

INTERSTATE COMMERCE COMMISSION  
WASHINGTON

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INVESTIGATION NO. 3076  
UNION PACIFIC RAILROAD COMPANY  
REPORT IN RE. ACCIDENT  
NEAR FARLEY, OREG., ON  
FEBRUARY 16, 1947

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SUMMARY

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Railroad: Union Pacific  
Date: February 16, 1947  
Location: Farley, Oreg.  
Kind of accident: Head-end collision  
Equipment involved: Track motor-car : Freight train  
Train number: : First 699  
Engine number: : 5503  
Consists: Motor-car 673 : 78 cars, caboose  
Estimated speeds: 20 m. p. h. : 35 m. p. h.  
Operation: Timetable, train orders and  
automatic block-signal and  
train-control systems  
Track: Single; 3°10' curve; level  
Weather: Clear  
Time: 6:57 p. m.  
Casualties: 1 killed; 1 injured  
Cause: Failure to provide adequate  
protection for movement of  
track motor-car  
Recommendation: That the Union Pacific Railroad  
Company provide adequate block-  
signal or train-order protection  
for the movement of track motor-  
cars on its line .

INTERSTATE COMMERCE COMMISSION

INVESTIGATION NO. 3076

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

UNION PACIFIC RAILROAD COMPANY

March 18, 1947

Accident near Farley, Oreg., on February 16, 1947, caused  
by failure to provide adequate protection for the  
movement of a track motor-car.

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

PATTERSON, Commissioner:

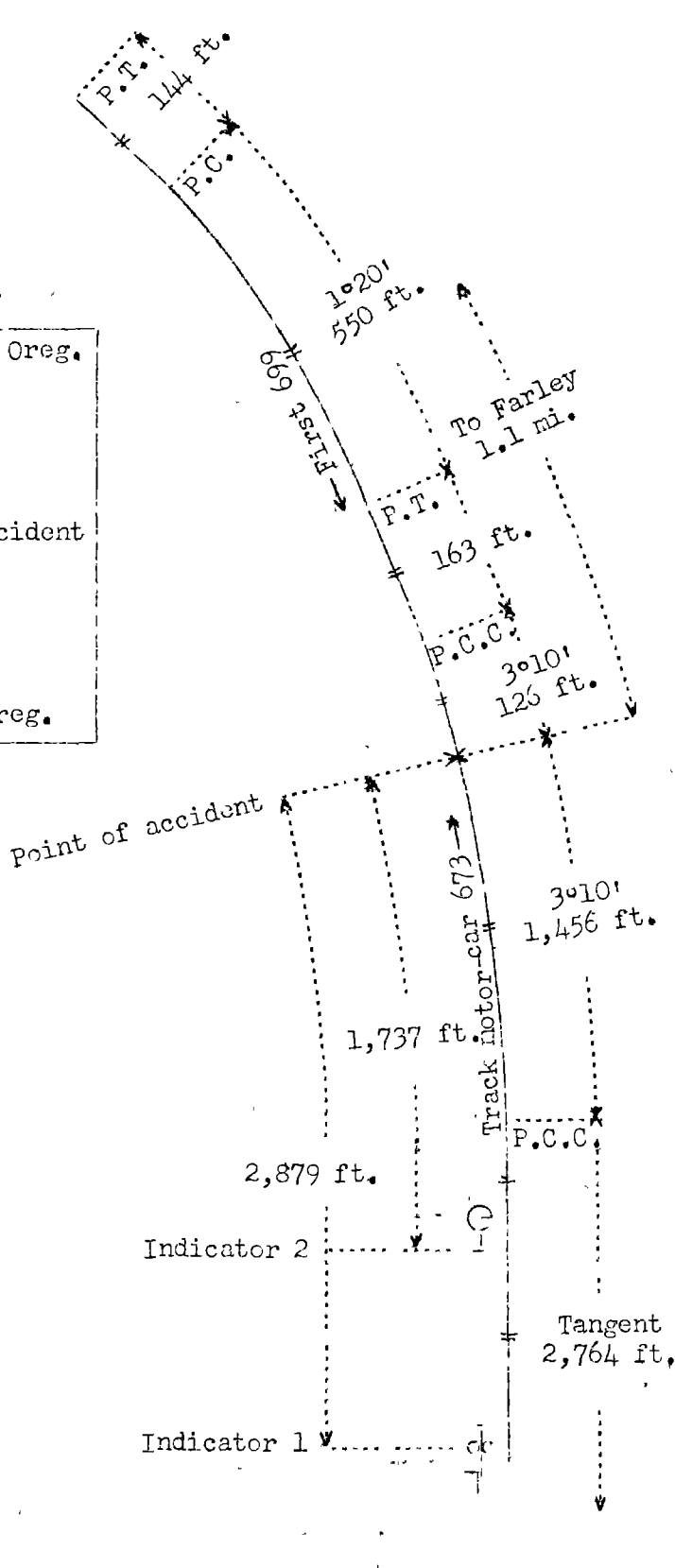
On February 16, 1947, there was a head-end collision  
between a track motor-car and a freight train on the  
Union Pacific Railroad near Farley, Oreg., which resulted  
in the death of one employee, and the injury of one  
employee.

