

INTERSTATE COMMERCE COMMISSION
WASHINGTON

INVESTIGATION NO. 2659
THE MISSOURI-KANSAS-TEXAS RAILROAD COMPANY
REPORT IN RE ACCIDENT
NEAR TIBBETTS, MO., ON
DECEMBER 11, 1942

SUMMARY

Railroad: Missouri-Kansas-Texas

Date: December 11, 1942

Location: Tebbetts, Mo.

Kind of accident: Head-end collision

Trains involved: Freight : Freight

Train numbers: Second 72 : Extra 853 South

Engine numbers: 737 : 853

Consist: 65 cars, caboose : 65 cars, caboose

Speed: 35-40 m. p. h. : 3-5 m. p. h.

Operation: Timetable and train orders

Track: Single; 2°16' curve; 0.47 percent
descending grade southward

Weather: Clear

Time: About 12:05 p. m.

Casualties: 3 killed; 4 injured

Cause: Accident caused by lap of authority
of two opposing trains

Recommendation: That the Missouri-Kansas-Texas
Railroad Company establish an
adequate block system on the
line involved in this accident

INTERSTATE COMMERCE COMMISSION

INVESTIGATION NO. 2659

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

THE MISSOURI-KANSAS-TEXAS RAILROAD COMPANY

January 29, 1943.

Accident near Tebbetts, Mo., on December 11, 1942, caused
by lap of authority of two opposing trains.

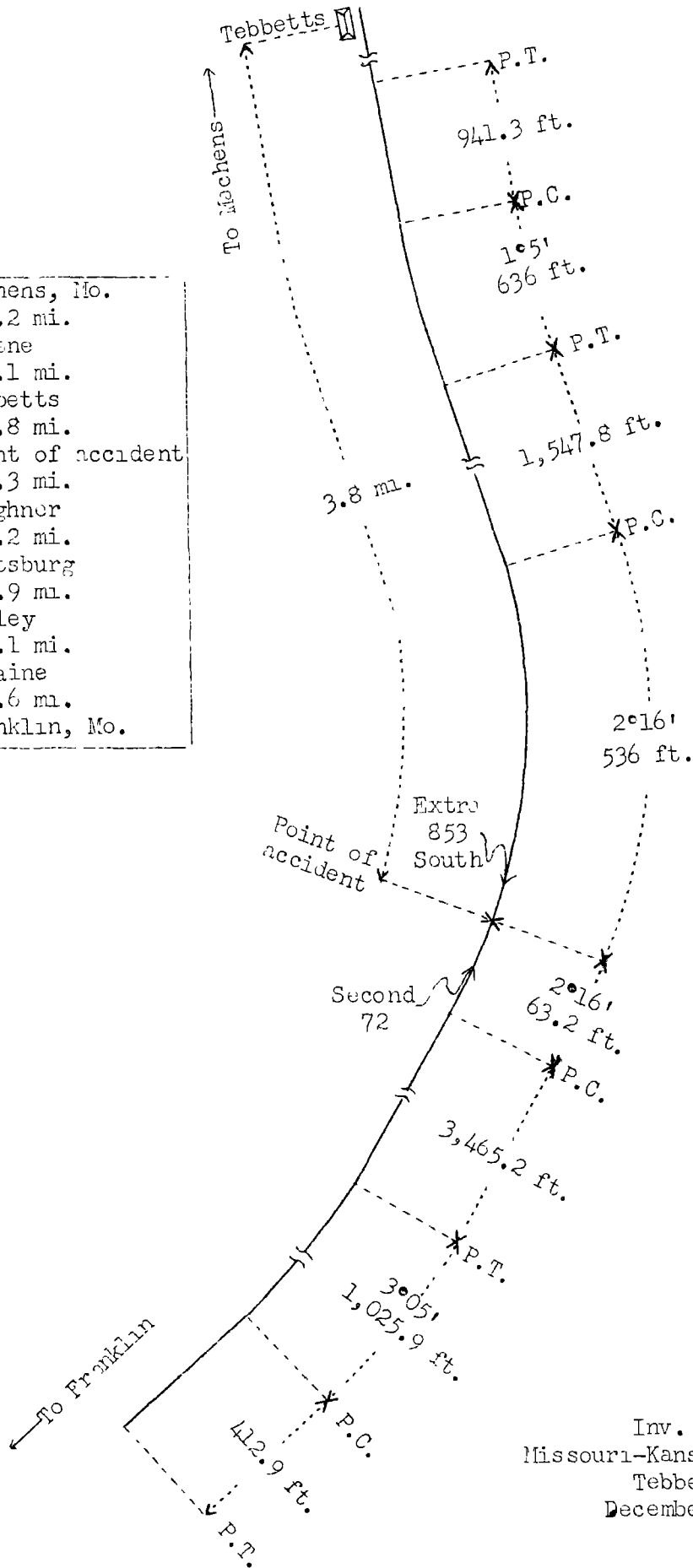
REPORT OF THE COMMISSION¹

PATTERSON, Commissioner:

On December 11, 1942, there was a head-end collision between two freight trains on the Missouri-Kansas-Texas Railroad near Tebbetts, Mo., which resulted in the death of three employees and the injury of three employees on duty and one employee off duty.

