

INTERSTATE COMMERCE COMMISSION
WASHINGTON

INVESTIGATION NO. 2544

THE CHICAGO, ROCK ISLAND & PACIFIC RAILWAY COMPANY

REPORT IN RE ACCIDENT

NEAR PERKINS, TEX., ON

NOVEMBER 20, 1941

SUMMARY

Railroad: Chicago, Rock Island & Pacific
Date: November 20, 1941
Location: Perkins, Tex.
Kind of accident: Derailment
Equipment involved: Passenger train : Motor truck
Train number: 1
Engine number: 551
Consist: 7 cars
Estimated speed: 50-60 m.p.h. : 4-6 m.p.h.
Operation: Timetable, train orders and an
automatic block-signal system
Track: Single; 0°30' left curve; 0.19
percent descending grade eastward
Highway: Tangent; crosses track at an angle
of about 35 degrees; 4.0 percent
ascending grade northward
Weather: Clear
Time: 8:10 a.m.
Casualties: 2 killed; 12 injured
Cause: Accident caused by motor truck being
driven upon highway grade crossing
immediately in front of approaching
train

INTERSTATE COMMERCE COMMISSION

INVESTIGATION NO. 2544

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

THE CHICAGO, ROCK ISLAND & PACIFIC RAILWAY COMPANY

January 9, 1942.

Accident near Perkins, Tex., on November 20, 1941, caused by
motor truck being driven upon highway grade crossing
immediately in front of approaching train.

