### RAILROAD ACCIDENT INVESTIGATION

Report No 3778

### FORT WORTH AND DENVER RAILWAY COMPANY

LOUETTA, TEX

August 27, 1957

INTERSTATE COMMERCE COMMISSION

Washington

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#### **SUMMARY**

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DATE August 27, 1957

RAILROAD Fort Worth and Denver

LOCATION Louetta, Tex

KIND OF ACCIDENT Collision

EQUIPMENT INVOLVED Passenger train Motor-truck

TRAIN NUMBER 4

LOCOMOTIVE NUMBER Diesel-electric unit C & S 9954

CONSIST 5 cars

ESTIMATED SPEEDS 79 m p h Undetermined

OPERATION Timetable, train orders and automatic block-signal

system

TRACK Single, tangent; 0 10 percent ascending grade

northward

HIGHWAY 4°30' curve, crosses track at angle of 73°,

1 0 percent ascending grade westward

WEATHER Clear

TIME 9.18 a. m

CASUALTIES 2 killed, 8 injured

CAUSE Failure to stop motor-fruck short of train moving

over rail-highway grade crossing

### INTERSTATE COMMERCE COMMISSION

### REPORT NO 3778

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

#### FORT WORTH AND DENVER RAILWAY COMPANY

March 7, 1958

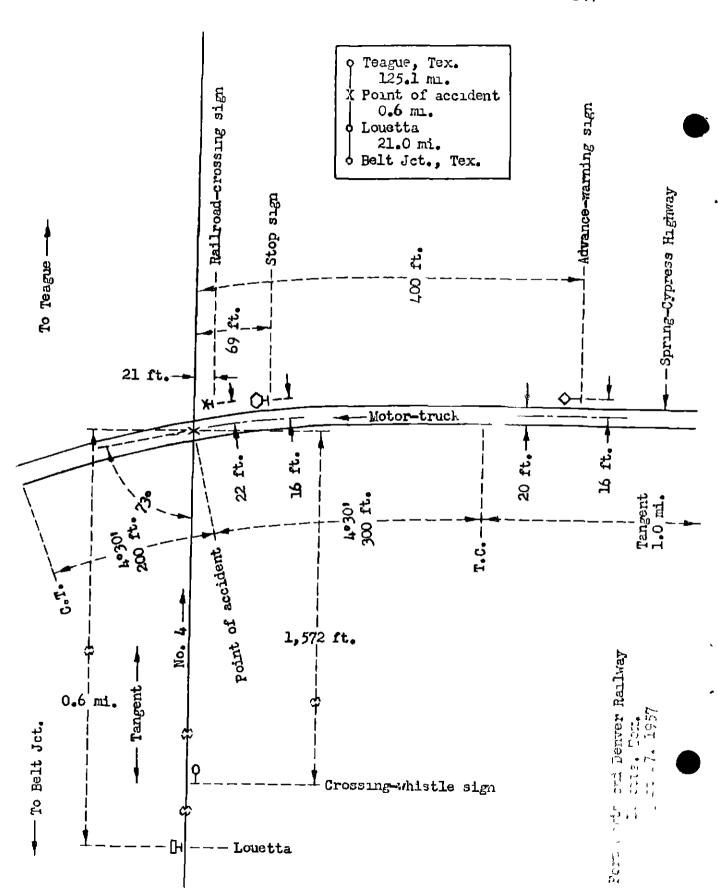
Accident near Louetta, Tex, on August 27, 1957, caused by failure to stop a motor-truck short of a train moving over a rail-highway grade crossing

### REPORT OF THE COMMISSION

### TUGGLE, Commissioner

On August 27, 1957, there was a collision between a passenger train on the Fort Worth and Denver Railway and a motor-truck at a rail-highway grade crossing near Louetta, Tex, which resulted in the death of the driver and another occupant of the motor-truck, and the injury of 7 passengers, and I dining-car employee

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



#### Location of Accident and Method of Operation

This accident occurred on that part of the Joint Texas Division extending between Belt Jct and Teague, Tex., 146.7 miles, a single-track line over which trains are operated by time-table, train orders, and an automatic block-signal system. The accident occurred on the main track at a point 21.6 miles north of Belt Jct and 3,135 feet north of the station sign at Louetta, where the railroad is crossed at grade by Spring-Cypress Highway. The track is tangent for a considerable distance immediately north and south of the point of accident. The grade for south-bound trains is, successively, level 2,000 feet, and 0.10 percent ascending 1,530 feet to the point of accident.