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.

○	Machens, Mo.	98.2 mi.
○	Mokane	6.1 mi.
○	Tebbetts	3.8 mi.
×	Point of accident	11.3 mi.
○	Boughner	7.2 mi.
○	Hartsburg	3.9 mi.
○	Easley	7.1 mi.
○	McBaine	19.6 mi.
○	Franklin, Mo.	



Inv. No. 2659
Missouri-Kansas-Texas Railroad
Tebbetts, Mo.
December 11, 1942

Location of Accident and Method of Operation

This accident occurred on that part of the Northern District designated as the St. Louis Division and extending between Macdens and Franklin, Mo., a distance of 162.2 miles. In the immediate vicinity of the point of accident this is a single-track line over which trains are operated by timetable and train orders. There is no block system in use. The accident occurred at a point 3.8 miles south of the station at Tebbetts. Approaching from the north there are, in succession, a tangent 941.3 feet in length, a 1°05' curve to the left 636 feet, a tangent 1,547.8 feet and a 2°16' curve to the right 536 feet to the point of accident. Approaching from the south there are, in succession, a tangent 412.9 feet in length, a 3°05' curve to the left 1,025.9 feet, a tangent 3,465.2 feet and a 2°16' curve to the left 63.2 feet to the point of accident. The grade for south-bound trains is, successively, 0.429 percent descending 1,000 feet, 0.14 percent ascending 1,100 feet, level 1,100 feet, 0.316 percent descending 1,100 feet and 0.47 percent descending about 25 feet to the point of accident. The grade for north-bound trains varies between 0.033 and 0.47 percent ascending throughout a distance of 5,400 feet to the point of accident and is 0.47 percent at the point of accident.

Operating rules read in part as follows:

204. Train orders must be addressed to those who are to execute them, naming the place at which each is to receive his copy. * * *

* * *

The maximum authorized speed for the trains involved is 40 miles per hour.

Description of Accident

Second 72, a north-bound third-class freight train, consisted at the time of the accident of engine 737, 47 loaded and 18 empty cars and a caboose. After a terminal air-brake test was made this train departed from Franklin, 57.9 miles south of Tebbetts, at 10 a. m., according to the dispatcher's record of movement of trains, 3 hours late, and departed from McBaine, 38.3 miles south of Tebbetts, at 10:53 a. m., 3 hours 7 minutes late. At Hartsburg, 23.3 miles south of Tebbetts and the last open office, the crew received a clearance card and copies of two train orders, of which one was train order No. 57 reading as follows:

Second 72 Eng 737 wait Tebbetts.
1210 pm for Extra 853 South

Second 72 departed from Hartsburg at 11:29 a. m., 3 hours 7 minutes late, and while moving at an estimated speed of 35 to 40 miles per hour it collided with Extra 853 South at a point 3.8 miles south of Tebbetts.

Extra 853 South, a south-bound freight train, consisted at the time of the accident of engine 853, 32 loaded and 33 empty cars and a caboose. This train departed from Machens, 104.3 miles north of Tebbetts, at 5:44 a. m., according to the dispatcher's record of movement of trains. At Mokane, 6.1 miles north of Tebbetts, the crew received a clearance card and copies of train order No. 57, previously quoted. This train departed from Mokane at 11:42 a. m. At Tebbetts, the last open office, the crew received a clearance card and copies of two train orders, of which one was train order No. 61 reading in part as follows:

* * *

Extra 853 South has right over
Third 72 Eng 892 Tebbetts to
Boughner and has right over
Fourth 72 Eng 898 Tebbetts to
Easley
Second 72 wait Hartsburg
1245 pm for Extra 853 South

Second 72 did not receive a copy of this order. Boughner, Hartsburg and Easley are, respectively, 15.1 miles, 22.3 miles and 31.2 miles south of Tebbetts. Extra 853 departed from Tebbetts at 11:55 a. m., and while moving at an estimated speed of 3 to 5 miles per hour it collided with Second 72. The brakes of Extra 853 had been tested previously, and they functioned properly en route.

