# INTERSTATE COMMERCE COMMISSION WASHINGTON

INVESTIGATION NO. 2979

ST. LOUIS-SAN FRANCISCO RAILWAY COMPANY

REPORT IN PE ACCIDENT

NEAR BRISTON, OKLA., ON

MARCH 16, 1946

#### SUMMARY

Railroad:

St. Louis-San Francisco

Date:

March 16, 1946

Location:

Bristow, Okla.

Kind of accident:

Collision

Equipment involved:

Passenger train : Motor-truck

Train number:

5

Engine number:

1062

Consist:

6 cars

Estimated speed:

30 m. p. h. : Unknown

Operation:

Timetable, train orders and automatic block-signal system

Track:

Single; tangent; 1 percent descending grade westward

Highway:

Tangent; crosses track at angle of 50°; level

Weather:

Cloudy

Time:

7:40 a. m.

Casualties:

4 killed

Cause:

Failure to operate a motor-truck approaching railroad crossing at grade in accordance with

requirements of law

#### INTERSTATE COMMERCE COMMISSION

#### INVESTIGATION NO. 2979

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

ST. LOUIS-SAL' FRANCISCO RAILWAY COMPANY

## April 8, 1946.

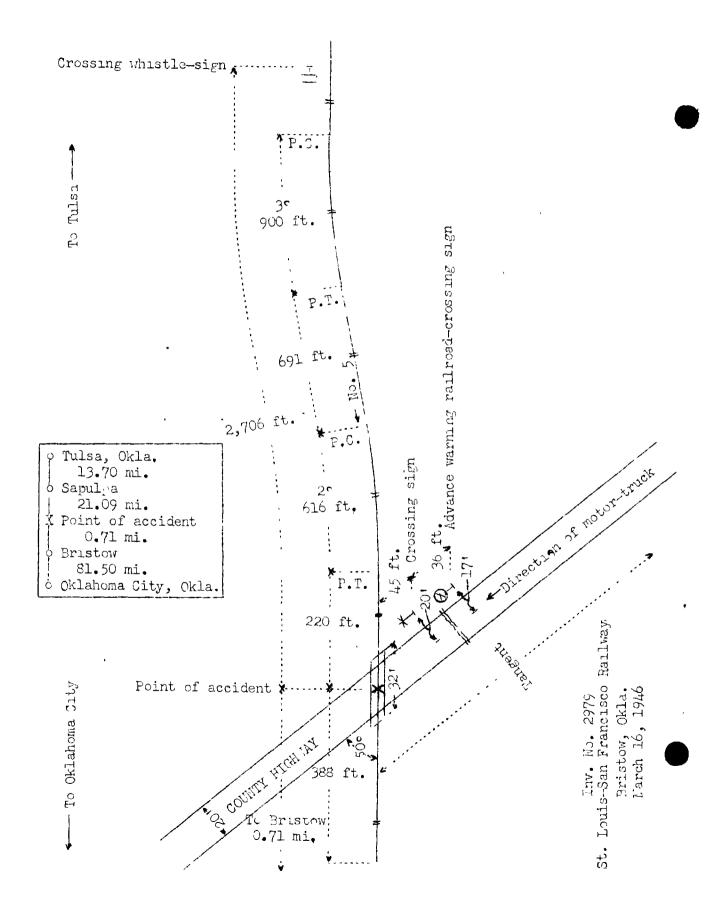
Accident near Bristow, Okla., on March 16, 1946, caused by failure to operate a motor-truck approaching a railroad crossing at grade in accordance with reduirements of law.

## REPORT OF THE COMMISSION

## PATTERSON, Commissioner:

On March 16, 1946, there was a collision between a passenger train on the St. Louis-San Francisco Railway and a motor-truck at a highway grade crossing near Bristow, Okla., which resulted in the death of two truck drivers and two train-service employees.

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.



## Location of Accident and Method of Operation

This accident occurred on that part of the Southwestern Division extending between Tulsa and Oklahoma City, Okla., 117 miles, a single-track line in the vicinity of the point of accident, over which trains are operated by timetable, train orders and an automatic block-signal system. The accident occurred 34.79 miles west of Tulsa, at a point 0.71 mile east of the station at Bristow, where the railroad is crossed at grade by a county highway. From the east on the railroad there are, in succession, a 30 curve to the left 900 feet in length, a tangent 691 feet, a 20 curve to the right 616 feet and a tangent 220 feet to the point of accident and 388 feet westward. The grade is 1 percent descending westward.

The highway intersects the railroad at an angle of 50°, and is surfaced with oil-treated gravel to a width of 20 feet. The highway is tangent throughout a considerable distance south of the crossing and some distance northward. The grade for north-bound vehicles varies between 1.43 percent and 4.26 percent ascending throughout a distance of 240 feet immediately south of the crossing, then it is level over the crossing. The crossing is 32 feet wide, and is of plank construction. Flangeways 2-1/2 inches wide are provided.

An advance warning railroad-crossing sign is located 81 feet south of the crossing and 17 feet east of the center-line of the highway. This sign is a disc about 30 inches in diameter mounted on a mast about 3 feet above the level of the highway. It bears two diagonal lines intersecting at right angles at its center, and bears the letters "R.R." in black and in colorless reflector buttons. A standard cross-buck railroad-crossing sign is located to the right of the direction of north-bound traffic, 45 feet south of the center-line of the track and 20 feet east of the center-line of the nighway. This sign is mounted on a mast 15 feet 9 inches above the level of the highway, and bears the words "RAILROAD CROSSING LOOK OUT FOR THE CARS" in black letters on a white background. A crossing-whistle sign for west-bound trains is located 2,706 feet east of the crossing.

