

INTERSTATE COMMERCE COMMISSION
WASHINGTON

INVESTIGATION NO. 2911
ST. LOUIS-SAN FRANCISCO RAILWAY COMPANY
REPORT IN RE ACCIDENT
NEAR CUSTER CITY, OKLA., ON
JULY 3, 1945

SUMMARY

Railroad: St. Louis-San Francisco

Date: July 3, 1945

Location: Custer City, Okla.

Kind of accident: Head-end collision

Trains involved: Freight : Passenger

Train numbers: 662 : 609

Engine numbers: 1616 : Gas-electric 2123

Consist: 2 cars, caboose : 1 car

Estimated speed: 35 m. p. h. : 40 m. p. h.

Operation: Timetable and train orders

Track: Single; 4° curve; 1.0 percent
ascending grade northward

Weather: Clear

Time: 2:55 p. m.

Casualties: 1 killed; 29 injured

Cause: Failure to deliver meet order

Recommendation: That the St. Louis-San Francisco
Railway Company install an adequate block system on the line
on which this accident occurred

INTERSTATE COMMERCE COMMISSION

INVESTIGATION NO. 2911

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

ST. LOUIS-SAN FRANCISCO RAILWAY COMPANY

August 27, 1945.

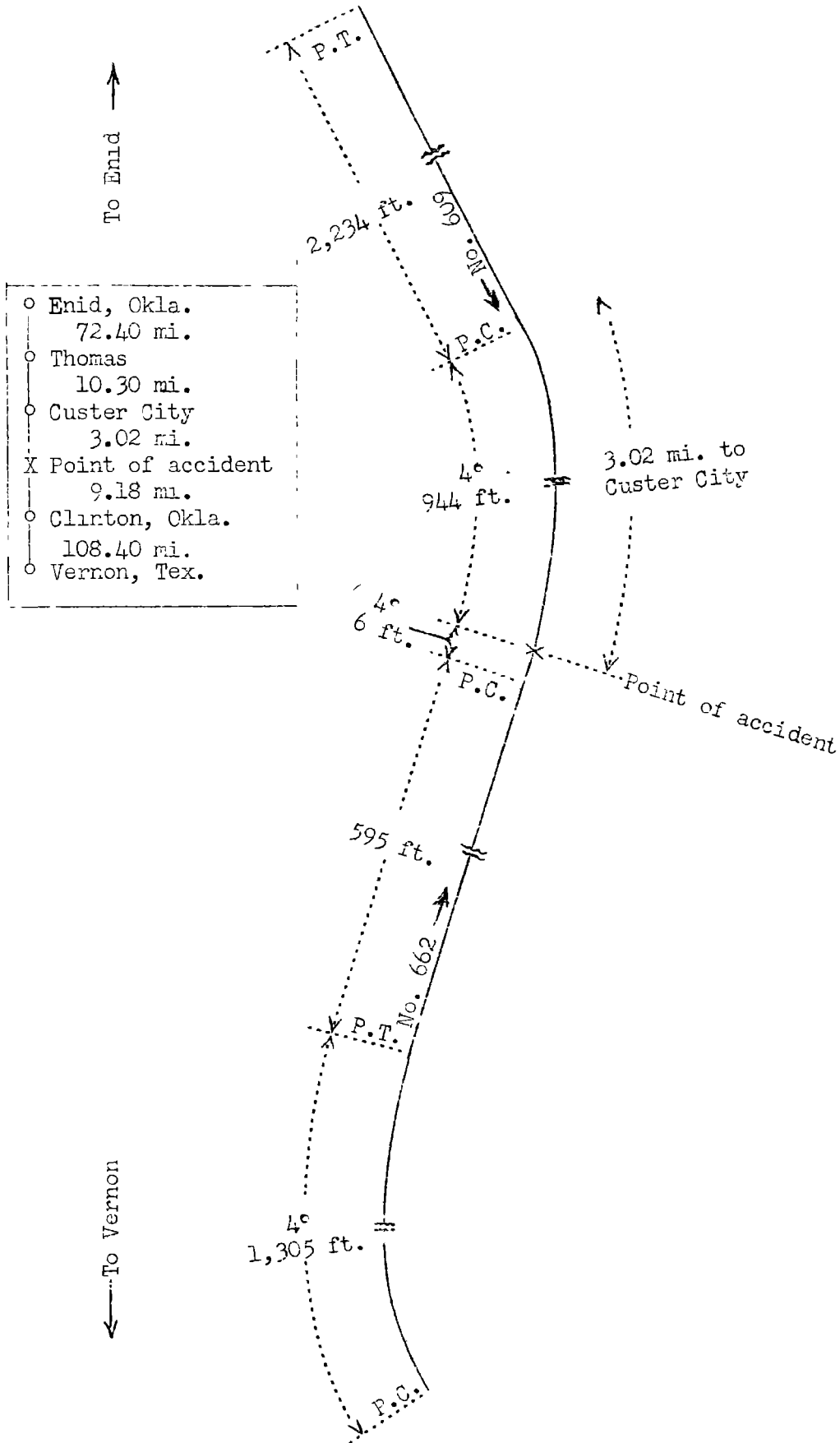
Accident near Custer City, Okla., on July 3, 1945, caused
by failure to deliver a meet order.

