

INTERSTATE COMMERCE COMMISSION
WASHINGTON

INVESTIGATION NO. 3047
THE WESTERN PACIFIC RAILROAD COMPANY
REPORT IN RE ACCIDENT
AT FOX, UTAH, ON
DECEMBER 14, 1946

SUMMARY

Railroad: Western Pacific

Date: December 14, 1946

Location: Fox, Utah

Kind of accident: Head-end collision

Trains involved: Passenger : Freight

Train numbers: Extra 175 East : Extra 57 West

Engine numbers: 175 : 57

Consists: 13 cars : 10 cars,
caboose

Estimated speeds: 15 m. p. h. : 5 m. p. h.
(backward motion)

Operation: Timetable and train orders

Track: Single; tangent; 0.10 percent
ascending grade eastward

Weather: Clear

Time: About 6:14:30 a. m.

Casualties: 80 injured

Cause: Failure of inferior train to provide
adequate protection after having
failed to clear main track at time
required by the rules

INTERSTATE COMMERCE COMMISSION

INVESTIGATION NO. 3047

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

THE WESTERN PACIFIC RAILROAD COMPANY

January 27, 1947

Accident at Fox, Utah, on December 14, 1946, caused by failure of the inferior train to provide adequate protection after having failed to clear main track at time required by the rules.

