

RAILROAD ACCIDENT INVESTIGATION

Report No 3848

PANHANDLE AND SANTA FE RAILWAY COMPANY

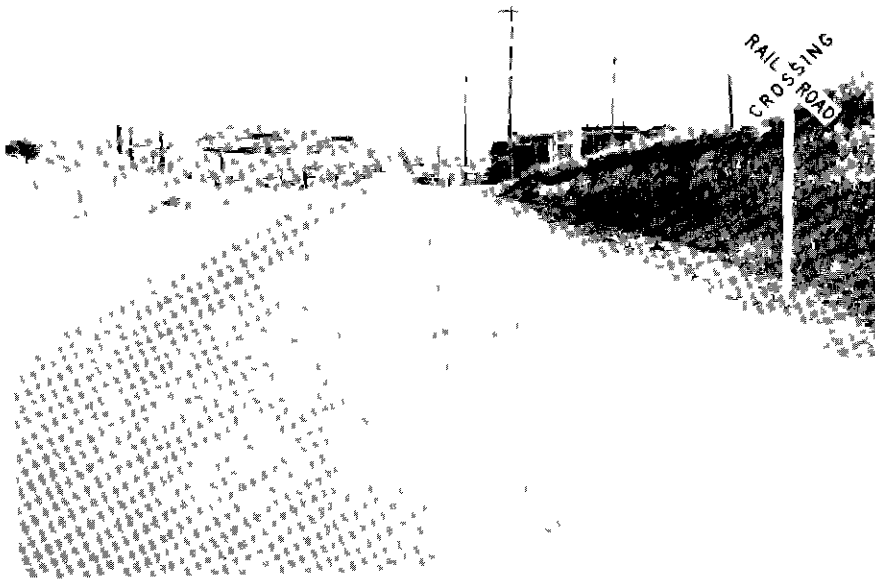
JUILLIARD, TEXAS

JUNE 16, 1959

INTERSTATE COMMERCE COMMISSION

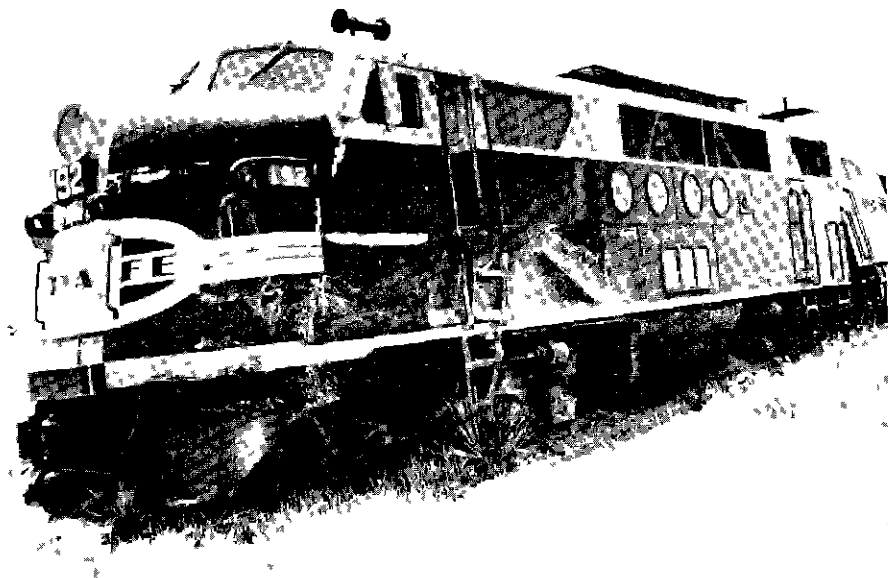
Washington

PLATE 1



Northbound motorist's view of rail-highway crossing involved Train shown is westbound Photograph was taken from a point 250 feet south of crossing

