

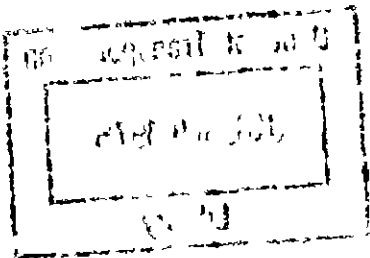
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INTERSTATE COMMERCE COMMISSION,
WASHINGTON

REPORT NO. 3551
MISSOURI-KANSAS-TEXAS RAILROAD COMPANY
OF TEXAS
IN RE ACCIDENT
AT ROYSE CITY, TEX., ON
DECEMBER 13, 1953



SUMMARY

Date: December 13, 1953

Railroad: Missouri-Kansas-Texas of Texas

Location: Royse City, Tex.

Kind of accident: Collision

Equipment involved: Passenger train Automobile
station wagon

Train number: 2

Engine number: Diesel-electric
units 106A and
106C

Consist: 14 cars

Estimated speeds: 68 m. p. h. : Undetermined

Operation: Timetable, train orders, and
automatic block-signal system

Track: Single, tangent, 1.126 percent
ascending grade northward

Highway: Tangent, crosses track at angle of
90°, level

Weather: Clear, dark

Time: 7 p. m.

Casualties: 6 killed; 29 injured

Cause: Automobile station wagon occupying
rail-highway grade crossing
immediately in front of approaching
train

INTERSTATE COMMERCE COMMISSION

REPORT NO. 3551

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

MISSOURI-KANSAS-TEXAS RAILROAD COMPANY OF TEXAS

February 5, 1954

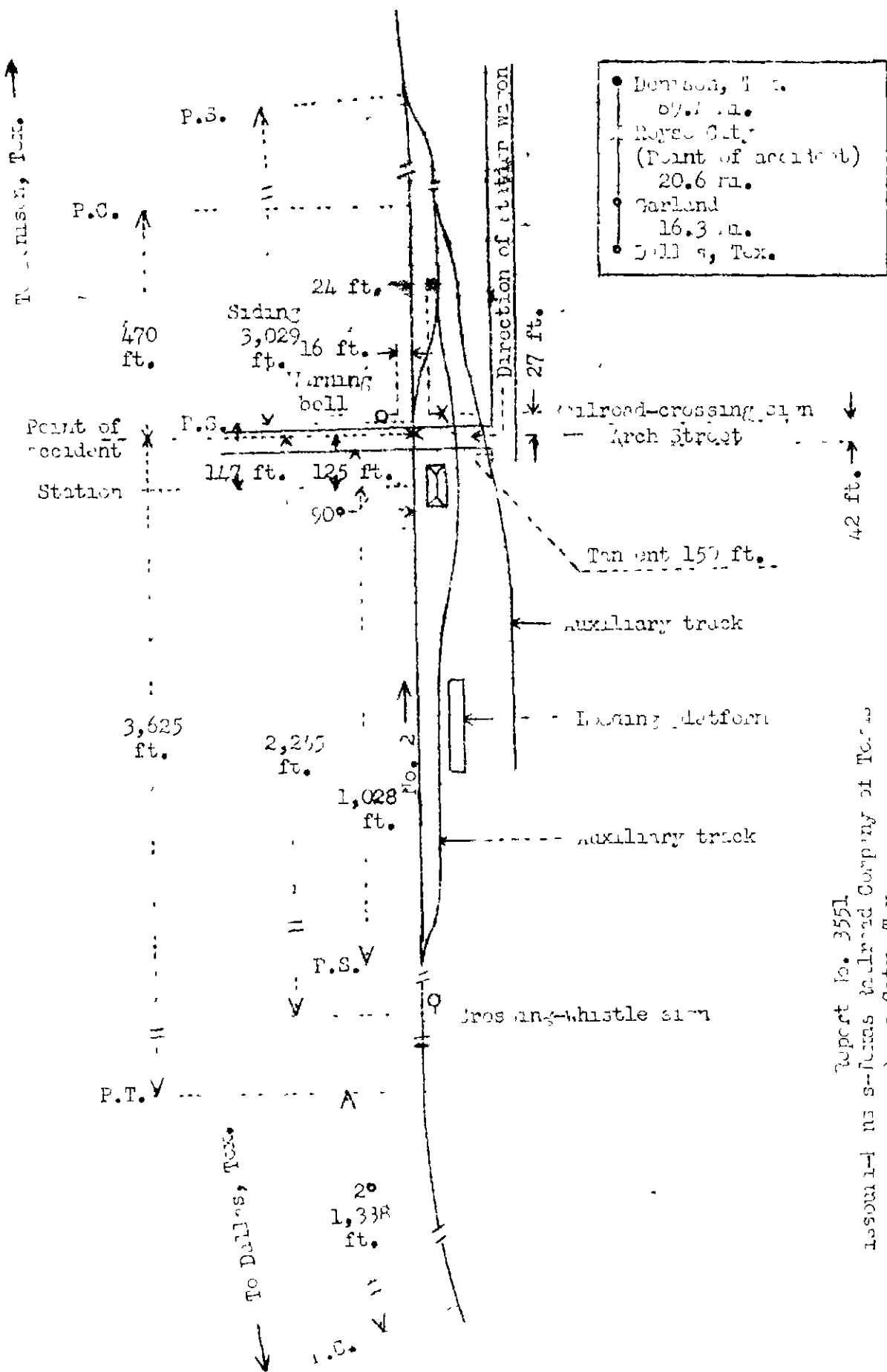
Accident at Royse City, Tex., on December 13, 1953, caused
by an automobile station wagon occupying a rail-
highway grade crossing immediately in front of an
approaching train.

