

INTERSTATE COMMERCE COMMISSION

WASHINGTON

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INVESTIGATION NO. 2884

THE ATCHISON, TOPEKA AND SANTA FE  
RAILWAY COMPANY

REPORT IN RE ACCIDENT

AT RIVERSIDE, CALIF., ON

APRIL 14, 1945

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SUMMARY

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Railroad: Atchison, Topeka and Santa Fe  
Date: April 14, 1945  
Location: Riverside, Calif.  
Kind of accident: Collision  
Equipment involved: Freight train : Motor-truck  
Train number: Extra 1991 East :  
Engine number: 1991 :  
Consist: 14 cars, caboose :  
Estimated speed: 20 m. p. h. : 5 m. p. h.  
Operation: Timetable, train orders and  
automatic block-signal system  
Track: Single; tangent; 0.137 percent  
descending grade eastward  
Street: Tangent; crosses track at right  
angles; level  
Weather: Clear  
Time: 7:40 p. m.  
Casualties: 3 injured  
Cause: Motor-truck being driven upon  
street grade crossing immedi-  
ately in front of approaching  
train

INTERSTATE COMMERCE COMMISSION

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INVESTIGATION NO. 2884

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

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May 30, 1945.

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Accident at Riverside, Calif., on April 14, 1945, caused  
by a motor-truck being driven upon a street grade  
crossing immediately in front of an approaching  
train.

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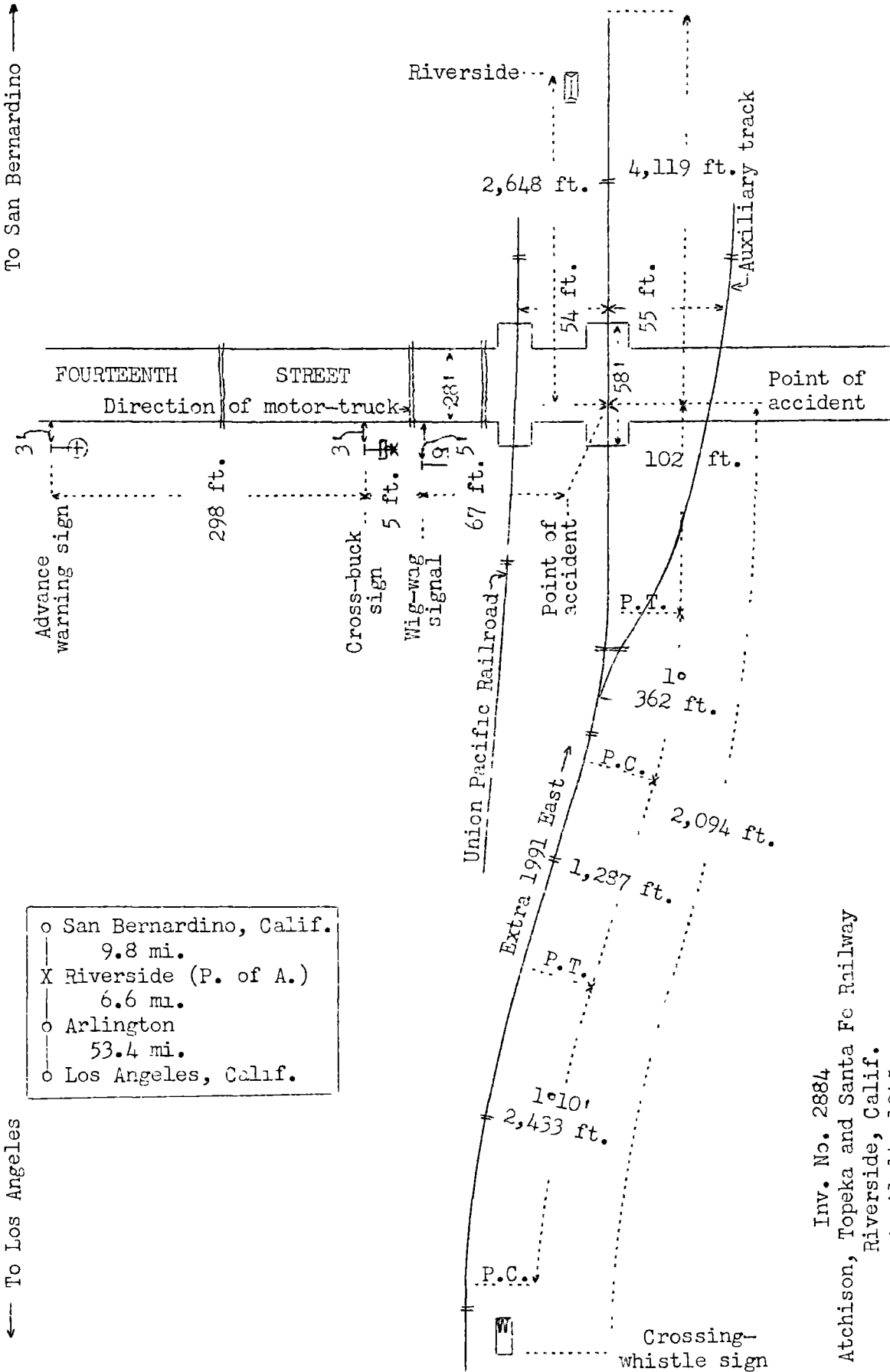
REPORT OF THE COMMISSION<sup>1</sup>