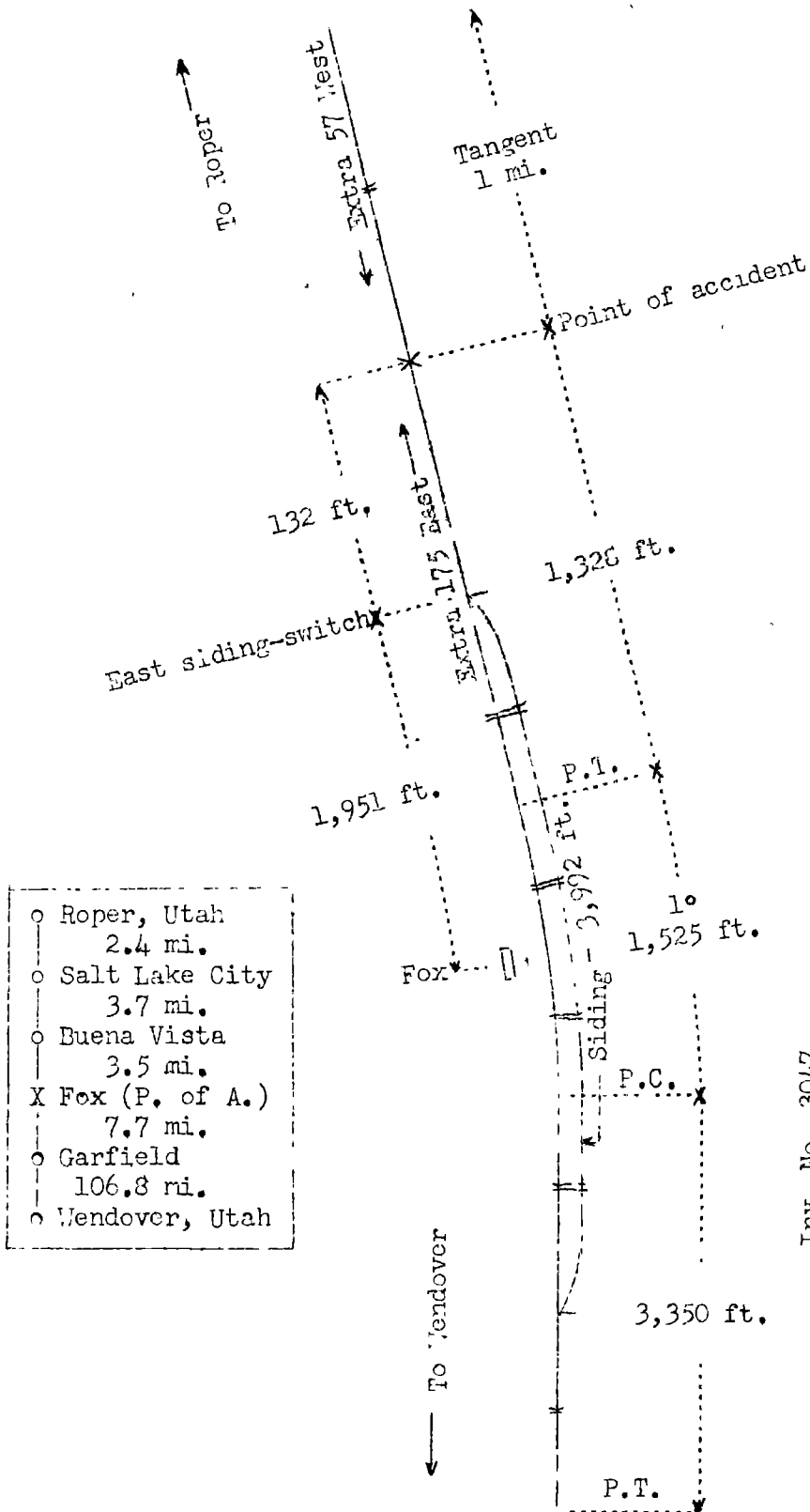
REPORT OF THE COMMISSION¹

PATTERSON, Commissioner:

On December 14, 1946, there was a head-end collision between a passenger train and a freight train on the Western Pacific Railroad at Fox, Utah, which resulted in the injury of 77 passengers, 1 dining-car employee and 2 train-service employees. This accident was investigated in conjunction with a representative of the Public Service Commission of Utah.

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.



- | | | |
|---|----------------|-----------|
| ○ | Roper, Utah | 2.4 mi. |
| ○ | Salt Lake City | 3.7 mi. |
| ○ | Buena Vista | 3.5 mi. |
| X | Fox (P. of A.) | 7.7 mi. |
| ○ | Garfield | 106.8 mi. |
| ○ | Wendover, Utah | |

Inv. No. 3047
 Western Pacific Railroad
 Fox, Utah
 December 14, 1946

Location of Accident and Method of Operation

This accident occurred on that part of the Eastern Division extending between Wendover and Roper, Utah, 124.1 miles, a single-track line, over which trains are operated by timetable and train orders. There is no block system in use. At Fox, 114.5 miles east of Wendover, a siding 3,902 feet in length parallels the main track on the south. The east switch of the siding is 1,951 feet east of the station. The accident occurred on the main track 132 feet east of the east siding-switch. From the west there are, in succession, a tangent 3,350 feet in length, a 1° curve to the left 1,525 feet and a tangent 1,328 feet to the point of accident and about 1 mile eastward. At the point of accident the grade is 0.10 percent ascending eastward.

Operating rules read in part as follows:

5. * * *

The time applies to the switch where an inferior train enters the siding; * * *

* * *

35. The following signals must be used by flagmen:

* * *

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

S-71. A train is superior to another train by right, class, or direction.

Right is conferred by train orders; * * *

Right is superior to class or direction.

* * *

S-87. An inferior train must keep out of the way of opposing superior trains and failing to clear the main track by the time required by rule must be protected as prescribed by Rule 99.

* * *

Note.- An extra must clear the time of an opposing extra which is given right over it not less than five minutes. * * *

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.

* * *

The front of the train must be protected in the same way, when necessary, by the brakeman; if not available, the fireman.

* * *

211 (C). All train orders * * * must be shown by conductor to at least one brakeman, and to others when practicable. They must be shown by engineer to fireman and, when practicable, to forward brakeman. Brakemen and firemen must read and return them, and should there be occasion to do so, remind conductor or engineer of their contents.

FORMS OF TRAIN ORDERS

* * *

* * *

G.

Extra Trains.