REPORT OF THE COMMISSION¹

PATTERSON, Commissioner:

On July 3, 1945, there was a head-end collision between a freight train and a passenger train on the St. Louis-San Francisco Railway near Custer City, Okla., which resulted in the death of 1 passenger, and the injury of 21 passengers, 1 railway-mail clerk and 7 train-service employees.

¹Under 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. 2911
 St. Louis-San Francisco Railway
 Custer City, Okla.
 July 3, 1945

Location of Accident and Method of Operation

This accident occurred on that part of the Western Division designated as the Enid-Hobart Sub-Division and extending northward from Vernon, Tex., to Enid, Okla., 203.3 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. The accident occurred 117.58 miles north of Vernon at a point 3.02 miles south of the station at Custer City. From the south there are, in succession, a 4° curve to the right 1,305 feet in length, a tangent 595 feet and a 4° curve to the left 6 feet to the point of accident and 944 feet northward. From the north there is a tangent 2,234 feet in length, which is followed by the curve on which the accident occurred. The grade is 1.0 percent ascending northward.

The train-order signal at Custer City is of the two-arm, lower-quadrant, semaphore type. It is mounted on a mast located in front of the station. The involved day aspects and corresponding indications of this signal are as follows:

<u>Aspect</u>	<u>Indication</u>
Horizontal	Stop
Vertical	Proceed

Operating rules read in part as follows:

DEFINITIONS

* * *

Fixed Signal. A signal of fixed location indicating a condition affecting the movement of a train.

* * *

72. Trains of the first class are superior to those of the second, trains of the second class are superior to those of the third; and so on.

* * *

207. To transmit a train order, the signal "31" or the signal "19" followed by the direction must be given to each office addressed, the number of copies being stated, if more or less than three, thus: "31 West copy 5" or "19 East copy 2".

208. * * *

* * *

A train order must not be sent to a superior train at the meeting or waiting point, * * * if it can be avoided. When an order is so sent, the fact will be stated in the order and special precautions must be taken to insure safety.

210. When a "31" train order has been transmitted, operators must, unless otherwise directed, repeat it at once from the manifold copy in the succession in which the several offices have been addressed, and then write the time of repetition and his last name in full on the order. Each operator receiving the order must observe whether the others repeat correctly, * * *

Those to whom the order is addressed, except enginemen, must read it to the operator and then sign it, and the operator will send their signatures preceded by the number of the order to the train dispatcher. The response "complete" and the time will then be given by the train dispatcher with his initials. Each operator receiving this response will then write on each copy the word "complete", the time, the dispatcher's initials and his last name in full, and then deliver a copy to each person addressed, except enginemen. The copy for each engineman must be delivered to him personally by the conductor; the engineman will then read the order to the conductor and sign the conductor's copy of the order, before proceeding.

220. Train orders once in effect continue so until fulfilled, superseded or annulled. * * *

* * *

221. * * * a fixed signal must be used at each train order office which shall, * * * indicate "stop" when there is an operator on duty, except when changed to "proceed" to allow a train to pass when there are no train orders for any train in that direction, * * *

* * *

When an operator receives the signal, "31" or "19" followed by the direction, he must immediately ascertain definitely that his train order signal is at stop indication for the direction indicated and then reply "stop displayed" adding the direction and until the orders have been delivered or annulled the signal must not be placed in "proceed" indication.

* * *

223. The following signals and abbreviations may be used:

* * *

"31" or "19"-To clear the line for Train Orders, and for operators to ask for Train Orders.

SD-For "stop displayed".

* * *

FORMS OF TRAIN ORDERS

* * *

A.

FIXING MEETING POINTS FOR OPPOSING TRAINS:

(1) No. 1 meet No. 2 at B.

* * *

Trains receiving these orders will run with respect to each other to the designated points, and there meet in the manner prescribed by rules.

* * *

The maximum authorized speed for the passenger train involved was 50 miles per hour and for the freight train, 35 miles per hour.