PATTERSON, Commissioner:

On April 14, 1945, there was a collision between a freight train on the Atchison, Topeka and Santa Fe Railway and a motor-truck at a street grade crossing at Riverside, Calif., which resulted in the injury of three train-service employees.

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<sup>1</sup>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.



- o San Bernardino, Calif. 9.8 mi.
- X Riverside (P. of A.) 6.6 mi.
- o Arlington 53.4 mi.
- o Los Angeles, Calif.

Inv. No. 2884  
 Atchison, Topeka and Santa Fe Railway  
 Riverside, Calif.  
 April 14, 1945

Location of Accident and Method of Operation

This accident occurred on that part of the Los Angeles Division designated as the Third District and extending eastward from Los Angeles to San Bernardino, Calif., 69.8 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 59.5 miles east of Los Angeles, at a point 2,648 feet west of the station at Riverside, where the railroad is crossed at grade by Fourteenth Street. From the west on the railroad there are, in succession, a 1°10' curve to the right 2,433 feet in length, a tangent 1,287 feet, a 1° curve to the left 362 feet and a tangent 102 feet to the point of accident and 4,119 feet beyond. The grade for east-bound trains is 0.137 percent descending.

Fourteenth Street intersects the main track at right angles. From the north the street is tangent 740 feet to the crossing and a considerable distance southward. Throughout a distance of 200 feet immediately north of the crossing the grade for south-bound vehicles is about 3 percent ascending, then it is level over the crossing. At the crossing a single-track line of the Union Pacific Railroad is 54 feet north and an auxiliary track is 55 feet south of the A.T. & S.F. main track. North of the crossing, Fourteenth Street is surfaced with asphaltum to a width of about 28 feet. The crossing is about 58 feet wide and is surfaced with asphaltum.

An advance warning railroad-crossing sign is located 370 feet north of the A.T. & S.F. main track and 3 feet west of the street. This sign is a disc 24 inches in diameter mounted on a mast. It bears a horizontal line and a vertical line, which intersect at right angles at its center, and bears the letters "R.R." in black on a white background. A standard cross-buck railroad-crossing sign and an automatic wig-wag crossing signal are located to the right of the direction of south-bound traffic, and are, respectively, 72 feet and 67 feet north of the A.T. & S.F. crossing and, respectively, 3 feet and 5 feet west of the street. The cross-buck sign is mounted on a mast and bears the words "RAILROAD CROSSING 3 TRACKS" in black letters on a white background. The wig-wag signal is equipped with a red light and a bell. The center of the lens is 13.5 feet above the level of the street. The light of the wig-wag signal is illuminated and the bell sounds when an east-bound train occupies any portion of either the U.P. or the A.T. & S.F. main tracks throughout a distance of 2,020 feet west of the crossing. A crossing-whistle sign for east-bound A.T. & S.F. trains is located 2,094 feet west of the crossing.

Operating rules read in part as follows:

14. ENGINE WHISTLE SIGNALS.

Note.--The signals prescribed are illustrated by "o" for short sounds; "\_\_\_" for longer sounds; and "\_\_\_\_\_" for extra long sounds. \* \* \*

SOUND.

INDICATION.

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(1) \_\_\_\_\_ o o

Approaching public crossings at grade, at curves and other obscure places; to be prolonged or repeated until passed.

