorized and properly qualified employes \* \* \*

1102. A watch conforming to requirements \* \* \* and a copy of the current timetable, and supplements if any, must be carried by each employe in charge of track car.

1104. \* \* \* whenever possible, a line-up of trains should be obtained before starting on a run, and approximately each two hours thereafter. \* \* \*

1120. Although block signals and indicators for track cars may indicate that a block is not occupied by a train, operators of track cars must bear in mind that an approaching train may immediately thereafter enter the block \* \* \*

In the vicinity of the point of accident the maximum authorized speeds are 55 miles per hour for the train involved and 15 miles per hour for track motor-cars with trailers.

#### Description of Accident

About 3:30 p. m. a track motor-car occupied by a lead welder, a welder, and two welder helpers departed east-bound from the motor-car set-off located 3,187 feet west of the west siding-switch at Erickson. It was being operated by the welder. It was stopped a short distance east of the set-off, and a trailer was placed on the track and coupled to the rear end of the car. The track motor-car, towing the trailer, then proceeded eastward. While it was moving at an undetermined speed it collided with No. 9 at a point 476 feet west of the west siding-switch.

No. 9, a west-bound first-class passenger train, consisted of Diesel-electric units 6015, 5914, and 6007, coupled in multiple-unit control, one baggage car, two coaches, one dining car, two coaches, one dome lounge car, one coach, and one observation parlor car, in the order named. All cars were of lightweight construction. This train passed Macdoel, Calif., 23.6 miles east of Erickson and the last open office, at 3:08 p. m., 5 minutes late, passed signal 3729, which indicated Proceed, and while moving at a speed of about 45 miles per hour it collided with the track motor-car.

No. 9 stopped with the front of the locomotive 1,196 feet west of the point of accident. The front of the locomotive was slightly damaged. The track motor-car and the trailer were demolished.

The welder and one welder helper were killed. The lead welder and one welder helper were injured.

The weather was clear at the time of the accident, which occurred about 3:35 p. m.

The track motor-car involved was of the belt-drive type. It was powered by a one-cylinder 5 to 8 horsepower engine and was equipped with four-wheel brakes. It weighed 900 pounds and had seating capacity for six persons. The trailer was constructed with a flat wooden deck. The trailer weighed 295 pounds. Both the track motor-car and the trailer were 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 18.7 trains.

### Discussion

On the day of the accident the lead welder, the welder, and the two welder helpers reported for duty at Penoyar, 4.1 miles east of Erickson, at 7:30 a. m. The lead welder secured a line-up of expected train movements between the hours of 7:01 a. m. and 9:01 a. m., and these employees then proceeded to a point about 1/2 mile west of the west siding-switch at Erickson with their track motor-car and trailer. The trailer was removed from the track at this point, and the track motor-car was removed from the track at the motor-car set-off located 3,187 feet west of the switch. About 3:20 p. m. these employees returned to the track motor-car with the intention of returning to Penoyar. No. 10, an east-bound passenger train due at Erickson at 3:21 p. m., passed as they were returning to the car. The surviving employees said that the block indicator near the set-off indicated Block-occupied for several minutes after No. 10 passed and that the indication then changed to Block-clear. These employees said that the welder, who was assigned to operate the track motor-car, told them that the indicator indicated track occupancy between that point and Bray, 8.8 miles east of Erickson. They said they told the welder they were under the impression that the indicator indicated track occupancy only to Penoyar, and that they

thought they should wait until No. 9 passed before placing the track motor-car on the track. No. 9 is due to leave Erickson at 3:29 p. m. They said they waited about 2 minutes after the indication of the indicator changed to Block-clear. The welder then told them that if No. 9 had left either Bray or Penoyar on the arrival of No. 10 it would have actuated the indicator, and since the indicator continued to indicate Block-clear there would be sufficient time for them to operate the track motor-car to the siding at Erickson and he would use the telephone at that point and obtain a line-up. There is no telephone at the motor-car set-off, and these employees were not provided with a portable telephone. The welder was the only employee in the force who was qualified as a track motor-car operator, and the surviving employees said that after he told them that there would be sufficient time to reach Erickson before the arrival of No. 9 they made no further protest. They placed the track motor-car on the track, proceeded to to the point at which they had been working, and attached the trailer to the track motor-car and loaded their welding equipment. They thought that they stopped at the latter point not more than 1 or 2 minutes. They then boarded the track motor-car and proceeded eastward. In this vicinity the track is laid on a series of short fills and cuts, and as a track motor-car approaches the point of accident from the west the occupants' view of an approaching west-bound train is restricted to a distance of about 1,000 feet. The surviving employees who were on the car said that they approached the point of accident at a speed of about 15 miles per hour. They first saw No. 9 approaching when the train was a short distance east of the west siding-switch. There was then insufficient time to stop the car before the collision occurred.

No. 10 entered the siding at Penoyar, the schedule meeting point with No. 9, and met No. 9 at that point. Between the time that No. 10 entered the siding and the time that No. 9 passed Penoyar the block indicator west of Erickson indicated Block-clear, and it was between these times that the track motor-car was placed on the track.

As No. 9 was approaching the point where the accident occurred the enginemen were maintaining a lookout ahead from the control compartment at the front of the locomotive. The members of the train crew were in the cars of the train. The brakes of the train had been tested and had functioned properly when used en route. The engineer said that the



speed was approximately 55 miles per hour. He said that he first saw the track motor-car when the locomotive was approximately 500 feet east of the west siding-switch at Erickson. When he saw the car he immediately made an emergency application of the brakes and sounded a warning on the horn. The fireman said that he saw the car and opened his emergency brake valve at approximately the same time that the engineer applied the brakes. He thought that the speed had been reduced to about 45 miles per hour when the collision occurred.

There is no means of communication with the train dispatcher or an operator from the point at which the track motor-car was placed on the track, and according to the rules of the carrier the car should have been kept clear of the track until after one of the employees had returned from a point at which he could obtain information concerning train movements or until after flag protection had been provided. Either course of action would have resulted in considerable delay to the track motor-car, and if flag protection had been provided there was a possibility of delay to a train. The operator of the track motor-car told the other employees he considered that they could move from the block indicator to the switch in less time than No. 9, which had not yet actuated the indicator, could reach the switch, and he would use a telephone near the switch to obtain information concerning train movements.

During the past 10 years the Commission has investigated 63 collisions, including the present case, in which track motor-cars were involved. These accidents resulted in the death of 89 persons and the injury of 185 persons.

#### Cause

This accident was caused by failure to take required precautions in the operation of a track motor-car.

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

By the Commission, Commissioner Clarke.

(SEAL)

HAROLD D. McCOY,  
Secretary.