INTERSTATE COMMERCE COMMISSION

WASHINGTON

INVESTIGATION NO. 2956

THE ATCHISON, TOPEKA AND SANTA FE RAILWAY COMPANY

REPORT IN RE ACCIDENT

NEAR CHETO, ARIZ., ON

DECEMBER 13, 1945

SUMMARY

Railroad:	Atchison, Topeka and Santa Fe	
Date:	December 13, 1945	
Location:	Cheto, Ariz.	
Kind of accident:	Rear-end collision	
Trains involved:	Passenger	: Passenger
Train numbers:	Third 4	: First 24
Engine numbers:	3739	: 3754
Consist:	15 cars	: 14 cars
Estimated speed:	15 m. p. h.	: 35 m. p. h.
Operation:	Signal indications for movements with current of traffic	
Track:	Double; tangent; 0.60 percent ascending grade eastward	
Weather:	Snowing and foggy	
Time:	2:10 a. m.	
Casualties:	94 injured	
Cause:	Failure of the Atchison, Topeka and Santa Fe Railway Company to provide adequate safeguards for movement of trains against current of traffic	
Recommendation:	That the Atchison, Topeka and Santa Fe Railway Company provide an adequate block system for operation of trains against the current of traffic	

INTERSTATE COMMERCE COMMISSION

INVESTIGATION NO. 2956

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

THE ATCHISON, TOPEKA AND SANTA FE RAILWAY COMPANY

January 18, 1946.

Accident near Cheto, Ariz., on December 13, 1945, caused by failure of the Atchison, Topeka and Santa Fe Railway Company to provide adequate safeguards for the movement of trains against the current of traffic.

REPORT OF THE COMMISSION[1]

PATTERSON, Commissioner:

On December 13, 1945, there was a rear-end collision between two passenger trains on the Atchison, Topeka and Santa Fe Railway near Cheto, Ariz., which resulted in the injury of 77 passengers, 2 Pullman employees, 11 dining-car employees, 1 club-car attendant and 3 train-service employees.

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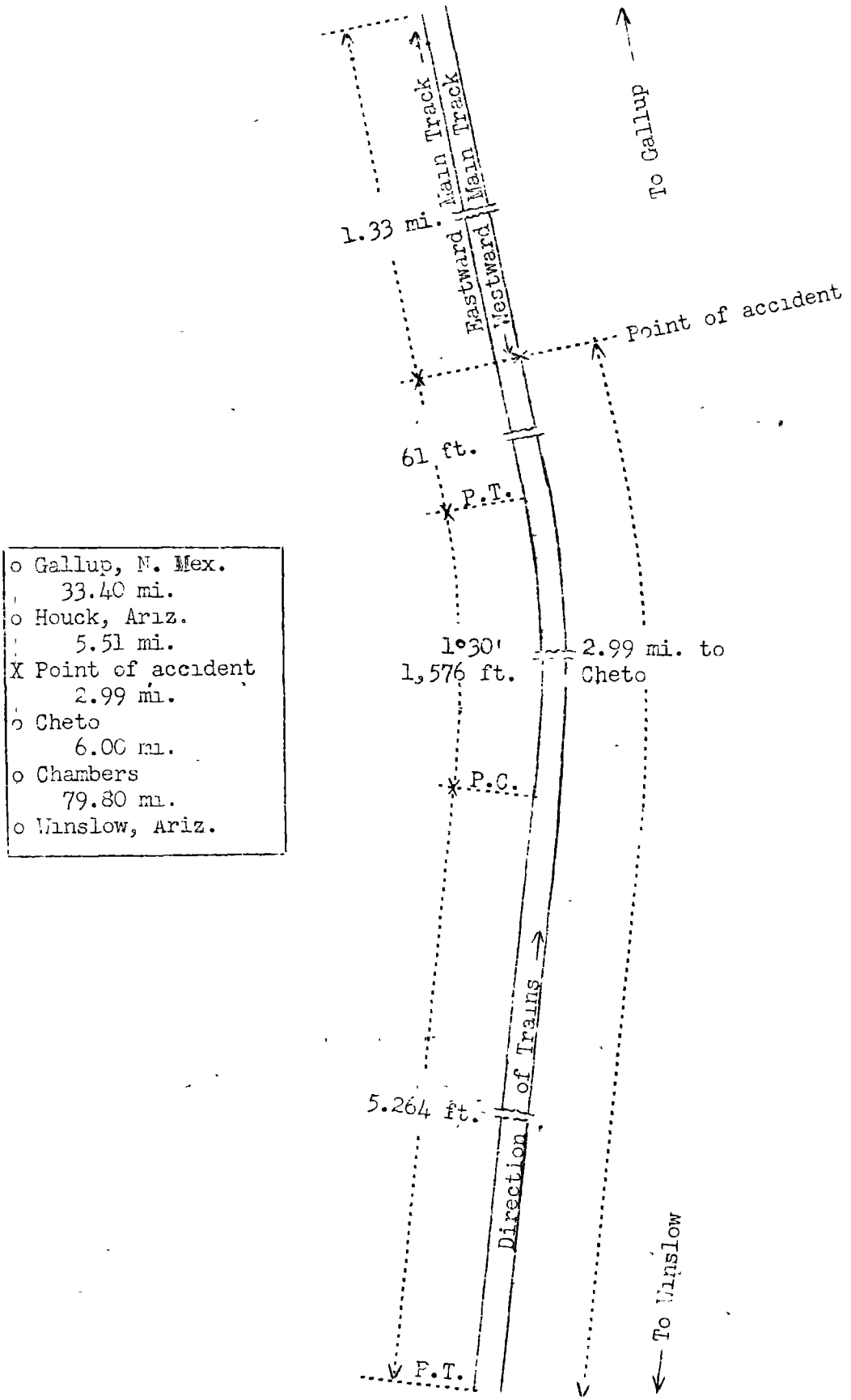
[1]Under authority of section 17 (2) of the Interstate Commerce Act the above-entitled proceeding was referred by the Commission to Commissioner Patterson for consideration and disposition.



