INTERSTATE COMMERCE COMMISSION

WASHINGTON

INVESTIGATION NO. 2946

THE WESTERN PACIFIC RAILROAD COMPANY

REPORT IN RE ACCIDENT

NEAR CARBONA, CALIF., ON

NOVEMBER 11, 1945

SUMMARY

Railroad:	Western Pacific	
Date:	November 11, 1945	
Location:	Carbona, Calif.	
Kind of accident:	Rear-end collision	
Trains involved:	Freight	: Passenger
Train numbers:	Second 53	: Extra 177 West
Engine numbers:	309-17	: 81-177
Consist:	63 cars, caboose	: 15 cars, caboose
Estimated speed:	Standing	: 25 m. p. h.
Operation:	Timetable and train orders	
Track:	Single; tangent; 0.63 percent ascending grade westward	
Weather:	Clear	
Time:	4:52 a. m.	
Casualties:	1 killed; 118 injured	
Cause:	Failure to provide adequate protection for preceding train	

INTERSTATE COMMERCE COMMISSION

INVESTIGATION NO. 2946

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

THE WESTERN PACIFIC RAILROAD COMPANY

January 8, 1946.

Accident near Carbona, Calif., on November 11, 1945, caused by failure to provide adequate protection for the preceding train.

REPORT OF THE COMMISSION[1]

PATTERSON, Commissioner:

On November 11, 1945, there was a rear-end collision between a freight train and a passenger train on the Western Pacific Railroad near Carbona, Calif., which resulted in the death of 1 train-service employee, and the injury of 105 passengers, 1 Pullman employee, 1 traffic agent, 4 dining-car employees and 7 train-service employees. This accident was investigated in conjunction with a representative of the Railroad Commission of California.

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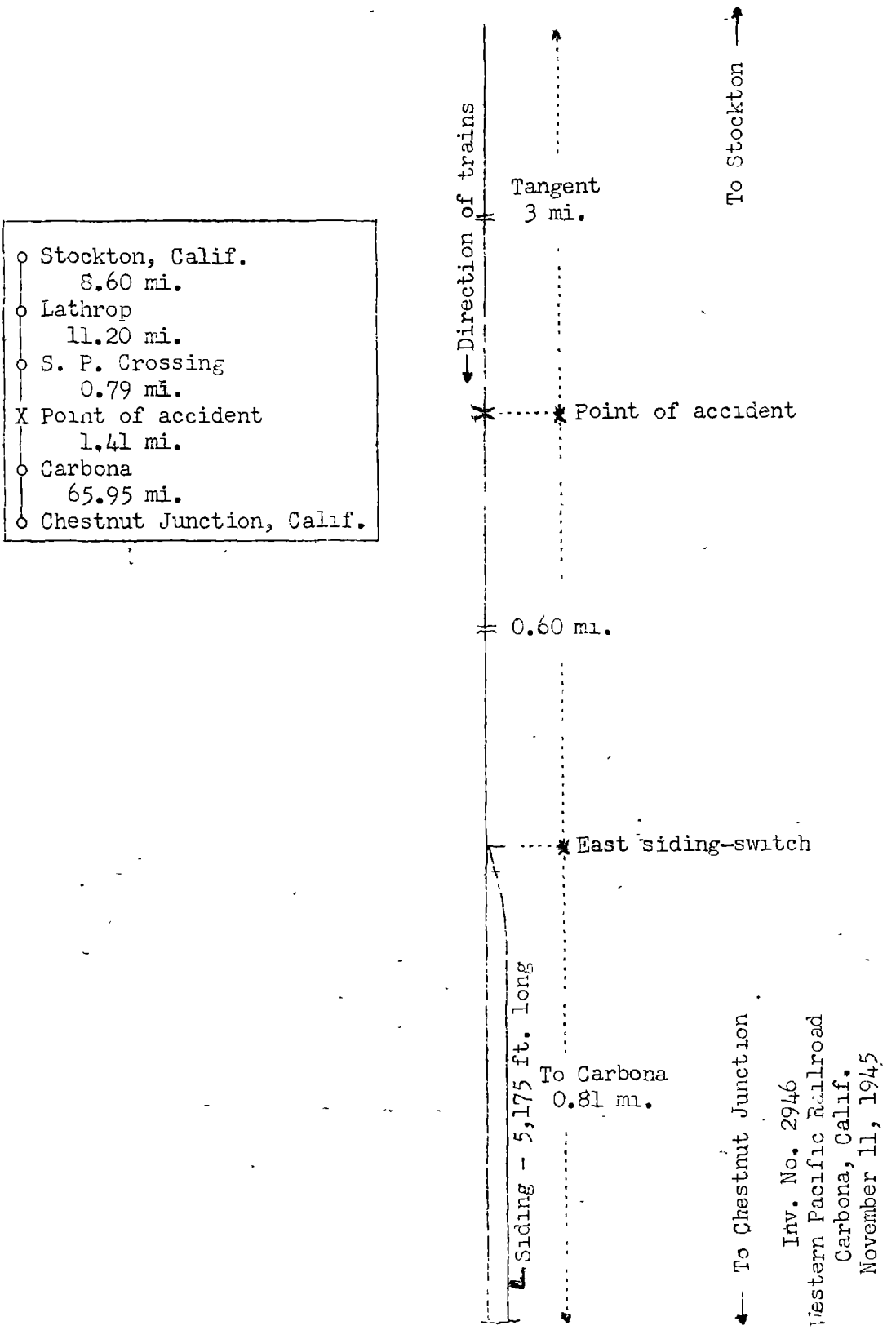
[1]Under authority of section 17 (2) of the Interstate Commerce Act the above-entitled proceeding was referred by the Commission to Commissioner Patterson for consideration and disposition.