* * *

(3) Eng 77 run extra leaving A Thursday Feb 17th as follows with right over * * *

Leave A eleven thirty	11 30 p m
* * *	
E one forty seven	1 47 a m

* * *

This order may be varied by specifying the kind of extra and the particular trains over which the extra shall or shall not have right. Oposing trains over which the extra is thus given right must clear the time of the extra not less than five minutes; * * *

* * *

Between points 31.19 miles west and 4.11 miles east of the point of accident the maximum authorized speeds are 60 miles per hour for passenger trains and 40 miles per hour for freight trains. Between points 4.11 miles and 9.21 miles east of the point of accident the maximum authorized speed for all trains is 20 miles per hour.

Description of Accident

At Wendover the crew of Extra 175 East, an east-bound passenger train, received copies of train orders No. 44 and No. 7 reading in part as follows:

Order No. 44

Engs 313 and 175 run as two extras leaving Wendover saturday Dec. 14th as follows with right over all trains except first class trains and each other:

Leave Wendover	Two one	201 AM
* * *		
Garfield	Four Thirty Six	436 AM
Fox	Four Forty six	446 AM
Buena Vista	Four Fifty one	451 AM
Arrive Salt Lake City	* * *	

Order No. 7

Extra 175 east run one 1 hour thirty 30 mins late on Order No. 44

Garfield is 7.7 miles west of Fox, and Buena Vista and Salt Lake City are, respectively, 3.5 and 7.2 miles east of Fox. Extra 175 East consisted of one baggage car, five sleeping cars, one dining car, five sleeping cars and one observation-sleeping car, in the order named. All cars were of steel construction. This train departed from Wendover at 3:50 a. m., passed Garfield, the last open office, at 6:06 a. m., passed

the east siding-switch at Fox about 6:14:30 a. m. and while moving at an estimated speed of 15 miles per hour it collided with Extra 57 West at a point 132 feet east of the east siding-switch.

At Roper, the last open office, 2.3 miles east of Fox, the crew of Extra 57 West, a west-bound freight train, received copies of train orders No. 44 and No. 7. This train, consisting of engine 57, 10 cars and a caboose, departed from Roper at 5:20 a. m., departed from Buena Vista about 6:05 a. m. and stopped about 6:12 a. m., with the engine standing immediately east of the east siding-switch at Fox. About 2 minutes later, while this train was moving in backward motion at an estimated speed of 5 miles per hour, it was struck by Extra 175 East.

The front ends of the engines of both trains and the cab of the engine of Extra 57 West were damaged. The first two cars of Extra 175 East were derailed and damaged.

The conductor and the fireman of Extra 175 East were injured.

The weather was clear and it was dark at the time of the accident, which occurred about 6:14:30 a. m.

During the 30-day period preceding the day of the accident, the average daily movement in the vicinity of point of accident was 11.53 trains.

Discussion

The rules governing operation on this line provide that an inferior train must keep out of the way of opposing superior trains, and inferior trains must clear the time of opposing superior trains not less than 5 minutes. If an inferior train fails to clear the time of an opposing superior train, flag protection must be provided.

The crew of each train held copies of train orders No. 44 and No. 7. Train order No. 44 gave Extra 175 East right over all trains except first-class trains between Wendover and Salt Lake City, and required Extra 175 East to wait at Garfield, 7.7 miles west of Fox, until 4:36 a. m., at Fox until 4:46 a. m. and at Buena Vista, 3.5 miles east of Fox, until 4:51 a. m. Train order No. 7 required Extra 175 East to run 1 hour 30 minutes late on train order No. 44. Under the provisions of these orders, Extra 175 East was due to leave Garfield at 6:06 a. m., Fox at 6:16 a. m. and Buena Vista at

6:21 a. m. Under the rules, the times specified for Extra 175 East at Garfield, Fox and Buena Vista applied at the east switch of the siding at each of these stations, and Extra 57 West, which was inferior to Extra 175 East by right, was required to be into clear at Fox not later than 6:11 a. m., if it proceeded to that station to meet Extra 175 East. Extra 175 East passed Garfield at 6:06 a. m. and Extra 57 West departed from Buena Vista about 6:05 a. m. There is no siding between Buena Vista and Fox. Extra 175 East and Extra 57 West collided about 6:14:30 a. m., at a point 132 feet east of the east siding-switch at Fox.