PLATE 2



SUMMARY

§§§

DATE	June 16, 1959	
RAILROAD	Panhandle and Santa Fe	
LOCATION	Juilliard, Texas	
KIND OF ACCIDENT	Collision	
EQUIPMENT INVOLVED	Mixed	Motortruck
TRAIN NUMBER	37	
LOCOMOTIVE NUMBER	Diesel-electric units 192L, 192A, 192C	
CONSIST	39 cars	
SPEEDS	41 m p h	Undetermined
OPERATION	Timetable, train orders	
TRACK	Single, tangent, 1 0 percent descending grade westward	
HIGHWAY	Tangent, 1 94 percent descending grade northward, crosses track at angle of 83°31'	
WEATHER	Clear	•
TIME	10 25 a m	
CASUALTIES	1 killed, 1 injured	
CAUSE	Failure to stop motortruck short of train moving over rail- highway grade crossing	

INTERSTATE COMMERCE COMMISSION

REPORT NO 3848

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

PANHANDLE AND SANTA FE RAILWAY COMPANY

September 18, 1959

Accident near Juilliard, Texas, on June 16, 1959, caused by failure to stop a motortruck short of a train moving over a rail-highway grade crossing

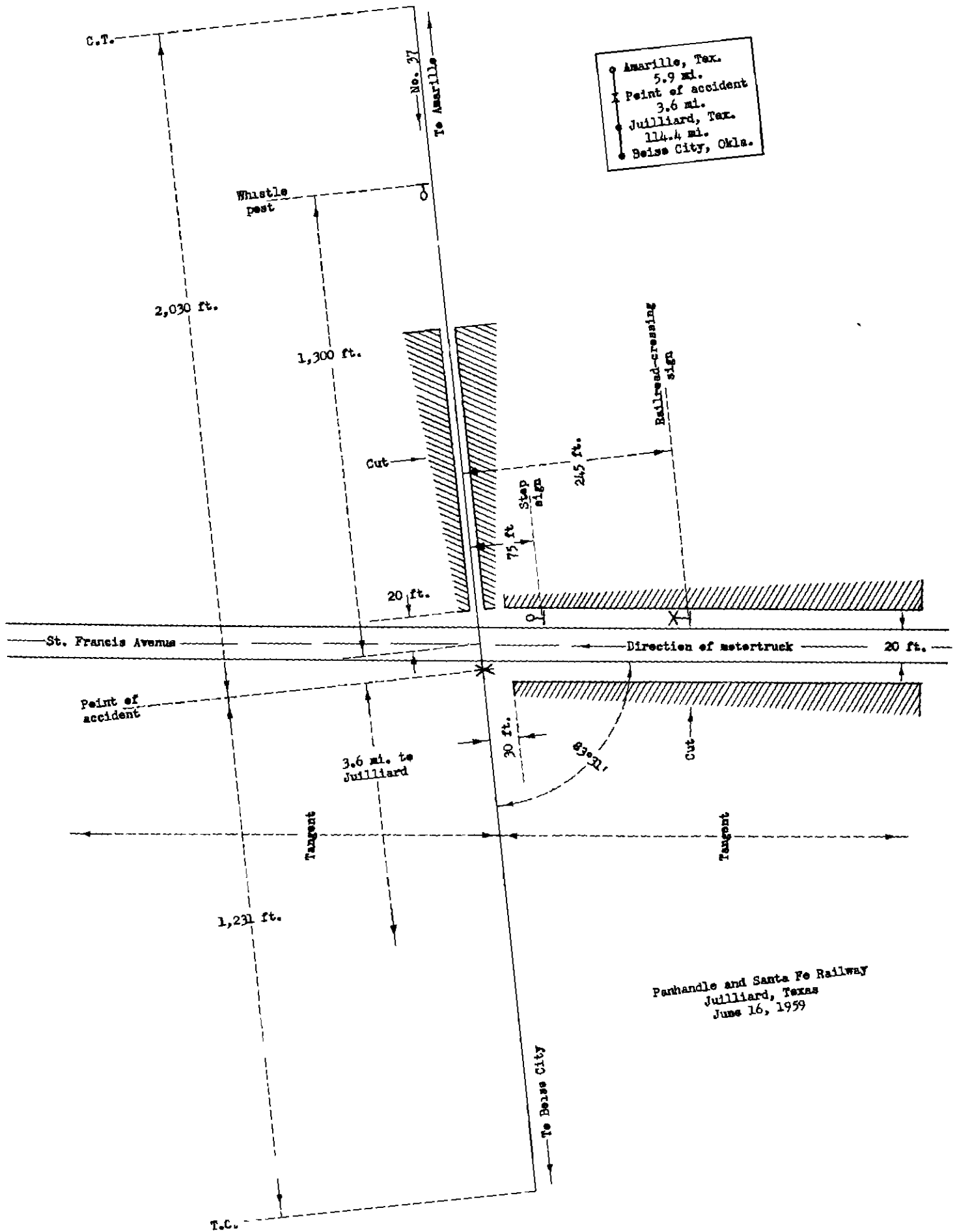
REPORT OF THE COMMISSION¹

FREAS, Commissioner

On June 16, 1959, near Juilliard, Texas, there was a collision between a mixed train of the Panhandle and Santa Fe Railway Company and a motortruck at a rail-highway grade crossing, which resulted in the death of the truck driver and the injury of 1 train-service employee

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

• Amarillo, Tex.
 5.9 mi.
 * Point of accident
 3.6 mi.
 • Juilliard, Tex.
 114.4 mi.
 • Boise City, Okla.



Location of Accident and Method of Operation

This accident occurred on that part of the Plains Division of the Panhandle and Santa Fe Railway extending between Amarillo, Tex., and Boise City, Okla., 123.9 miles, a single-track line over which trains are operated by timetable and train orders. There is no block-signal system in use. In the vicinity of the point of accident, a westbound train by timetable direction moves toward the north by geographic direction. Timetable directions are used in this report.

The accident occurred on the main track at a point 5.9 miles west of the station at Amarillo and 3.6 miles east of Julliard, Texas, where the railroad is crossed at grade by St. Francis Ave. (PLATE 1). From the east the track is tangent throughout a distance of 2,030 feet to the point of accident and 1,231 feet westward. The grade is 1.0 percent descending westward.

