

RAILROAD ACCIDENT INVESTIGATION

Report No 3784

ST LOUIS-SAN FRANCISCO RAILWAY COMPANY

LAVERTY, OKLA

OCTOBER 14, 1957

INTERSTATE COMMERCE COMMISSION

Washington

SUMMARY

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DATE	October 14, 1957	
RAILROAD	St Louis-San Francisco	
LOCATION	Lavery, Okla	
KIND OF ACCIDENT	Rear-end collision	
TRAINS INVOLVED	Passenger	Freight
TRAIN NUMBERS	10	32
LOCOMOTIVE NUMBERS	Diesel-electric units 2005 and 2003	Diesel-electric units 5034, 5300, 5119 and 5032
CONSIST	5 cars	14 cars, caboose
SPEEDS	28 m p h	37 m p h
OPERATION	Timetable, train orders	
TRACK	Single, tangent, level	
WEATHER	Cloudy	
TIME	4 32 p m	
CASUALTIES	10 injured	
CAUSE	Failure to provide protection for preceding train	

INTERSTATE COMMERCE COMMISSION

REPORT NO 3784

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

ST LOUIS-SAN FRANCISCO RAILWAY COMPANY

APRIL 14, 1958

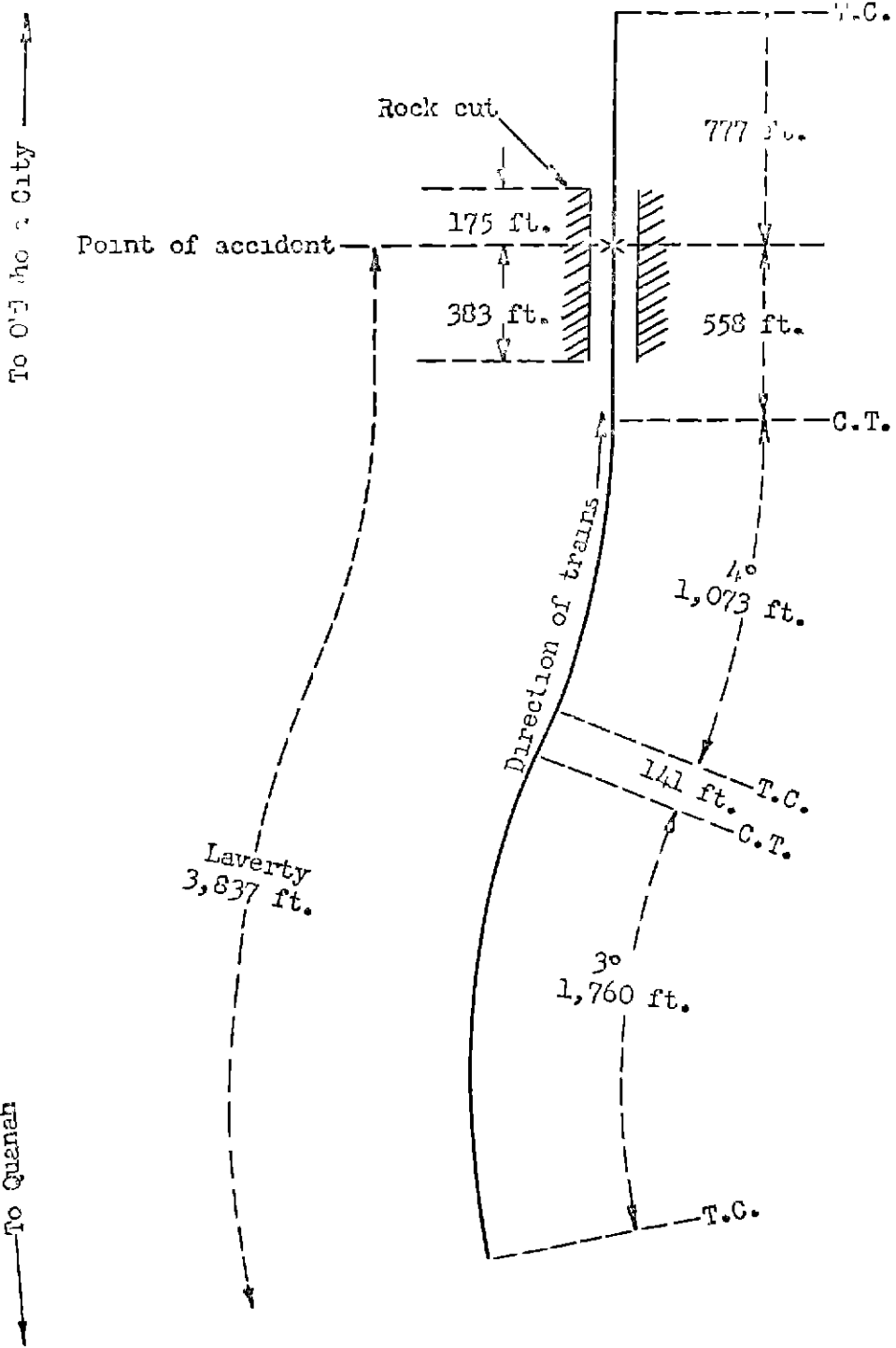
Accident near Lavery, Okla , on October 14, 1957, caused by failure to provide protection for a preceding train