Operating rules read in part as follows:

14 Engine Whistle Signals

NOT	E; :	The	signa	als'p	rescr	ibed	l are	e illu:	strated
									sounds.

Sound Indication

\* \* \*

(1) \_\_\_ o \_\_\_ Approaching public crossings
at grade \* \* \*

(p) Succession of Alarm \* \* \*
short sounds

\* \* \*

Laws of the State of Oklahoma governing the operation of motor vehicles transporting inflammable liquids read in part as follows:

Every motor vehicle transporting \* \* \* inflammable \* \* \* liquids in bulk \* \* \* shall, upon approaching any railroad grade crossing be brought to a full stop within fifty (50) feet, but not less than ten (10) feet, from the nearest rail of such railroad grade crossing, and shall not proceed until due caution has been taken to ascertain that the course is clear: \* \* \*

The maximum authorized speed for passenger trains is 70 miles per hour, and all trains are restricted to a speed of 30 miles per hour over the crossing involved.

## Description of Accident

No. 5, a west-bound first-class passenger train, consisted of engine 1062, one express-refrigerator car, two baggage cars, one baggage-mail car, one coach and one buffet-lounge car, in the order named. The first and the fifth cars were of steel-underframe construction, and the remainder were of all-steel construction. This train departed from Sapulpa, the last open office, 21.8 miles east of Bristow, at 7:16 a.m., 18 minutes late, and while moving at an estimated speed of 30 miles per hour it struck a motor-truck on a highway grade crossing 0.71 mile east of the station at Bristow.

The motor-truck involved was a tractor and semi-trailer, owned and operated by Gilmore, Gardner and Kirk Company, Oklanoma City, Okla. The occupants of the motor-truck were two drivers, who held chauffeurs! licenses Nos. 58780 and 135567. The tractor was a 1941 WA-22 White 6-cylinder model, and bore Oklanoma license No. 209T804. It weighed 8,025 pounds, and was equipped with dual tires on the rear wheels and vacuum operated brakes, and was provided with an enclosed steel cab. The tractor was hauling a semi-trailer, which had dual tires on its wheels, and was provided with vacuum operated brakes. The semi-trailer was equipped with a steel tank, and bore Oklahoma license No. 31-063. The total length of the two units was 41 feet 6 inches. At the time of the accident the cargo consisted of 4,679 gallons of gasoline. A few minutes before the accident occurred, the motor-truck departed from the premises of the Wilcox Oil Company, located immediately west of the high-way and about 220 feet south of the crossing. This vehicle was **-** 7 **-** 2979

moving northward on the highway at an unknown speed when it entered upon the crossing and was struck by No. 5.

The tractor was torn loose from the semi-trailer, and both units were demolished. The tank was punctured, and escaping gasoline became ignited. No. 5 was not derailed, and stopped with the front end of the engine 1,760 feet west of the crossing. The front end of the engine was damaged in the collision, and the engine was considerably damaged by fire. The cars were slightly damaged by fire.

It was cloudy at the time of the accident, which occurred about 7:40 a.m.

The engineer and the fireman were killed.

During the 24-hour period beginning at 12:01 a.m., March 19, 1946, 156 automobiles, 75 trucks and 16 trains passed over the crossing.

## Discussion

No. 5 was approaching the crossing at a speed of about 70 miles per nour in territory where the maximum authorized speed was 70 miles per hour. The brakes of this train had been tested and had functioned properly en route. The members of the train crew were in various locations throughout the cars of the train. These employees said that a service application of the brakes was made at a point a considerable distance east of the crossing, and the speed of the train had been reduced to about 30 miles per hour when it was approaching the immediate vicinity of the crossing. The first these employees were aware of anything being wrong was when they heard an alarm signal sounded on the engine whistle, and the collision occurred immediately afterward. Several residents in the vicinity heard the engine whistle sounded for the crossing. The enginemen were fatally burned in the accident, therefore, it could not be determined when they first became aware that the motor-truck nad entered upon the crossing.

The investigation disclosed that two drivers were occupying the cab of the motor-truck when the vehicle departed from
the premises of the Wilcox Oil Company a few minutes prior to
the time the accident occurred. An employee of the oil company
said that the motor-truck was about 100 feet south of the crossing and was moving northward on the highway at a speed of 5 or
6 miles per hour when he last observed the vehicle prior to the
accident. At that time he heard the train approaching and soon
afterward several short blasts were sounded on the engine
whistle. His view of the movement of the motor-truck throughout the 100 feet immediately south of the crossing was obstructed
by a storage tank. However, he was positive in his statement

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that this vehicle did not stop short of the crossing.

The laws of the state of Oklahora governing the operation of motor vehicles require that a vehicle transporting inflammable liquids must stop before it proceeds upon a railroad track, and must not proceed unless it is safe to do so. The crossing involved was protected by an advance warning railroad-crossing sign and a standard cross-buck railroad-crossing sign. The occupants of the motor-truck were experienced drivers and were familiar with the route. Visibility was not impaired by weather conditions and the occupants of the vehicle could have seen the approaching train throughout a considerable distance immediately east of the crossing. It could not be determined why the motor-truck entered upon the crossing immediately in front of the approaching train, as both occupants of the vehicle were killed in the accident.

## Cause

It is found that this accident was caused by failure to operate a motor-truck approaching a railroad crossing at grade in accordance with requirements of law.

Dated at Wasnington, D. C., this eighth day of April, 1946.

By the Commission, Commissioner Patterson.

(SEAL)

W. P. BARTEL, Secretary.