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<sup>1</sup>  
Under authority of section 17 (2) of the Interstate Com-  
merce Act the above-entitled proceeding was referred by the  
Commission to Commissioner Patterson for consideration and  
disposition.

↑ To The Dalles

- o The Dalles, Oreg. 35.6 mi.
- o Wyeth 3.2 mi.
- o Farley 1.1 mi.
- X Point of accident 7.2 mi.
- o Bonneville 12.1 mi.
- o Bridal Veil 26.6 mi.
- o Portland, Oreg.



Inv. No. 3076  
 Union Pacific Railroad  
 Farley, Oreg.  
 February 16, 1947

Location of Accident and Method of Operation

This accident occurred on that part of the Oregon Division extending between The Dalles and Portland, Oreg., 85.8 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 and an automatic train-control system. The accident occurred on the main track 39.9 miles west of The Dalles and 1.1 miles west of the station at Farley. From the east there are, in succession, a tangent 144 feet in length, a 1°20' curve to the right 550 feet, a tangent 163 feet and a compound curve to the right, the maximum curvature of which is 3°10', 126 feet to the point of accident and 1,456 feet westward. From the west there is a tangent 2,764 feet in length, then the curve on which the accident occurred. The grade is practically level.

Rules governing the movement of track motor-cars read in part as follows:

99 (L). \* \* \*

Copy of current time-table, and the following supply of signal equipment must be on each \* \* \* car \* \* \* :

Single Track

| DAYS   | NIGHTS   |
|--|--|
| 3 red flags,<br>6 fuses,<br>Not less than<br>24 torpedoes. | In addition to the white light<br>at front and the red light at<br>rear,<br>2 lanterns with red globes,<br>3 red flags,<br>6 fuses,<br>Not less than 24 torpedoes. |

\* \* \*

1500. Track cars must be \* \* \* in charge of employes who have been examined and qualified as track car operators.

\* \* \*

1501. Before occupying main track with track cars, employes in charge of them must, if possible, obtain information from operator or train dispatcher in writing as to train movements. Such information, however, does not relieve employes from observing the rules for protection of track cars.

\* \* \*

1504. Track cars must be run with caution at all times and must never be used when to do so would involve risk of accident.

The speed shown below must not be exceeded and must be as much slower as necessary to insure safety:

Power-propelled \* \* \* cars....30 M.P.H.  
\* \* \*

\* \* \*

Speed on curves must be such that track car can be stopped in less than one-half the distance track is seen to be clear.

\* \* \*

In block signal territory, when in his judgment it can be safely done, track car operator may be governed by indication of block signals or indicators, but signals must not be entirely depended upon, and sharp lookout must be kept for trains \* \* \*

On single track, when signal indicators or block signals indicate approach of a train, track car must be immediately stopped and removed from track and kept off track, unless car is properly protected, or unless it can be plainly seen or is known that it is safe to proceed.

\* \* \*

1516. \* \* \*

Only insulated track cars may be used where there are track circuits.

A white-light type track-occupancy indicator, hereinafter referred to as indicator 1, and a semaphore-type track-occupancy indicator, hereinafter referred to as indicator 2, governing movement of east-bound track motor-cars, are located, respectively, 2,879 feet and 1,737 feet west of the point of accident. Indicator 1 is mounted on a signal mast immediately north of the north rail of the main track, and consists of two 25-watt incandescent lamps, normally lighted and mounted in horizontal position 8 feet above the level of the tops of the rails. The controlling circuit of this indicator is so arranged that the south light is not illuminated when a west-bound train occupies any portion of the main track throughout a distance of 1.35 miles immediately east of the location of this indicator. Indicator 2 is mounted on a mast immediately north of the north rail of the main track, and consists of a two-position, lower-quadrant, semaphore enclosed in a glass-front metal case, which is 6 feet above the level of the tops of the rails. The controlling circuit of this indicator is so arranged that the semaphore is displayed in horizontal position when a west-bound train occupies any portion of the main track throughout a distance of 2.9 miles immediately east of the location of this indicator.