Spring-Cypress Highway is surfaced with bituminous material to a width of 20 feet. It intersects the railroad at an angle of 73 degrees. Planking 36 feet in length is laid along the outside of each rail and between the rails at the crossing. From the east on the highway there are, in succession, a tangent 1 mile in length, and a 4°30′ curve to the left approximately 300 feet to the point of accident and 200 feet westward. The grade for westbound vehicles is, successively, practically level throughout a distance of several hundred feet, and 1.0 percent ascending 300 feet to the crossing.

A standard highway advance-warning sign is located 16 feet north of the centerline of the highway and 400 feet east of the railroad. This sign is 2 feet 6 inches square and is mounted diagonally on a mast 5 feet 10 inches above the level of the highway. It bears the words "STOP AHEAD" in black letters 6 inches high and 1 inch wide on a yellow background. A standard octagonal highway stop sign is located 16 feet north of the centerline of the highway and 69 feet east of the railroad. This sign measures 2 feet between parallel edges and is mounted on a mast 6 feet above the level of the highway. It bears the word "STOP" in white letters 7 inches high and 1 inch wide on a red background. A standard crossbuck railroad-crossing sign is located in the northeast angle of the intersection. It is 22 feet north of the centerline of the highway and 21 feet east of the centerline of the railroad. This sign is mounted on a mast 8 feet 6 inches above the level of the highway and bears the words "RAILROAD CROSSING" in reflectorized black letters on a white background. A crossing-whistle sign for northbound trains is located 1,572 feet south of the crossing.

This carrier's operating rules read in part as follows

14 Engine Horn or Whistle Signals - \* \* \*

NOTE—The signals prescribed are illustrated by "o" for short sounds, "—" for longer sounds \* \* \*

SOUND

INDICATION

(1) -- -- 0 ---

Approaching public crossings at grade (Standard sign will designate point at which signal must begin ) To be prolonged or repeated until crossing is occupied by engine or car

\* \* \*

17 Headlights -- The standard white headlight must be displayed brightly to the front of every train by day and by night

\* \* \*

30 Ringing Beil --\* \* \* the engine bell must be rung when an engine is \* \* \* approaching public crossings at grade, \* \* \*

Motor vehicle laws of the State of Texas read in part as follows

## SPECIAL STOPS AND RESTRICTED SPEEDS REQUIRED

Sec 86 Obedience to signal indicating approach of train—Whenever any person driving a vehicle approaches a railroad grade crossing, the driver of such vehicle—shall stop within fifty (50) feet but not less than fifteen (15) feet from the nearest rail of such railroad and shall not proceed until be can do so safely when

\* \* \*

- (c) A railroad engine approaching within approximately fifteen hundred (1500) feet of the highway crossing emits a signal audible from such distance and such engine by reason of its speed or nearness to such crossing is an immediate hazard.
- (d) An approaching train is plainly visible and is in hazardous proximity to such crossing
- Sec 87 All vehicles must stop at certain railroad grade crossings—With respect to highways under their respective jurisdiction, the State Highway Department and local authorities are hereby authorized to designate particularly dangerous highway grade crossings of railroads and to erect stop signs thereat. When such stop signs are erected, the driver of any vehicle shall stop within fifty (50) feet but not less than fifteen (15) feet from the nearest rail of such railroad and shall proceed only upon exercising due care

The maximum authorized speed for passenger trains is 79 miles per hour

### Description of Accident

No 4, a northbound first-class passenger train, consisted of diesel-electric unit C & S 9954, I baggage car, 3 coaches and I dining-lounge car, in the order named. This train departed from Houston, 5 I miles south of Belt Jct, at 8 40 a.m., 5 minutes late, passed Belt Jct, the last open office, at 8 54 a.m. 7 minutes late, and while moving over the intersection of the railroad and Spring-Cypress Highway at a speed of 79 miles per hour, the third car of the train was struck by a motor-truck.