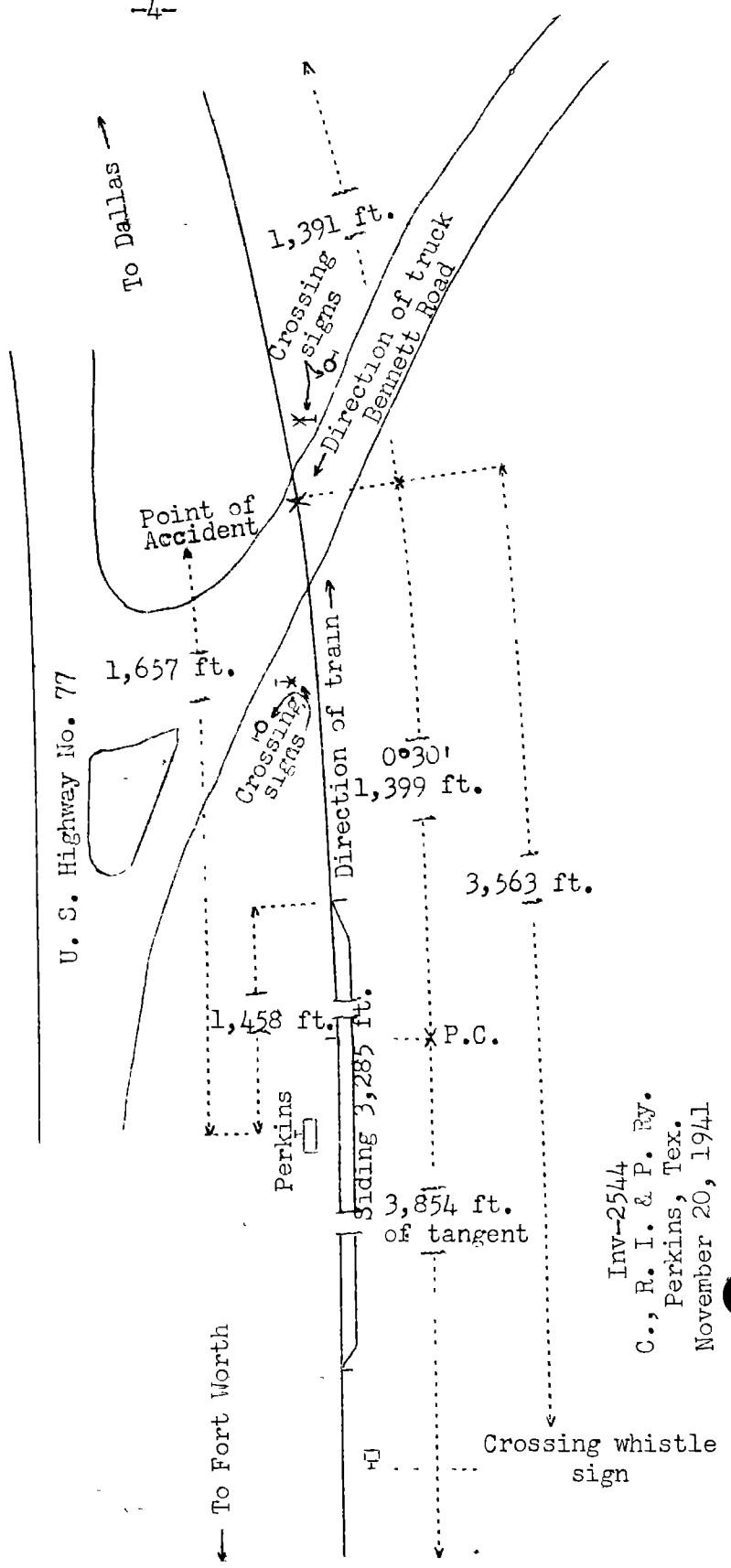
REPORT OF THE COMMISSION¹

PATTERSON, Commissioner:

On November 20, 1941, there was a derailment of a pas-
senger train on the Chicago, Rock Island & Pacific Railway
after it struck a motor truck at a highway grade crossing near
Perkins, Tex. The accident resulted in the death of 1 train-
service employee and the driver of the motor truck, and the
injury of 10 passengers and 2 train-service employees.

¹Under authority of section 17(2) of the Interstate Commerce
Act the above-entitled proceeding was referred by the Commis-
sion to Commissioner Patterson for consideration and dis-
position.

○	Austin Street Yard	Dallas, Tex.
		3.79 mi.
X	Point of Accident	0.31 mi.
○	Perkins	6.6 mi.
○	Irving	24.1 mi.
○	Fort Worth, Tex.	



Inv-2544
 C., R. I. & P. Ry.
 Perkins, Tex.
 November 20, 1941

Location of Accident and Method of Operation

This accident occurred on that part of the Southern Division designated as Subdivision 2, which extends between Fort Worth and Austin Street Yard, Dallas, Tex., a distance of 34.8 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. Compass directions are used in this report. In the vicinity of the point of accident the railroad extends practically east and west. The accident occurred 1,657 feet east of the station sign, at which point the railroad is crossed at grade by Bennett Road. As the point of accident is approached from the west on the railroad there are, in succession, a tangent 3,854 feet in length and a $0^{\circ}30'$ curve to the left 1,399 feet to the center of the crossing and 1,391 feet beyond. The grade is 0.19 percent descending eastward. The highway crosses the track from southeast to northwest at an angle of about 35 degrees. As the point of accident is approached from the south on Bennett Road there are, in succession, a slight curve to the left 145 feet in length and a tangent 175 feet to the crossing and 150 feet beyond. At the north end of this tangent Bennett Road connects with U.S. Highway No. 77, which parallels the railroad on the north. The grade for north-bound vehicles on Bennett Road is 4.0 percent ascending 200 feet to the south rail of the track and then 1.2 percent descending throughout a distance of 50 feet beyond. The highway is 35 feet in width and is surfaced with asphalt. The crossing is of similar construction and is 40 feet wide.

The crossing is protected on each side of the track by a highway stop-sign of the reflector type and a railroad cross-buck sign. The reflector stop-sign and the cross-buck sign on the south side of the track are located just east of the east edge of the highway and, respectively, 35 and 18 feet south of the south rail. The reflector stop-sign is octagonal, bears the words "STOP" in black letters on a yellow background, and the top of the sign is 4 feet above the ground line. The cross-buck sign bears the words "RAILROAD CROSSING" in black letters on a white background, and the top of the sign is about 10 feet 6 inches above the ground line. A crossing whistle sign for east-bound trains is located 3,563 feet west of the crossing involved.

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. * * *

* * *

(1) _____ o _____ Approaching public crossings at grade. To be prolonged or repeated until crossing is occupied by engine or car. * * *

* * *

Article 800 of the 1941 Texas Laws relating to highway traffic reads in part as follows:

Art. 800. Approaching Railroad Crossing.--- Any person driving a motor vehicle * * * when approaching the intersection * * * of a steam railroad * * * where such * * * highway crosses such track * * * at grade, and where the view of the said crossing is obscured either wholly or partially, shall before attempting to make the said crossing, and at some point not nearer than thirty feet of the said track, reduce the speed of his motor vehicle * * * to a speed not exceeding six miles per hour before making the said crossing, * * * .

In the vicinity of the point of accident the maximum authorized speed for passenger trains is 60 miles per hour.

Description of Accident

No. 1, an east-bound passenger train according to compass directions but south-bound according to time-table directions, consisted of engine 551, of the 4-6-2 type, one dormitory car, two coaches, three Pullman sleeping cars and one diner-lounge car, in the order named. The first and third cars were of stainless steel construction, and the remainder were of standard steel construction. At Fort Worth, 30.7 miles west of Perkins, a terminal air-brake test was made and the brakes functioned properly en route. This train departed from Fort Worth at 7:23 a.m., according to the dispatcher's record of movement of trains, 23 minutes late, passed Irving, 6.6 miles west of Perkins and the last open office, at 7:58 a.m., 27 minutes late, and while moving at a speed estimated as 50 to 60 miles per hour it collided with a motor truck on a highway grade crossing, and was derailed.