REPORT OF THE COMMISSION¹

CLARKE, Commissioner:

On December 13, 1953, there was a collision between a
passenger train on the line of the Missouri-Kansas-Texas
Railroad Company of Texas and an automobile station wagon
at Royse City, Tex., which resulted in the death of 6
occupants of the station wagon, and the injury of 26
passengers, 1 Pullman Company employee, 1 dining-car employee,
and 1 train-service employee.

¹
Under authority of section 17 (2) of the Interstate Com-
merce Act the above-entitled proceeding was referred by the
Commission to Commissioner Clarke for consideration and
disposition.



Report No. 3551
 Texas Railroad Company of Texas
 Royse City, Tex.
 December 13, 1953

Location of Accident and Method of Operation

This accident occurred on that part of the North Texas Division extending between Dallas and Denton, Tex., 106.3 miles. In the vicinity of the point of accident this is a single-track line, over which trains are operated by timetable, train orders, and an automatic block-signal system. The accident occurred on the main track at a point 36.9 miles north of Dallas and 125 feet north of the station at Royse City, where the railroad is crossed at grade by Arch Street. The station at Royse City is located on the east side of the main track. The south switch of a siding 3,029 feet in length, which parallels the main track on the east, is located 147 feet north of the station. Two auxiliary tracks extend southward from the siding and cross Arch Street at points east of the station. South of the station, the west auxiliary track parallels the main track at a distance of about 20 feet. A loading platform approximately 200 feet in length is located on the east side of this auxiliary track and south of the station. From the south on the main track there are, in succession, a 2° curve to the right 1,338 feet in length, and a tangent 3,625 feet to the point of accident and 470 feet northward. The grade for north-bound trains is 1.126 percent ascending at the point of accident.

Arch Street intersects the railroad at an angle of 90°. The highway is 42 feet wide and is surfaced with bituminous material. It is tangent throughout a distance of 150 feet immediately east of the crossing. The crossing is 48 feet wide. Planking 8 inches in width is provided on the outside of each rail. Flangeways 2 inches wide are provided, and the remaining area of the crossing is surfaced with planking to the level of the tops of the rails. The grade is practically level in the vicinity of the crossing.

A standard cross-buck railroad-crossing sign is located to the right of the direction of west-bound traffic, 24 feet east of the track and 27 feet north of the center-line of the highway. This sign is mounted on a mast 12 feet above the level of the ground and bears the words "RAILROAD CROSSING LOOK OUT FOR THE CARS" in black on a white background. A sign which bears the figure "3" above the word "TRACKS" in black on a white background is mounted on the same mast 9 feet 3 inches above ground level. A warning bell mounted on a mast 13 feet above the level of the highway is located

16 feet west of the center-line of the track and in the northwest angle of the intersection. The control circuits are so arranged that the bell rings when a north-bound train is occupying any portion of the main track within a distance of 2,904 feet immediately south of the crossing. A crossing-whistle sign for north-bound trains is located 2,255 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.
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* * *

(1) — — o ———

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.

* * *

* * *

30. Ringing Bell.--* * * the engine bell must be rung * * * while approaching and passing public crossings at grade * * *

The maximum authorized speed for passenger trains is 75 miles per hour, but it is restricted to 65 miles per hour in the vicinity of the point of accident.

