

INTERSTATE COMMERCE COMMISSION
WASHINGTON

INVESTIGATION NO. 2885
THE CHICAGO, ROCK ISLAND AND PACIFIC
RAILWAY COMPANY
REPORT IN RE ACCIDENT
AT JONES, KANS., CH
APRIL 17, 1945

SUMMARY

Railroad: Chicago, Rock Island and Pacific
Date: April 17, 1945
Location: Jones, Kans.
Kind of accident: Side collision
Trains involved: C.R.I. & P. : A.T. & S.F.
freight passenger
Train numbers: Extra 5032 West : Passenger Extra
1311 West
Engine numbers: 5032 : 1311
Consist: 34 cars, caboose : 8 cars
Estimated speed: Standing : 45 m. p. h.
Operation: Timetable, train orders and
automatic block-signal system
Track: Double; 1° curve; 0.74 percent
descending grade westward
Weather: Clear
Time: 4:32 a. m.
Casualties: 1 killed; 1 injured
Cause: Train fouling main track immedi-
ately in front of following train
Recommendation: That the Chicago, Rock Island and
Pacific Railway Company provide
adequate protection for movement
of trains which enter a main
track through a spring switch

INTERSTATE COMMERCE COMMISSION

INVESTIGATION NO. 2885

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

THE CHICAGO, ROCK ISLAND AND PACIFIC RAILWAY COMPANY

May 19, 1945.

Accident at Jones, Kans., on April 17, 1945, caused by
a train fouling the main track immediately in
front of a following train.

REPORT OF THE COMMISSION¹

PATTERSON, Commissioner:

On April 17, 1945, there was a side collision between a Chicago, Rock Island and Pacific Railway freight train and an Atchison, Topeka and Santa Fe Railway passenger train on the line of the Chicago, Rock Island and Pacific Railway at Jones, Kans., which resulted in the death of one employee and the injury of one employee.

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.

→ To Topeka Yard →

Westward main track
Eastward main track

P.T.

Sig. 1439

Tangent
1.8 mi.

Jones

9,178 ft.

- | | | |
|---|--------------------|----------|
| ○ | Topeka Yard, Kans. | 31.5 mi. |
| ○ | McFarland | 22.7 mi. |
| X | Jones (P. of A.) | 26.7 mi. |
| ○ | Herington, Kans. | |

4,815 ft.

Siding - 5,064 ft. long
← Passenger Extra 1311 West

P.C.

1°
2,101 ft.

Clearance point -
insulated joints

Sig. 1455

147 ft.

148 ft.

Point of accident
(Fouling point)

22 ft.

P.T.

← To Herington

101 ft.

← Extra 5092 West

West siding-switch

Inv. No. 2885
Chicago, Rock Island and Pacific Railway
Jones, Kans.
April 17, 1945

Location of Accident and Method of Operation

This accident occurred on that part of the Missouri-Kansas Division designated as Subdivision 36 and extending westward from Topeka Yard to Herington, Kans., 80.9 miles, a double-track line over which trains moving with the current of traffic are operated by timetable, train orders and an automatic block-signal system. Because of flood conditions on a line of the Atchison, Topeka and Santa Fe Railway, trains of this railroad were being operated over the line on which the accident occurred. At Jones, 54.2 miles west of Topeka Yard, a siding 5,064 feet long parallels the westward main track on the north. The west switch of this siding is a spring switch and is 4,815 feet west of the station. The clearance point at the west end of the siding is 248 feet east of the switch. The accident occurred at the fouling point of the westward main track and the turnout of the west siding-switch, at a point 147 feet west of the clearance point and 101 feet east of the switch. From the east there is a tangent 1.8 miles in length, which is followed by a 1° curve to the left extending 2,101 feet to the point of accident and 22 feet westward. At this point the grade is 0.74 percent descending westward.

Automatic signals 1439 and 1455, governing west-bound movements on the westward main track, are 9,326 feet and 148 feet east of the point of accident. Signal 1439 is of the three-indication, color-light type, and signal 1455 is of the one-arm, three-position, upper-quadrant, semaphore type. These signals are approach-lighted. The approach-lighting circuit for signal 1455 extends to a point 4,565 feet east of that signal. The involved aspects and corresponding indications and names of these signals are as follows:

| <u>Signal</u> | <u>Aspect</u> | <u>Indication</u> | <u>Name</u> |
|---------------|---------------------------|---|----------------------------|
| 1439 | Green | PROCEED | CLEAR SIGNAL |
| 1455) | Green | PROCEED | CLEAR SIGNAL |
|) | Red, with number plate | STOP, THEN PROCEED AT RESTRICTED SPEED * * * | STOP AND PROCEED SIGNAL |

The track circuit of the fouling section of the turnout of the west siding-switch extended 248 feet east of the switch.

Operating rules read in part as follows:

DEFINITIONS.

* * *

Restricted Speed.--Proceed prepared to stop short of train, obstruction, or anything that may require the speed of a train or engine to be reduced.

* * *

34. All members of engine and train crews must, when practicable, communicate to each other by its name the indication of each signal affecting the movement of their train or engine.

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, placing two torpedoes, and when necessary, in addition, displaying lighted fuses.

* * *

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 full protection. By night, or by day when the view is obscured, lighted fuses must be thrown off at proper intervals.

* * *

516. After passing a signal displaying a Proceed indication, the indication of the next signal may change to Stop and enginemen and trainmen must be on the alert to observe it.

535. * * *

* * *

A train or engine trailing through and stopping on a spring switch must not make reverse movement or take slack while any part of train or engine is on switch points until switch has been thrown by hand.

* * *

The maximum authorized speed for passenger trains is 70 miles per hour.