In the vicinity of the point of accident the track is laid in a cut extending a considerable distance eastward from a point about 20 feet east of the center of the crossing. The banks of the cut are about 6 feet in height throughout a distance of about 400 feet eastward from the crossing and then gradually rise to a height of about 20 feet.

St. Francis Ave. is surfaced with bituminous material to a width of 20 feet. The southwest angle of the intersection of the road and the railroad is $83^{\circ}31'$. A 90-pound rail is laid on the gage side of each rail throughout the crossing, and the remaining area of the crossing is surfaced with bituminous material. The road is tangent a considerable distance north and south of the crossing. The average grade for northbound vehicles on the highway is 1.94 percent descending throughout a distance of about 400 feet immediately south of the crossing and is level over the crossing. In the vicinity of the crossing the highway is laid in a cut extending about 700 feet southward from a point about 30 feet south of the centerline of the track. The banks of the cut rise to a maximum height of about 9 feet.

A cross buck railroad-crossing advance-warning sign is located on the east side of the highway about 245 feet south of the crossing. This sign bears the words "RAILROAD CROSSING" in black letters $5\frac{5}{8}$ inches in height painted on a white background, and is mounted on a post 7 feet $7\frac{1}{2}$ inches in height. A 24-inch octagonal highway stop sign mounted on a post 2 feet in height is located on the east side of the highway about 75 feet south of the crossing. This sign bears the word "STOP" in black letters $8\frac{3}{16}$ inches in height painted on a white background. The top and bottom portions of the sign are painted yellow. A crossing-whistle sign for westbound trains is located 1,300 feet east of the crossing.

This carrier's 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.

SOUND

INDICATION

(1) -- o --

Approaching public crossings at grade, * * *, to be prolonged or repeated until crossing is reached.