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Section 576 of Chapter 12 of the Vehicle Code State of California read in part as follows:

576. Certain Vehicles Must Stop at All Railway Grade Crossings. (a) The driver \* \* \* of any motor truck carrying \* \* \* inflammable liquids as a cargo or part of a cargo, before crossing at grade any track or tracks of a steam railway \* \* \* shall stop such vehicle not less than 10 nor more than 50 feet from the nearest rail of such track and while so stopped shall listen, and look in both directions along such track, for any approaching railway train, \* \* \* or \* \* \* other vehicle using such rails before traversing such crossing, \* \* \*

\* \* \*

The maximum authorized speed for the train involved was 35 miles per hour.

Description of Accident

Extra 1991 East, an east-bound freight train, consisting of engine 1991, 14 cars and a caboosc, departed from Arlington, 6.6 miles west of Riverside and the last open office, at 7:25 p. m., and while moving at an estimated speed of 20 miles per hour it struck a motor-truck on a street grade crossing 2,648 feet west of the station at Riverside.

The vehicle involved was a motor-truck with a trailer, owned and operated by the Asbury Transportation Company, Los Angeles, Calif. The driver, who was the sole occupant, held California chauffeur's license No. 400469. The motor-truck was an Autocar model, equipped with a 6-cylinder Diesel engine and a steel tank, the capacity of which was 2,500 gallons. It bore 1945 California license No. B.E.P.C. 8119, and I.C.C. vehicle identification No. 1244. The trailer was a Weber 1938 model, and was equipped with a steel tank, the capacity of which was

4,500 gallons. It bore California license No. S.E.P.T. 17095 and C.R.C. B-7-316. Each unit was equipped with 3 pairs of dual wheels, and air-operated brakes were provided on each unit. The overall length of the truck and the trailer was 59 feet 11 inches. At the time of the accident the tanks of the motor-truck and the trailer were loaded with high-octane gasoline. This vehicle moved southward on Fourteenth Street and stopped a few feet north of the U.P. main track. After an east-bound U.P. freight train had passed over the U.P. crossing, the vehicle proceeded upon the A.T. & S.F. crossing at an estimated speed of 5 miles per hour, and the trailer was struck by Extra 1991 East.

The trailer was demolished. The tank was punctured, and escaping gasoline became ignited. Extra 1991 was not derailed. It stopped with the front end of the engine 265 feet east of the crossing. The front end of the engine was damaged in the collision, and the engine, the tender and the first two cars were damaged later by fire.

An east-bound train approaching on the A.T. & S.F. main track could be seen by the driver of a south-bound vehicle throughout a distance of 2,950 feet from points 15 feet north of the U.P. main track and 15 feet north of the A.T. & S.F. main track.

The weather was clear at the time of the accident, which occurred at 7:40 p. m.

The engineer, the fireman and the front brakeman were injured.

During the 24-hour period beginning at 4 p. m., April 19, 2,615 automobiles, 553 trucks, 36 buses, and 75 trains of the A.T. & S.F. and the U.P. passed over the crossing.

#### Discussion

Extra 1991 East was approaching the crossing at a speed of about 20 miles per hour in territory where the maximum authorized speed was 35 miles per hour. The headlight was lighted brightly, and the enginemen were maintaining a lookout ahead. The air brakes had functioned properly en route. The whistle signal for the crossing was sounded in compliance with the rules. When the engine was about 200 feet west of the crossing the fireman called a warning to the engineer. Then the engineer saw the motor-truck proceeding on the crossing, and immediately moved the brake valve to emergency position, but the collision occurred before the speed of the train was materially reduced.

The crossing was protected by an advance warning sign, a cross-buck sign, and an automatic wig-wag signal. The wig-wag

signal was functioning properly at the time of the accident. The driver said that when his motor-truck proceeded upon the crossing he was not aware of the approach of the A.T. & S.F. train until the front of the motor-truck was on the A.T. & S.F. main track. Then he saw the headlight of the approaching train a short distance west of the crossing. He increased the speed of the vehicle, but was unable to clear the crossing in time to avert the accident. The A.T. & S.F. train was on the controlling circuit when the U.P. train cleared the crossing, and the wig-wag signal continued to give warning of the approach of a train. If the driver had observed this continued warning and looked for other trains he would have been able to see the approaching A.T. & S.F. train.

Cause

It is found that this accident was caused by a motor-truck being driven upon a street grade crossing immediately in front of an approaching train.

Dated at Washington, D. C., this thirtieth day of May, 1945.

By the Commission, Commissioner Patterson.

(SEAL)

W. P. BARTEL,  
Secretary.