Description of Accident

Extra 5032 West, a west-bound C.R.I. & P. freight train, consisted of engine 5032, 34 cars and a caboose. About 4:32 a. m., after this train had moved westward on the siding at Jones and had stopped with the front of the engine on the westward main track at a point about 225 feet west of the west siding-switch, the fifth car was struck by A.T. & S.F. Passenger Extra 1311 West.

Passenger Extra 1311 West, a west-bound A.T. & S.F. passenger train, consisted of one baggage car, two passenger-box cars, three baggage cars, one Pullman sleeping car and one coach, in the order named. The fourth to the sixth cars, inclusive, and the eighth car were of steel-underframe construction, and the remainder were of all-steel construction. This train departed from McFarland, 22.7 miles east of Jones and the last open office, at 3:57 a. m., passed signal 1439, which displayed proceed, passed signal 1455, which displayed stop-taken-proceed-at-restricted speed, and while moving on the westward main track at an estimated speed of 45 miles per hour it struck Extra 5032 West.

The first five cars of Extra 5032 West and the engine of Passenger Extra 1311 West were derailed. The first five cars of Extra 5032 West, and the engine and the first five cars of Passenger Extra 1311 West were more or less damaged.

The weather was clear at the time of the accident, which occurred about 4:32 a. m.

The fireman of Passenger Extra 1311 West was killed. A road foreman of engines who was engineer-pilot of Passenger Extra 1311 West was injured.

In tests after the accident the automatic block-signal system functioned properly.

During the 30-day period preceding the day of the accident the average daily movement on the sub-division involved was 33.1 trains.

Discussion

Extra 5032 West stopped into clear at the east end of the siding at Jones about 3:40 a. m. About 52 minutes later, after this train had moved westward on the siding and had stopped with the engine and the first three cars on the westward main track immediately west of the west siding-switch and the remainder of the train on the turnout and the siding immediately east of the switch, the fifth car was struck by Passenger Extra 1311 West. No train order restricting the authority of either train to proceed had been issued.

As Passenger Extra 1311 West was approaching Jones the speed was about 60 miles per hour. The movement of this train was in the charge of a road foreman of engines, who was an employee of the C.R.I. & P. acting as pilot-engineer. The remainder of the crew were employees of the A.T. & S.F. The engineer was operating the engine. The headlight was lighted, and the enginemen and the pilot-engineer were maintaining a lookout ahead. The air brakes had functioned properly en route.

Signal 1439 displayed proceed, and the employees on the engine called the indication. Beginning about 2,000 feet east of signal 1455 the track curved to the left, and the first the pilot-engineer and the engineer knew of anything being wrong was when the engine reached a point about 1,300 feet east of signal 1455, where the fireman informed them that this signal was displaying red. The engineer immediately moved the brake valve to emergency position but the collision occurred before the speed of the train was materially reduced.

When Extra 5032 West was moving westward on the siding, the enginemen, the conductor and the front brakeman were on the engine, and the flagman was on the caboose. The engineer said that he sounded two long blasts on the engine whistle to indicate that their train was about to proceed. He did not sound the whistle signal calling for flag protection, but he expected that flag protection, if required, would be provided by the flagman. When the front end of the engine was about opposite signal 1455 the fireman saw this signal light up. He thought this was caused by his engine entering the circuit which controlled the approach-lighting of this signal, but when the engine was a short distance east of the clearance point the fireman saw the reflection of the headlight of a train approaching from the east, and he then called a warning. The conductor told the engineer that their train should remain into clear until the following train had passed, and the engineer immediately made a service brake-pipe reduction. However, the train was not stopped until after the engine and the first three cars had entered the westward main track. The engineer then sounded the whistle signal calling for flag protection, the engine and the first three cars were cut off and moved forward to clear the switch, the spring switch was reversed by hand, and an unsuccessful attempt was made to back the train into clear on the siding. The flagman said that when his train stopped after moving westward on the siding he was not aware that the engine had passed the clearance point. He thought his train had stopped to permit the following train to pass, and for that reason the marker lamps were displaying green to the rear when the accident occurred. He heard the whistle signal calling for flag protection, but at that time the engine of Extra 1311 was about opposite or a little beyond his caboose.

The operating rules of this carrier provide that in automatic block-signal territory at bolt-locked switches, after the trainman operates the bolt-lock, he must wait two minutes before he operates the switch. At non-bolt-locked switches where the view is obstructed by the physical condition of the track or by weather conditions, after the trainman operates the switch, two minutes must elapse before a train or an engine may foul the main track. However, in the case of the switch involved in this accident, neither of these provisions was

applicable as it was a spring switch. There was no signal to govern movements from siding to main track. The only provision made for safeguarding such movements was the general requirement that the flagman must take such action as necessary to insure full protection. In this case the flagman had not been instructed that flag protection was required, neither was the whistle signal calling for flag protection sounded until after the main track had been obstructed. The procedure appears to have been in conformity with the common practice on this line. Adequate provision should be made to safeguard movements through a spring switch to a main track.

During a period of approximately two years immediately preceding the date of this accident, the Commission investigated seven accidents in which a train, without providing protection, fouled the main track immediately in front of an approaching train, such as occurred in the accident under discussion. These accidents resulted in the death of 44 and the injury of 201 persons. Of these, six occurred in territories where the operation was by timetable, train orders and automatic block-signal system, and one occurred in territory where the operation was by timetable and train orders only.

Cause

It is found that this accident was caused by a train fouling the main track immediately in front of a following train.

Recommendation

It is recommended that the Chicago, Rock Island and Pacific Railway Company provide adequate protection for the movement of trains which enter a main track through a spring switch.

Dated at Washington, D. C., this nineteenth day of May, 1945.

By the Commission, Commissioner Patterson.

(SEAL)

W. P. BARTEL,
Secretary.