REPORT OF THE COMMISSION¹

TUGGLE, Commissioner

On October 14, 1957, there was a rear-end collision between a passenger train and a freight train on the St Louis-San Francisco Railway near Lavery, Okla , which resulted in the injury of 4 passengers, 3 dining-car employees, 1 railway postal clerk, and 2 train-service employees

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



○	Oklahoma City Okla.	46.4 mi.
○	Norge	4.8 mi.
X	Point of accident	0.72 mi.
○	Laverty	7.1 mi.
○	Cenent	5.5 mi.
○	Cyril	9.6 mi.
○	Elgin	15.6 mi.
○	Larton	94.0 mi.
○	Quanah, Tex.	

St. Louis-San Francisco Railway Company
 Laverty, Okla.
 October 14, 1957

Location of Accident and Method of Operation

This accident occurred on that part of the Southwestern Division extending between Quanah, Texas and Oklahoma City, Okla., 183.7 miles. In the 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 on the main track at a point 132.5 miles east of Quanah and 3,837 feet east of the station at Laverty. From the west there are, in succession, a 3° curve to the right 1,760 feet in length, a tangent 141 feet, a 4° curve to the left 1,073 feet, a tangent 558 feet to point of accident and 777 feet eastward. The grade for eastbound trains approaching the point of accident is 0.15 percent ascending and at the point of the accident it is level.

Between points about 383 feet west and about 175 feet east of the point of accident the track is laid in a cut. The north wall of the cut rises to a height of 14 feet above the tops of the rails.

This carrier's operating rules read in part as follows:

11(b) * * * Care must be used to avoid placing fuseses where fire can be communicated to the right of way.

35 The following signals will be used by flagman:

Day signals—Red flag, torpedoes and red fuseses.

* * *

91 Outside of block signal limits, trains in the same direction must keep not less than ten minutes apart, except in closing up at stations.

* * *

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 red fuseses must be thrown off at proper intervals.

* * *

The maximum authorized speeds in the vicinity of the point of accident are 50 miles per hour for passenger trains and 45 miles per hour for freight trains.

Description of Accident

No. 10, an eastbound first-class passenger train, consisted of diesel-electric units 2005 and 2003, coupled in multiple-unit control, 1 baggage-mail car, 1 baggage car, 1 coach, 1 cafe-lounge car, and 1 sleeping car, in the order named. The third and fifth cars were of lightweight steel construction and the other cars were of conventional steel construction. This train departed from Lawton, Okla., at 2:45 p. m., on time. It was delayed by preceding eastbound train No. 32 at Elgin, 15.6 miles east of Lawton, passed No. 32 at Cyril, 9.6 miles east of Elgin, 32 minutes late, and passed Cement, Okla., 5.5 miles east of Cyril, at 4:12 p. m., 29 minutes late. At Cement, the last open office, the crew received copies of train order No. 52 which read in part as follows:

To C&E No 32 and No 10

No 32 wait at Norge until 428PM

No 10 wait at Norge until 438PM

Norge is 12.6 miles east of Cement and 5.5 miles east of Laverty. No 10 departed from Cement at 4:12 p.m., passed Laverty, and while moving at a speed of 28 miles per hour, as indicated by the tape of the speed-recording device, the rear car was struck by No 32 at a point 3,837 feet east of the station at Laverty.

No 32, an eastbound second-class freight train, consisted of diesel-electric units 5034, 5300, 5119 and 5032, coupled in multiple-unit control 14 cars and a caboose. This train departed from Quanah at 12:15 p.m., 45 minutes late, entered the siding at Cyril to permit No 10 to pass and departed from Cyril at 4:15 p.m., 1 hour 33 minutes late. It passed Cement, where the crew received copies of train order No 52, at 4:25 p.m., 1 hour 33 minutes late, and while moving at a speed of 37 miles per hour, according to the tape of the speed-recording device, it struck the rear end of No 10.