As Extra 175 East was approaching Fox the speed was about 50 miles per hour. The brakes of this train had been tested and had functioned properly en route. The enginemen were maintaining a lookout ahead. The conductor and the front brakeman were in the third car, a trainmaster was in the fifth car and the flagman was in the rear car. Each member of the crew and the trainmaster had compared time with each other and with a standard clock, and there was only a few seconds variation in their watches. They had read the train orders involved and each understood the requirements of these orders. The enginemen said that the first they knew of anything being wrong was when their engine was approaching the east end of the curve about 1,500 feet west of the east siding-switch. Then the fireman saw the reflection of the headlight of Extra 57 West and called a warning to the engineer. The engineer immediately moved the brake valve to emergency position, but the collision occurred before the train could be stopped. No flagging signal was seen or heard by these employees in this vicinity. The fireman said that he last looked at his watch in the vicinity of Garfield at 6:06 a. m. The engineer was positive that the time shown by his watch was 6:15:40 a. m. when his engine was in the vicinity of the west siding-switch at Fox. The conductor and the front brakeman said that they observed the time as 6:14 a. m. when their train was in the vicinity of the west siding-switch, and, because no action had been taken by the engineer to reduce the speed, the conductor sounded a warning signal on the train air-signal system then opened the emergency air valve on the third car. The trainmaster and the flagman did not observe the time after the train passed Garfield. The trainmaster said that immediately after the accident the time shown by his watch was 6:15 a. m.

The crew of Extra 57 West understood that, under the provisions of the train orders involved, their train was required to be into clear at Fox not later than 6:11 a. m.,

and that flag protection was required to be furnished against Extra 175 East west of the east siding-switch if their train was not clear of the main track at the required time. These employees said that they consulted their watches and read the train orders before their train passed Buena Vista, and they were confident that sufficient time remained for their train to be into clear at Fox not later than 6:16 a. m. They thought the time was about 6:11 a. m. or 6:12 a. m. when their train stopped immediately east of the east siding-switch at Fox. Then the front brakeman lined the switch for entry to the siding and displayed a lighted red fusee in the vicinity of the switch. However, before action was taken to move Extra 57 West into clear the engineer saw the reflection of the headlight of the approaching train, and he took immediate action to move his train eastward in backward motion. Extra 57 West was moving eastward at a speed of about 5 miles per hour when the collision occurred. Considering that Extra 57 West consisted of only an engine, ten cars and a caboose, it is probable this train could have been into clear at Fox a few seconds before 6:16 a. m. if Extra 175 East had not passed the clearance point at the east siding-switch before that time. However, if Extra 57 West had been into clear at Fox not later than 6:11 a. m., as required by the rules, or had provided adequate protection against Extra 175 East after 6:11 a. m., this accident could have been averted.

Trains are operated on this line by timetable and train orders only. If an adequate block system had been in use, these opposing trains would not have been permitted to occupy the same block simultaneously. No recommendation is made here concerning additional protection for operation of trains at the maximum authorized speed disclosed in this investigation, because there is now pending before the Commission docket No. 29543, which is an investigation instituted May 20, 1940, by the Commission on its own motion, to determine whether it is necessary, in the public interest, to require any common carrier by railroad to install block signal system, interlocking, automatic train stop, train control and/or cab signal devices, and/or other similar appliances, methods and systems intended to promote safety of railroad operation, upon the whole or any part of its railroad on which any train is operated at a speed of 50 or more miles per hour.

Cause

It is found that this accident was caused by failure of the inferior train to provide adequate protection after having failed to clear main track at time required by the rules.

Dated at Washington, D. C., this twenty-seventh day of January, 1947.

By the Commission, Commissioner Patterson.

(SEAL)

W. P. BARTEL,
Secretary.