Stockton, Calif.
8.60 mi.
Lathrop
11.20 mi.
S. P. Crossing
0.79 mi.
X Point of accident
1.41 mi.
Carbona
65.95 mi.
Chestnut Junction, Calif.
Direction of trains
Tangent
3 mi.
To Stockton
Point of accident
0.60 mi.
East siding-switch
Siding - 5,175 ft. long
To Carbona
0.81 mi.
To Chestnut Junction
Inv. No. 2946
Western Pacific Railroad
Carbona, Calif.
November 11, 1945

Location of Accident and Method of Operation

This accident occurred on that part of the Western Division extending between Stockton and Chestnut Junction, Calif., 87.95 miles, a single-track line in the vicinity of the point of accident, over which trains are operated by timetable and train orders. There is no block system in use. At Carbona, 22 miles west of Stockton, a siding 5,175 feet in length parallels the main track on the south. The east switch of this siding is 0.81 mile east of the station. The accident occurred on the main track 0.60 mile east of the east siding-switch at Carbona. The track is tangent throughout a distance of 3 miles east of the point of accident and a considerable distance westward. The grade is 0.63 percent ascending westward.

Operating rules read in part as follows:

11. * * *

* * * a train finding a fusee burning on or near its track must stop and not proceed until it has burned out.

* * *

19. The rear of every train will be indicated by markers * * *

* * *

19 (A). When the markers display red lights to the rear, it is an indication that the main track is obstructed. * * *

35. The following signals must be used by flagmen:

* * *

Night signals--A red light,
A white light,
Torpedoes and
Fusees.

91. Unless some form of block signal system is used, trains in the same direction must keep at least ten minutes apart, except in closing up at stations. * * *

99. When a train stops under circumstances in which it may be overtaken by another train, the flagman must go back immediately with flagman's signals a sufficient distance to insure full protection.

* * *

When a train is moving under circumstances in which it may be overtaken by another train, the flagman must take such action as may be necessary to insure protection. By night, also by day when the view is obscured, lighted fusees must be thrown off at proper intervals.

* * *

When a train must stop to take siding at obscured points, a fusee should be displayed three-fourths mile from its rear, to warn following train.

* * *

The maximum authorized speed for the freight train was 40 miles per hour and for the passenger train, 50 miles per hour.

Description of Accident

Second 53, a west-bound second-class freight train, consisting of engine 309, 63 cars, a caboose and engine 17, in the order named, passed Lathrop, the last open reporting station, 13.4 miles east of Carbona, at 4:21 a. m., 6 hours 41 minutes late, passed S.P. Crossing, 2.2 miles east of Carbona, about 4:47 a. m., and stopped on the main track about 4:51 a. m., with the rear end 3,156 feet east of the east siding-switch at Carbona. About 1 minute later, while it was preparing to enter the siding to clear for an opposing superior train, the rear end was struck by Extra 177 West.

Extra 177 West, a west-bound passenger train, consisted of engines 81 and 177, six Pullman sleeping cars, seven troop sleeping cars, one dining car, one kitchen car and a caboose, in the order named. The caboose was of steel-underframe construction, and the remainder of the cars were of all-steel construction. This train passed Lathrop at 4:31 a. m., passed S.P. Crossing about 4:50 a. m., and while moving at an estimated speed of 25 miles per hour it struck the rear end of Second 53.