Name of the equipment of either train was derailed and no separation occurred between cars or between the locomotive and cars. The rear car of No 10 stopped at a point 376 feet east of the point of accident and the front of the locomotive of No 32 stopped at a point 308 feet east of the point of accident. The fourth and fifth cars of No 10 were slightly damaged, and all wheels on the third and fourth diesel-electric units of No 32 were slid flat.

The conductor and a train porter of No 10 were injured.

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

Discussion

In the instant case, No 32 arrived at Elgin about 3:10 p.m., six minutes prior to the scheduled time of No 10 at that point. Since No 32 was inferior to No 10 by class, the crew of No 32 intended to place their train in the siding at Elgin and permit No 10 to pass as required by the rules. They were unable to do this, however, because the siding was occupied by outfit cars of maintenance-of-way forces employed in the immediate vicinity of Elgin. After being delayed by the maintenance-of-way employees about 40 minutes, during which time No 10 was stopped by the flagman of No 32, the latter train proceeded to Cyril, cleared the main track for No 10 at that point, and passed Cement 13 minutes after the departure of No 10, in accordance with the carrier's rule requiring that trains operating in the same direction outside of block-signal limits must keep not less than 10 minutes apart.

As No 10 was approaching the point where the accident occurred the enginemen were in their respective positions in the control compartment of the locomotive, the conductor and the train-porter were in the third car, and the flagman was in the rear car. When the train passed Cement at 4:12 p.m. and the crew received train order No 52, restricting No 10 from passing Norge before 4:38 p.m., the timetable running time of 16 minutes for No 10 between those two points was increased by 10 minutes. The engineer said that when he received train order No 52

he decided to consume the additional running time by operating his train at a slower speed than normal between Cement and Norge. An analysis of the speed-recording tape made by a representative of the carrier indicated that the average speed of No. 10 between Cement and the point of accident was 22 miles per hour. The fireman said that immediately prior to the collision he looked towards the rear of his train and saw No. 32 closely approaching the rear car. He said that he called a warning to the engineer who attempted to increase the speed of the train in order to avoid the collision but there was no material increase in speed before the accident occurred. The flagman said he maintained a lookout from the rear vestibule of the rear car for following trains between Cement and Laverty and at the latter point he entered the car and sat down in a bed room. Although numerous curves obscured his vision to the rear he did not place a lighted fusee on or near the main track between Cement and the point of accident, because he thought that a burning fusee might cause fire to spread to vegetation adjoining the main track. He said that he did not think flagging precautions were necessary between those two points as his train was moving at a speed of what he thought was 30 miles per hour and did not realize that following train No. 32 could overtake No. 10.

As No. 32 was approaching the point where the accident occurred the enginemen and the front brakeman were in the control compartment of the front diesel-electric unit maintaining a lookout ahead, and the conductor and the flagman were in the caboose. The brakes had been tested and had functioned properly when used en route. The headlight was lighted. The engineer said that when he received train order No. 52 at Cement he was certain that No. 10 had departed from that point at least 10 minutes previously and was aware that No. 10 was not authorized to pass Norge before 4:38 p. m. He said that because No. 10 had departed from Cement at least 10 minutes previously he decided to operate No. 32 at maximum authorized speed to Norge. According to a representative of the carrier, an analysis of the tape of the speed-recording device indicated the average speed of No. 32 between Cement and the point of accident was 42 miles per hour, and the speed was 47 miles per hour as the train approached the point of accident. While moving on a 4 degree curve to the north, at a point approximately 1,108 feet west of the point of accident, the enginemen observed the roof of the rear car of No. 10 extending above the wall of the cut where the accident occurred. The engineer immediately placed the handle of the brake valve in emergency position and then about 382 feet west of the point of accident he placed the controls in reverse position. According to the tape of the speed-recording device, the speed of the train had been reduced from 47 miles per hour to 37 miles per hour at the time of the collision.

The rules of this carrier provide that 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 provide full protection. When the view is obscured, lighted red fusees must be thrown off at proper intervals. In the instant case No. 10 was being operated at a slower speed than normal between Cement and Norge and the flagman's view to the rear was obscured by numerous curves. Under the circumstances, it is apparent that action was not taken to provide protection for No. 10 against being overtaken by following train No. 32, as required by the carrier's rules.

Cause

This accident was caused by failure to provide protection for a preceding train.

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Dated at Washington, D C , this fourteenth
day of April, 1958

By the Commission, Commissioner Tuggle

(SEAL)

HAROLD D McCOY,
Secretary