Inv. No. 2956
Atchison, Topeka and Santa Fe Railway
Cheto, Ariz.
December 13, 1945

Location of Accident and Method of Operation

This accident occurred on that part of the Albuquerque Division extending between Winslow, Ariz., and Gallup, N. Mex., 127.7 miles, a double-track line over which trains moving with the current of traffic are operated by signal indications. The current of traffic is to the left. At the time of the accident the eastward main track between Chambers and Houck, respectively, 79.8 miles and 94.3 miles east of Winslow, was out of service, and trains moving in either direction between these stations were being operated on the westward main track. There is no block system in use for movements against the current of traffic. The accident occurred on the westward main track 88.79 miles east of Winslow, at a point 2.99 miles east of the station at Cheto. From the west there are, in succession, a tangent 5,264 feet in length, a 1°30' curve to the left 1,576 feet and a tangent 61 feet to the point of accident and 1.33 miles eastward. The grade for east-bound trains varies between 0.11 percent and 0.602 percent ascending about 1.15 miles, then it is 0.60 percent ascending 1,329 feet to the point of accident and 201 feet eastward.

Operating rules read in part as follows:

11. A train finding a fusee burning on or near its track must stop and wait until it has burned out, before proceeding.

35. Fusees, which will burn for five minutes with a red flame, are to be used in addition to other signals for protecting trains. They may be dropped from a moving train as a signal against a train following, or in case of a severe snow or rain storm or in thick weather, or when trains are stopped under conditions that will not admit of flagman getting back far enough to insure protection against following trains, or in any manner which any particular emergency may demand.

37. The following signals will be used by flagmen:

* * *

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

91. Unless some form of block signal is used, trains in the same direction must keep at least five minutes apart, except in closing up at stations. A train following a passenger train must keep at least ten minutes behind it.

99. * * *

* * *

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 fusees must be thrown off at proper intervals.

* * *

FORMS OF TRAIN ORDERS.

* * *

D-Form S. Providing for the Use of a Section of Double Track as Single Track.

Example:

No 2, or westward, track will be used as single track between F and G.

* * *

All trains must use the track specified between the stations named and will be governed by rules for single track.

* * *

Time-table special rules read in part as follows:

20.. * * *

* * *

Trains moving against the current of traffic on double track must not exceed twenty miles per hour around sharp curves, * * * and where view is obscured, * * *

* * *

The maximum authorized speed for the trains involved was 70 miles per hour.

Description of Accident

Third 4, an east-bound first-class passenger train, consisted of engine 3739, two sleeping cars, one kitchen car, six sleeping cars, one kitchen car and five sleeping cars, in the order named. All cars were of steel construction. At Winslow the crew received copies of train order No. 250 reading in part as follows:

> Westward track will be used as single track between crossover Houck and crossover Chambers. * * *

Third 4 departed from Winslow at 9:10 p. m., December 12, 7 hours 4 minutes late, departed on the westward main track from Chambers, the last open office, at 1:07 a. m., December 13, 10 hours 1 minute late, passed Cheto, and while moving at an estimated speed of 15 miles per hour the rear end was struck by First 24.