The rear engine and the rear car of Second 53 were badly damaged. The caboose was demolished, and the wreckage was destroyed by fire. The engine truck and the tender of the first engine of Extra 177 West were derailed. Both engines of this train were badly damaged.

The weather was clear at the time of the accident, which occurred about 4:52 a. m.

The front brakeman of Extra 177 West was killed. The conductor and the flagman of Second 53, and the engineers, the firemen and the flagman of Extra 177 West were injured.

During the 30-day period preceding the day of the accident, the average daily movement in the vicinity of the point of accident was 29.4 trains.

Discussion

About 1 minute after Second 53 stopped in the vicinity of the east siding-switch at Carbona the rear end was struck by Extra 177 West.

As Extra 177 West was approaching the point where the accident occurred the speed was about 35 miles per hour. The brakes of this train, which were in the charge of the engineer of the first engine, had been tested and had functioned properly en route. No train order restricting the authority of this train to proceed at maximum authorized speed had been issued. The headlight of the first engine was lighted, and the enginemen of both engines were maintaining a lookout ahead. No warning signal was seen or heard by these employees. The engineer of the first engine saw the rear end of the preceding train about 400 feet distant, and he immediately moved the brake valve to emergency position, but the collision occurred before the train could be stopped.

The flagman of Second 53 said that he dropped a lighted 10-minute fusee from the rear platform of the caboose when the speed of the train was being reduced about 1 mile east of the point of accident. At that time he did not see or hear a train approaching from the east. He thought this fusee continued to burn but, because the engine coupled to the rear of the caboose obscured his view, he was unable to keep the fusee under further observation. The engineer of the rear engine said that he observed the flagman drop a lighted fusee at this point, but he did not observe whether it remained lighted after it was dropped. When Second 53 stopped, the flagman was preparing to proceed eastward to provide protection for his train, but the collision occurred before he had alighted from the caboose. The conductor of Second 53 was in the caboose when the collision occurred, and he was so seriously injured that he could not be questioned during this investigation. After the accident, two partly burned fusees were found in the vicinity of the point where the flagman of Second 53 said he dropped a lighted fusee. Examination of these fusees indicated that one had burned about 30 seconds and the other about 3 seconds. Both had been extinguished when they struck the ballast of the roadbed. Since no burning fusee was seen by the members of the engine crew of Extra 177, it is evident that the fusee dropped by the flagman of Second 53 did not remain lighted after it was dropped. The enginemen of the rear engine of Second 53 said that lighted marker lamps were displayed at the rear of the tender before this train departed from Stockton, and that the marker lamps were displaying red to the rear when the train was about 3 miles east of the point where the accident occurred. The enginemen of the first engine of Extra 177 said no marker light was visible at the rear of Second 53 from the time they first saw the preceding train until the collision occurred. Tests disclosed that lighted marker lamps with clean lenses could be seen in this vicinity throughout a distance

of about 5,600 feet.

In this territory trains are operated by timetable and train orders only. The only provision for spacing following trains is by the time-interval method enforced by operators at open stations, and by flagmen's signals. The rules require that a following train must be spaced at least 10 minutes behind a preceding train. In this case the preceding train passed Lathrop, the last open office, 13.4 miles east of Carbona, 10 minutes before the following train departed from that station. However, the time-spacing method in use does not provide means for spacing trains except at open offices, and the collision occurred before the trains reached Carbona, the next open office, 1.41 miles west of the point of accident. These trains passed the interlocking tower at S.P. Crossing, 0.79 mile east of the point of accident, about 3 minutes apart. However, the operator-leverman at S.P. Crossing is not required to report the passage of W.P. trains, or to space trains of this carrier. The operator-leverman said when he observed that the preceding train was stopping he held the westward home signal of the interlocking in stop position for Extra 177 until the speed of that train had been considerably reduced. If an adequate block system had been in use in this territory, the crew of the following train would have received definite information that the preceding train was occupying the main track in the same block. As a result of a previous accident which occurred on the line involved, the Commission issued an order calling upon this carrier to show cause, if any, why it should not be required to install an adequate block-signal system on this line. This order will be set for hearing in San Francisco, California, on April 1, 1946.

Cause

It is found that this accident was caused by failure to provide adequate protection for the preceding train.

Dated at Washington, D. C., this eighth day of January, 1946.

By the Commission, Commissioner Patterson.

W. P. BARTEL,
Secretary.

(SEAL)