The vehicle involved was a tractor and semi-trailer owned by the Texas Farm Produce Company of Nacogdoches, Tex—The driver held Texas Department of Public Safety commercial operator's license No 0367764—The tractor was a 1954 model International, powered by a 6-cylinder gasoline engine, and equipped with a conventional cab—It bore Texas license No 8X3865. The Lufkin van-type semi-trailer was of steel construction and was mounted on tandem axles. It bore 1957 Texas license No 8B6309—Both the tractor and the semi-trailer were equipped with air brakes—At the time of the accident the semi-trailer was loaded with 29,900 pounds of mixed dairy and poultry feed—The total weight of the vehicle and the cargo was 39,900 pounds—The

cargo was roaded at Nacogdoches and was being distributed to customers in the vicinity of Louetta This vehicle was moving westward on Spring-Cypress Highway at an undetermined speed when it entered the crossing and struck the side of the third car of No. 4

The tractor was separated from the semi-trailer and the semi-trailer then struck the fourth car. A portion of the semi-trailer entered the vestibule at the front end of the fourth car and was sheared from the semi-trailer. The remaining portion of the semi-trailer scraped the sides of the fourth and fifth cars. The tractor was demolished. The semi-trailer stopped upright on the highway. It was heavily damaged. No 4 stopped with the front end of the locomotive 1.04 miles north of the point of accident. The third and fourth cars were heavily damaged, and the fifth car was considerably damaged.

The weather was clear at the time of the accident, which occurred about 9 18 a m

During the 30-day period preceding the day of the accident the average daily movement over the crossing was 9 l trains. During the 24-hour period beginning at 12 0l p. m., August 30, 1957, 190 automobiles, 116 motor-trucks, and 1 farm tractor passed over the crossing.

#### Discussion

As No 4 was approaching the point where the accident occurred the enginemen were in the control compartment of the diesel-electric unit, and the conductor and the brakeman were in the second car. The fireman, a qualified engineer, was operating the locomotive and the engineer was standing beside him. The headlight was lighted brightly. The brakes of this train had been tested and had functioned properly when used en route. The fireman sounded the grade-crossing whistle signal as the train was approaching the crossing and the signal was prolonged until the front of the train passed the crossing. The bell was ringing during this time. When the train was about 150 feet south of the crossing both the engineer and the rire nan observed the motor-truck approaching at a high rate of speed at a distance of about 250 feet east of the crossing. The fireman immediately initiated an emergency brake application. The first the members of the train crew became aware of anything being wrong was when the brakes became applied in emergency.

The driver and the other occupant of the truck wer. Titled in the accident and it could not be determined why the driver did not take action to stop the truck short of the track in compliance with the warning signs. Skid marks on the highway indicated that he attempted to stop the truck immediately before the collision occurred and that the brakes of the truck were functioning.

Examination of the track structure after the accident occurred disclose (that the base of the west rail at the crossing war on the tops of the heads of the inside spikes. It is evident that the track struck the train at the surficient force to cant the west rail outward freeing the base of the rail from the inside spikes.

The range of vision between a vehicle approaching the crossing from the east and a train approaching the crossing from the south is materially restricted by trees in the southeast angle of the intersection. From a point approximately 250 feet east of the crossing an approaching northbound train is visible throughout a distance of 150 feet.

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### Cause

This accident was caused by failure to stop a motor-truck short of a train moving over a rail-highway grade crossing

Dated at Washington, D  $\,$  C , this seventh day of March, 1958

By the Commission, Commissioner Tuggle,

(SEAL) HAROLD D McCOY,

Secretary