The maximum authorized speed for the train involved was 35 miles per hour.

#### Description of Accident

About 6:20 p. m. track motor-car 673 departed east-bound from Bridal Veil, 20.4 miles west of Farley, passed Bonneville, the last open office, 8.3 miles west of Farley, about 6:45 p. m., and while moving at an estimated speed of 20 miles per hour it collided with First 699 at a point 1.1 miles west of Farley.

First 699, a west-bound second-class freight train, consisting of engine 5503, 78 cars and a caboose, departed from Wyeth, the last open office, 3.2 miles east of Farley, at 6:37 p. m., 6 hours 47 minutes late, passed Farley and while moving at an estimated speed of 35 miles per hour it collided with track motor-car 673.

The motor-car was moved westward about 1,700 feet on the front of the engine to the point where the train stopped. The motor-car was badly damaged.

The employee killed was a signal maintainer, and the employee injured was a section foreman. These employees were the only occupants of the motor-car.

The weather was clear and it was dark at the time of the accident, which occurred about 6:57 p. m.

According to data furnished by the railroad company, motor-car 673 was of the 4-wheel, 2-man type. It weighed 510 pounds, and was powered by a 5-8 horsepower gasoline motor. It was equipped with two headlights and a canvas-covered windshield, which had a 6 by 12-inch shatter-proof glass located in the upper right-hand corner.

### Discussion

The investigation disclosed that about 4 p. m. the train dispatcher communicated by telephone with the signal maintainer at Bridal Veil, 20.4 miles west of Farley, and instructed the maintainer to proceed to a point about 12 miles east of Farley to investigate a signal failure. The train dispatcher understood the signal maintainer to say he would make the trip by automobile, and no information was given the maintainer regarding train movements in this territory. The maintainer and a section foreman departed eastward from Bridal Veil on track motor-car 673 about 6:20 p. m. The motor-car was moving on a curve about 1.1 miles west of Farley at a speed of about 20 miles per hour when the section foreman saw the reflection of the headlight of the approaching train about 500 feet distant. He called a warning to the signal maintainer, who was operating the motor-car, then jumped just before the collision occurred. The section foreman said that before the motor-car departed from Bridal Veil he asked the maintainer if he had obtained a line-up of train movements, and the maintainer replied, "O.K." From this the foreman understood that the maintainer had the proper line-up, and he did not again question the maintainer. No stop was made en route, and the foreman was maintaining a lookout to the rear of the motor-car throughout the trip. He did not observe the indications displayed by the track-occupancy indicators or the automatic block-signals immediately west of the point where the accident occurred.

As First 690 was approaching the curve on which the accident occurred the speed was about 35 miles per hour. The headlight was lighted brightly. No train order restricting the movement of First 690 with respect to motor-car 673 had been issued. The engineer and the front brakeman were maintaining a lookout ahead, and the first they knew of the movement of the motor-car was when the engineer saw the reflection of the headlight of the motor-car about 500 feet distant. He immediately made a service brake-pipe reduction, and sounded an alarm signal on the engine whistle. The collision occurred before the speed of the train was materially reduced. The brakes of this train had been tested and had functioned properly en route.



In addition to the present accident, during the past three years the Commission has investigated fourteen collisions between trains and motor-cars. These accidents resulted in the death of 32 persons and the injury of 25, and were caused by failure to provide adequate protection for the movement of track motor-cars. In the instant case, the operator of the motor-car did not obtain a line-up of train movements, as required by the rules. The motor-car passed two track-occupancy indicators short distances west of the point where the accident occurred. These indicators should have indicated the approach of the opposing train. In tests after the accident, the indicators functioned properly. Track motor-cars are insulated to prevent actuation of automatic-block signals. Train crews have no knowledge of the movements of these cars. Under the rules of the carrier, if the motor-car operator had obtained a line-up at Bridal Veil, he would have been permitted to use his judgment in estimating the time First 699 would reach various points. The only other information about the movements of trains available to him was furnished by the indications displayed by the track-occupancy indicators. If proper block protection had been required and provided, neither the track motor-car nor the opposing train would have been permitted to enter a block occupied by an opposing movement. If train-order authority had been required to be issued to protect the movement of track motor-cars, this accident might have been prevented.

#### Cause

It is found that this accident was caused by failure to provide adequate protection for the movement of a track motor-car.

#### Recommendation

It is recommended that the Union Pacific Railroad Company provide adequate block-signal or train-order protection for the movement of track motor-cars on its line.

Dated at Washington, D. C., this eighteenth day of March, 1947.

By the Commission, Commissioner Patterson.

(SEAL)

W. P. BARTEL,

Secretary.