Engine 757, of Second 72, was derailed and stopped, badly damaged, on its right side, east of the track and parallel to it. The first five cars were derailed and demolished. The front truck of the sixth car was derailed. The thirtieth to thirty-fifth cars, inclusive, were derailed and badly damaged. Engine 853, of Extra 853 South, was derailed and stopped, badly damaged, on its left side, east of the track and parallel to it. The tender of engine 853 was derailed, became detached from the engine and stopped, badly damaged, west of the track. The first car was derailed and demolished. The front truck of the second car was derailed.

It was clear at the time of the accident, which occurred about 12:05 p. m.

The employees killed were the engineer, the fireman and the front brakeman of Second 72. The employees injured were the engineer, the fireman and the front brakeman of Extra 853 South, and a conductor who was deadheading on Second 72.

Data

During the 30-day period preceding the day of the accident, the average daily movement in the vicinity of the point of accident was 21.46 trains.

Discussion

The operating rules on the line involved provide that train orders must be addressed to those who are to execute them.

The investigation disclosed that the crews of both trains involved held copies of train order No. 57, which contained the provision for Second 72 to wait at Tebbetts until 12:10 p. m. for Extra 853 South. At 11:52 a. m. the train dispatcher issued order No. 61, which gave Extra 853 right over Third 72 Tebbetts to Boughner and right over Fourth 72 Tebbetts toasley, and contained the provision for Second 72 to wait at Hartsburg until 12:45 p. m. for Extra 853. This order was sent to Tebbetts for delivery to Extra 853 and to McBaine for delivery to Third and Fourth 72, but it was not addressed to Second 72. Second 72 departed from McBaine at 10:53 a. m., 59 minutes before order No. 61 was issued, and passed Hartsburg, the last open office, at 11:29 a. m., 23 minutes before this order was issued. The crew of Extra 853 received copies of order No. 61 at Tebbetts, and this train departed at 11:55 a. m. Extra 853 was authorized to use until 12:45 p. m. to clear for Second 72. The crew of Second 72 did not hold copies of the order. This resulted in a lap of authority of the trains involved and they collided at a point 3.8 miles south of Tebbetts.

The first the members of the crew on the engine of Extra 853 knew of anything being wrong was when the engineer saw Second 72 approaching at a distance of about 800 feet, and he immediately moved the brake valve to emergency position. The engineer said the speed was 3 to 5 miles per hour when he jumped off just before the collision occurred. The conductor and the flagman of Extra 853, who were in the caboose, said that when they received copies of order No. 61 it did not appear to read properly because, according to the provisions of the order, their train could not proceed beyond Boughner for Third 72, and Second 72 was required to wait at Hartsburg, 7.2 miles south of Boughner, for Extra 853. However, they did not take action to communicate with the train dispatcher to ascertain if an error had been made in the wording of the order and they permitted their train to proceed. It could not be determined at what point the members of the crew on the engine of Second 72 first saw Extra 853, as they were killed in the accident. The conductor and the flagman were in the caboose. They said the speed was 35 to 40 miles per hour when the brakes became applied

in emergency, and the collision occurred almost immediately.

According to the statement of the train dispatcher, he erroneously worded that part of order No. 61 which contained the provision for Second 72 to wait at Hartsburg. It should have read Third 72 instead of Second 72. The order was repeated as sent and he failed to detect the error. He said there was no condition in the dispatcher's office that caused him to become confused, and the duties required of him were not of sufficient volume to cause him to be overworked.

In the territory involved, trains are operated by timetable and train orders only. The Commission investigated a head-end collision between two passenger trains which occurred in this territory on December 17, 1941, and resulted in the death of 7 persons and the injury of 14 persons. The report of the Commission covering the investigation stated that if an adequate block system had been in use on this line the accident would not have occurred, and recommended the establishment of an adequate block system on the line involved. In the present case, if an adequate block system had been in use, the accident would not have occurred. This carrier has an automatic block-signal system in operation between Easley and Sedalia, Mo., a distance of 64.7 miles. The northern end of this system is located 31.2 miles south of Tebbetts.

Cause

It is found that this accident was caused by a lap of authority between two opposing trains.

Recommendation

It is recommended that the Missouri-Kansas-Texas Railroad Company establish an adequate block-signal system on the line involved in this accident.

Dated at Washington, D. C., this twenty-ninth day of January, 1943.

By the Commission, Commissioner Patterson.

(SEAL)

W. P. BARTEL,
Secretary.