Description of Accident

No. 2, a north-bound first-class passenger train, consisted of Diesel-electric units 106A and 106C, coupled in multiple-unit control, one baggage car, one baggage-mail car, one coach, one coach-lounge-buffet car, three chair cars, one

sleeping car, one dining car, four sleeping cars, and one lounge car, in the order named. The first car, the fourth to the seventh cars, inclusive, the eleventh car, and the fourteenth car were of conventional all-steel construction. The other cars were of lightweight steel construction and were equipped with tightlock couplers. This train departed from Dallas at 6:10 p. m., on time, passed Garland, 20.6 miles south of the point of accident and the last open office, at 6:39 p. m., 6 minutes late, and while moving at a speed of 68 miles per hour, as indicated by the tape of the speed-recording device, it struck an automobile station wagon at Arch Street, Royse City.

The automobile station wagon involved was a 1951 model Chevrolet. It bore Texas license No. KL 519. At the time of the accident the vehicle was occupied by the driver and five passengers. This vehicle was moving westward on Arch Street at slow speed when it entered the crossing and was struck by No. 2.

The locomotive, the first eight cars, and the front truck of the ninth car of No. 2 were derailed. The Diesel-electric units remained coupled and stopped between the siding and the main track, with the front end of the first unit 609 feet north of the point of collision. The front and the rear units leaned toward the east at angles of 35 degrees and 30 degrees, respectively. The first car stopped upright with the front and rear ends, respectively, 12 feet and 36 feet west of the main track. The second car was turned end for end and stopped upside down, parallel to the first car and immediately east of it. The third car stopped with the front end east of the siding and at an angle of about 60 degrees to the main track and the rear end against the rear end of the locomotive. The other derailed cars stopped between the siding and the main track and approximately in line. The ninth car stopped with the rear truck on the crossing. The Diesel-electric units, the first five cars, and the eighth car were badly damaged. The sixth, seventh, and ninth cars were somewhat damaged, and the fourteenth car was slightly damaged. The station wagon was demolished.

The engineer was injured.

The weather was clear and it was dark at the time of the accident, which occurred about 7 p. m.

During the 30-day period preceding the day of the accident the average daily movement over the crossing was 10.17 trains. During the 24-hour period beginning at 12:01 a. m., December 21, 1953, 1,121 automobiles, 363 trucks, 37 buses, and 5 other motor-driven vehicles passed over the crossing.

Discussion

As No. 2 was approaching the point where the accident occurred, the speed was about 68 miles per hour. The engineer and the fireman were maintaining a lookout ahead from the control compartment at the front of the locomotive. The members of the train crew were in various locations in the cars of the train. The headlight was lighted brightly, and the oscillating signal light was lighted. The brakes of this train had been tested and had functioned properly when used en route. The locomotive bell was ringing. The engineer said that he began to sound the grade-crossing signal as the train was approaching the crossing-whistle sign and that he prolonged the signal until the locomotive reached the crossing. He said that when he first observed the station wagon it was some distance north of the station and was proceeding southward on a street parallel to the railroad. The engineer's view of the station wagon was then obstructed by the loading platform and station buildings, and when he next saw it his locomotive was closely approaching the crossing. He immediately made an emergency application of the brakes, but the collision occurred before the speed of the train could be reduced. He said that the speed of the station wagon was low and he thought it could have been stopped at any point before it entered upon the crossing. The fireman said that he did not see the station wagon before it emerged from behind the station and entered the crossing. He said he called a warning at approximately the same time that the engineer moved the brake valve to emergency position.

All of the occupants of the station wagon were killed. A witness to the accident said that he was on the west side of the track near the crossing when the accident occurred. He observed the oscillating signal light of the locomotive and heard the locomotive horn being sounded as the train approached. Soon afterward he observed the headlights of the station wagon as it entered Arch Street and approached the crossing. The train was then closely approaching. The crossing bell was ringing. The witness said it appeared that the speed of the station wagon was reduced momentarily and was then increased immediately before the station wagon entered the crossing.

Members of the train crew said that when they alighted from the train immediately after the accident occurred the warning bell at the crossing was ringing. It continued to ring until it was disconnected by a member of the signal force about 2 hours 30 minutes after the accident occurred.

As a vehicle approaches the crossing from the east the driver's view of an approaching north-bound train is materially restricted by several buildings located east of the main track and south of Arch Street. At the time of the accident this view was further restricted by freight cars which had been placed on the auxiliary track at points adjacent to the loading platform and immediately south of the station. Under these conditions, from points on Arch Street 72 feet, 43 feet, and 15 feet east of the center-line of the main track the driver of a vehicle can obtain a view of an approaching train at distances of approximately 400 feet, 120 feet, and 940 feet, respectively, south of the crossing.

Cause

This accident was caused by an automobile station wagon occupying a rail-highway grade crossing immediately in front of an approaching train.

Dated at Washington, D. C., this fifth day of February, 1954.

By the Commission, Commissioner Clarke.

(SEAL)

GEORGE W. LAIRD,
Secretary.