First 24, an east-bound first-class passenger train, consisted of engine 3754, four baggage cars, two chair cars, one dining car, one lounge car and six sleeping cars, in the order named. The first and fourth cars were of steel-underframe construction, and the remainder were of all-steel construction. At Winslow the crew received copies of train order No. 250. This train departed from Winslow at 9:26 p. m., December 12, 1 hour 21 minutes late, departed from Chambers on the westward main track at 1:19 a. m., December 13, 3 hours 37 minutes late, passed Cheto, and while moving at an estimated speed of 35 miles per hour it struck Third 4.

The first and the last cars of Third 4 were considerably damaged, and the second to the fourth cars, inclusive, and the sixth to the fourteenth cars, inclusive, were more or less damaged. The engine, the first two cars and the sixth and seventh cars of First 24 were considerably damaged. None of the equipment of either train was derailed.

The weather was foggy and it was snowing at the time of the accident, which occurred about 2:10 a. m.

The fireman, the front brakeman and the flagman of Third 4 were injured.

Discussion

The investigation disclosed that at the time of the accident the eastward main track throughout a distance of about 14 miles between Chambers and Houck was out of service because of the derailment of a freight train in the vicinity of the station at Cheto, 5.9 miles east of Chambers. Train order No. 250 establishing the westward main track between Chambers and Houck as single track was issued, and trains moving in either direction were being operated on this track.

Third 4 was moving at a speed of about 15 miles per hour when the rear end was struck by First 24 at a point about 3 miles east of Cheto. The engineer of Third 4 said that because snow and fog materially restricted visibility in this vicinity he did not consider it safe for his train to proceed at a speed in excess of 15 miles per hour, and this speed was maintained between Cheto and the point where the accident occurred. The flagman said that he dropped a lighted 5-minute fusee soon after his train departed from Chambers, dropped another lighted fusee in the vicinity of Cheto and thought other lighted fusees were dropped east of Cheto. He was on the platform of the rear vestibule of the rear car until about 2 minutes prior to the time the accident occurred, then he entered the car and was near the rear door when the collision occurred. He did not see or hear the following train until the impact occurred. The conductor, who was in the fifth car, and the front brakeman, who was in the second car, were not aware of anything being wrong until the collision occurred.

As First 24 was approaching the point where the accident occurred the speed was about 35 miles per hour. The headlight was lighted brightly and the enginemen were maintaining a lookout ahead. The brakes had functioned properly at all points where used en route. This train stopped at a point about 3 miles east of Chambers and stopped in the vicinity of Cheto, as required because of lighted fusees which had been dropped by the flagman of the preceding train. The enginemen of First 24 said that no lighted fusee or any other flagging signal was seen or heard between Cheto and the point where the accident occurred. These employees first saw the lighted marker lamps of the preceding train at a distance of about 100 feet. Then the engineer moved the brake valve to emergency position, but the collision occurred before the speed could be reduced.

The rules required that a 10-minute interval be maintained between the trains involved. The fusees furnished flagmen are of the 5-minute type. The preceding train departed from Chambers, the last open office, 12 minutes before the following train departed from that station. The collision occurred before the trains reached Houck, the next open office, 14.4 miles east of Chambers. Because of restricted visibility the trains involved

were moving in this territory at a speed considerably less than the maximum authorized speed, but the preceding train was moving at a speed about 20 miles per hour less than the following train. The last fusee encountered by the following train was about 3 miles west of the point where the accident occurred and, after this train stopped at the fusee and waited until it had burned out, there was no provision for maintaining the prescribed time interval between the trains involved.

Although the westward main track was being used as single track, according to the train order covering the movements, the operation of the trains involved simulated movement against the current of traffic. The automatic block-signal system in this territory provides protection only for movements with the current of traffic. The method of operation for movements against the current of traffic does not provide equivalent protection. The book of operating rules of this carrier contains manual-block rules which provide, among other things, that no train may be permitted to enter a block occupied by a passenger train, and no passenger train may be permitted to enter a block occupied by any train, except in emergency. If the manual-block system had been in use for movements against the current of traffic in this territory, the following passenger train would not have been permitted to enter a block occupied by any train.

Cause

It is found that this accident was caused by failure of the Atchison, Topeka and Santa Fe Railway Company to provide adequate safeguards for the movement of trains against the current of traffic.

Recommendation

It is recommended that the Atchison, Topeka and Santa Fe Railway Company provide an adequate block system for operation of trains against the current of traffic. A rule to show cause why it should not do so will be served on said carrier.

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

By the Commission, Commissioner Patterson.

W. P. BARTEL,

(SEAL)

Secretary.