17 The headlight will be displayed to the front of every train by day and night * * *

- 30 The engine bell must be rung * * * while approaching and passing public crossings at grade * * *

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

Section 8 Rate and speed of vehicles -

Subsection 1 Speed restrictions (a) No person shall drive a vehicle on a highway at a speed greater than is reasonable and prudent under the conditions then existing, having regard to the actual and potential hazards when approaching and crossing an intersection or a railway grade crossing, * * *

Article XI

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 he can do so safely when

- (c) A railroad engine approaching within approximately fifteen hundred (1,500) 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 - * * * 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 the train involved was 40 miles per hour

Description of Accident

No 37, a westbound second-class mixed train, consisted of diesel-electric units 192L, 192A, and 192C, coupled in multiple-unit control, 38 freight cars, and 1 coach, in the order named This train departed from Amarillo at 10 00 a m , 2 hours 45 minutes late About 10 25 a m , while it was moving at a speed of 41 miles per hour, as indicated by the tape of the speed-recording device, the first unit of the locomotive was struck by a motortruck at a point about 15 feet west of the center of the intersection of the railroad and St Francis Ave

The vehicle involved was a 1957 Chevrolet dump-type motortruck owned and operated by Leon Cox, truck contractor, at Amarillo The driver, who was the sole occupant, held Texas operator's temporary license No 989211 The motortruck bore Texas license No 1E6826 It was powered by a 135-horsepower gasoline engine and was provided with a conventional cab, hydraulic brakes, and dual wheels on a single rear axle At the time of the accident the motortruck was loaded with approximately 14,500 pounds of gravel The vehicle was moving northward at an estimated speed of 40 to 45 miles per hour as it approached the crossing, and was moving at an undetermined speed when it struck No 37

The locomotive and the 1st to 16th cars, inclusive, were derailed. The locomotive stopped upright with the front end 390 feet west of the point of collision and 32 feet north of the track (PLATE 2). The derailed cars stopped in various positions on or near the track structure. The diesel-electric units were somewhat damaged, 6 cars were considerably damaged, and 8 cars were destroyed.

The motortruck stopped in the southwest angle of the intersection, about 50 feet west of the point of collision and 12 feet south of the centerline of the track. It was destroyed.

The engineer of No. 37 was injured.

The weather was clear at the time of the accident, which occurred about 10:25 a. m.

During a 12-hour period beginning at 7:00 a. m., June 25, 1959, a total of 586 motor vehicles passed over the crossing.

Discussion

As No. 37 was approaching the point where the accident occurred its speed was 41 miles per hour. The enginemen and the front brakeman were in the control compartment at the front of the locomotive. The conductor and the flagman were in the coach at the rear of the train. The brakes of the train had been tested and had functioned properly when used en-route. The headlight was lighted brightly.

The engineer said that he began to sound the locomotive horn and the bell as the train passed the crossing-whistle sign located 1,300 feet east of the crossing, and that these warning signals were prolonged until the collision occurred. The engineer and the front brakeman said that when the train was about 150 to 200 feet east of the crossing, they observed a northbound motortruck approaching the crossing at an estimated speed of 40 to 45 miles per hour when the motortruck was about 150 to 200 feet south of the crossing. When the engineer realized that the motortruck would not be able to stop short of the crossing, he initiated an emergency application of the brakes, but the speed of the train was not materially reduced before the collision occurred. The enginemen and the front brakeman said that the motortruck turned westward when it was about 25 feet south of the crossing, moved off the highway, and was beginning to turn over onto its right side immediately before the collision occurred.

The motortruck struck the front left side of the first diesel-electric unit when it was at a point about 15 feet west of the center of the crossing. The derailment occurred about 5 feet farther westward.

Skid marks on the highway indicated that the brakes of the motortruck were functioning as the vehicle was closely approaching the crossing. These marks extended from a point approximately 110 feet south of the centerline of the track to the west edge of the highway at a point 30 feet south of the track. The driver of the motortruck was killed in the accident and the reason for his failure to stop short of the crossing could not be determined.

As a northbound vehicle approaches the crossing, the driver's view of a westbound train approaching the crossing is considerably obstructed by the banks of the cuts in which the highway and the tracks are laid. From a point 200 feet south of the crossing the driver of the vehicle can see a westbound train approaching throughout a distance of 200 feet east of the crossing. When a driver of a northbound vehicle stops south of the crossing, in accordance with that part of Texas state motor vehicle laws pertaining to highway stop signs at rail-highway grade crossings, he can observe a westbound train approaching the crossing throughout a distance of at least 1,000 feet east of the crossing.

Cause

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

Dated at Washington, D C , this eighteenth
day of September, 1959

By the Commission, Commissioner Freas

(SEAL)

HAROLD D McCOY,
Secretary