Description of Accident

At Clinton, 12.2 miles south of Custer City, the crew of No. 662, a north-bound third-class freight train, received copies of train order No. 69, Form 19, reading as follows:

No 609 Gets this Order
and Meet No 662 Eng
1616 at Custer City

No. 662, consisting of engine 1616, 2 cars and a caboose, departed from Clinton, the last open office, at 2:35 p. m., 5 hours 10 minutes late, and while moving at an estimated speed of 35 miles per hour it collided with No. 609.

No. 609, a south-bound first-class passenger train, consisted of gas-electric motor-car 2123 and one coach, in the order named. The motor-car was of all-steel construction, and consisted of a control-power compartment, a railway post office compartment and a baggage compartment. The coach was of steel-underframe construction. This train departed from Thomas, an open office 10.3 miles north of Custer City, at 2:31 p. m., 1 minute late, departed from Custer City, where the crew of this train should have received copies of train order No. 69, at 2:51 p. m., on time, and while moving at an estimated speed of 40 miles per hour it collided with No. 662.

The front and rear ends of the motor-car and the front end of the coach of No. 609 were crushed inward a distance of about 6 feet. The front end of the engine of No. 662 was badly damaged.

The weather was clear at the time of the accident, which occurred about 2:55 p. m.

The engineer, the fireman and the conductor of No. 662, and the engineer, the conductor, the brakeman and the baggageman of No. 609 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 13.06 trains.

Discussion

The rules governing operation in the territory involved provide that at each train-order office the train-order signal must be displayed to indicate stop when there is an operator on duty, except when changed to indicate proceed to allow a train to pass when there are no train orders for delivery to any train in that direction. When an operator receives instructions to copy a train order, he must immediately ascertain that the train-order signal is displaying stop, and the signal must remain so displayed until the train order has been delivered to all trains addressed. Train orders must not be sent to a train which is to be restricted at the meeting or waiting point, if it can be avoided. When the order is so sent, the fact must be stated in the order and special precautions taken to insure safety. When a form "31" train order has been received for delivery to a train, the operator must procure the signature of those to whom the order is addressed, except

engineers, and send the signature to the train dispatcher. The response "complete" and the time, with the initials of the train dispatcher, will then be given by the train dispatcher. The operator will then write the word "complete", the time, the dispatcher's initials and the operator's last name in full on the order, and then deliver a clearance form and copies of the order to each person addressed, except engineers. The copy for each engineer must be delivered to him by the conductor, and each engineer must read the order to the conductor and sign the conductor's copy before the train is permitted to proceed. Train orders remain in effect until fulfilled, superseded or annulled. The dispatcher and the operator concerned understood these requirements.

At Clinton the crew of No. 662, a third-class train, received copies of train order No. 69, which established Custer City as the meeting point between No. 662 and No. 609, a first-class train. The order was sent to the operator at Custer City for delivery to No. 609, but it was not delivered to the crew of that train. This resulted in a lap of authority of the trains involved, as the crew of No. 662 held an order authorizing its train to proceed to Custer City to meet No. 609, but the crew of the latter train had no knowledge of the order affecting the authority of their train to proceed. These trains collided at a point 3.02 miles south of the station at Custer City. Because of embankments and vegetation on the inside of the curves in this vicinity, the members of the crew on the engine of each train were unable to see the other train more than a few hundred feet. The accident occurred before effective action could be taken to stop either train.

The train dispatcher said that it was not possible for him to arrange a meeting point between the trains involved until he received information that No. 662 was ready to depart from Clinton. When he received this information, No. 609 had departed from Thomas, the last open office north of Custer City, and he sent the order to the operator at Custer City for delivery to No. 609. The order contained information that No. 609 was to receive the order at Custer City. The operator at Custer City said that when the dispatcher instructed him to copy order No. 69 the train-order signal was in stop position. After he had repeated the order to the dispatcher he placed it on his desk. He was engaged in selling tickets, checking baggage and answering the city telephone until he heard the engine whistle sounded by the engineer of No. 609 as the train was approaching the station. Then, forgetting that he held order No. 69 for delivery to No. 609, he changed the indication of the train-order signal from stop to proceed. During the time that No. 609 was at Custer City, the operator was engaged in handling baggage and express, and he was not aware of his failure to deliver the order until he returned to the office soon after

No. 609 had departed. No extra precautions were taken in the handling of the order for delivery to No. 609 at Custer City. However, the investigation disclosed that on previous occasions a meet order had been sent for delivery to a train at the meeting point without taking extra precautions.

Trains are operated in this territory 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, and this accident could have been prevented.

Cause

It is found that this accident was caused by failure to deliver a meet order.

Recommendation

It is recommended that the St. Louis-San Francisco Railway Company install an adequate block system on the line on which this accident occurred.

Dated at Washington, D. C., this twenty-seventh day of August, 1945.

By the Commission, Commissioner Patterson.

(SEAL)

W. P. BARTEL,
Secretary.