The motor truck and trailer involved were owned by the Mosher Steel Company, Houston, Tex., and was being driven by Arthur A. Spearman, sole occupant, who held Texas chauffeur's license No. 85301, effective from March 18, 1941, to March 18, 1942. The motor truck was a 1941 Mack, model EH chassis, and

bore Texas license No. 404792. It had a registered empty weight of 8,800 pounds, a carrying capacity of 14,200 pounds and a wheelbase of 13 feet 2 inches, was equipped with a hydraulic booster brake and with dual tires on each rear wheel and was provided with an enclosed steel cab. It was hauling a floating type trailer, which was licensed for a gross weight of 18,000 pounds. The trailer was equipped with a vacuum booster brake controlled by a lever in the cab of the truck. The motor truck and trailer had a total wheelbase of 31 feet 5-1/2 inches and an overall length of 38 feet 2-1/2 inches. At the time of the accident the vehicle was loaded with structural steel and rivets, which weighed 24,305 pounds. The vehicle, moving northward on Bennett Road en route from Houston to Dallas, approached the crossing at a low rate of speed, stopped, then proceeded upon the track at a speed of 4 to 6 miles per hour and was struck by No. 1.

There was no unusual condition about the enclosed cab that obscured the vision of the truck driver. From a point on Bennett Road 72 feet south of the crossing the driver of a vehicle can have an unobstructed view of a train approaching from the west a distance of 2,124 feet. The fireman of an east-bound train can have an unobstructed view across the inside of the curve involved a distance of 1,635 feet to the crossing; however, he cannot see a vehicle approaching the crossing from the south.

The front end of the motor truck was torn loose from the frame and was demolished. The rear end of the motor truck and the trailer remained upright on the highway.

Engine 551 was derailed to the left and stopped upright, 435 feet east of the crossing, down the embankment of a fill about 12 feet in height, with its front end against the south embankment of U.S. Highway No. 77. The engine and tender were jack-knifed and the right side of the cab was crushed. The trucks of the tender were badly damaged. The front endsill of the tender was badly damaged and the drawbar between the engine and tender destroyed. The first car stopped, considerably damaged, across the track at an angle and opposite the engine and tender. The second car was derailed to the north and stopped, practically upright, down the embankment, just west of the engine and parallel to it, with its front end against the embankment of U.S. Highway No. 77. The trucks and the appurtenances under the body of this car were considerably damaged. The third car was derailed to the north and stopped, upright, practically parallel to the track, with its front end 342 feet east of the crossing. The trucks and the appurtenances under the body of this car were damaged. The fourth car was derailed to the north and stopped, upright, practically parallel to the

track, with its front end 261 feet east of the crossing. The appurtenances under the body of this car were somewhat damaged. The fifth and sixth cars were derailed to the north and stopped upright on the roadbed. The seventh car blocked the highway at the crossing and its front truck was derailed. Throughout a distance of 432 feet east of the crossing the track was destroyed.

The weather was clear at the time of the accident, which occurred about 8:10 a.m.

The train-service employee killed was the engineer, and the train-service employees injured were the conductor and the fireman.

Data

During the 30-day period preceding the day of the accident, the average daily movement of trains over the crossing was 22.4. During the 24-hour period beginning at 1 p.m., November 26, 35 busses, 4,878 automobiles, 1,089 trucks, 13 passenger trains and 10 freight trains passed over this crossing.

Discussion

No. 1 was approaching the crossing at a speed of 50 to 60 miles per hour, in territory where the maximum authorized speed was 60 miles per hour. The crossing whistle signal was being sounded throughout a distance of about 3,500 feet immediately west of the crossing. Because of track curvature to the left and the motor truck approaching toward the right side of the engine, the fireman did not see the motor truck until the accident occurred. It is not known when the engineer first saw the approaching motor truck, as he was killed in the accident. Apparently the engineer did not see the motor truck until the engine had practically reached the crossing, as he did not take action to reduce the speed of the train until the engine was within a few feet of the crossing. Since the motor truck stopped a few feet south of the crossing and then proceeded upon the crossing at a speed of 4 to 6 miles per hour, it is probable the engine was within a very short distance of the crossing when the engineer first realized that the driver of the motor truck was attempting to operate his vehicle over the crossing ahead of the train. The motor truck and trailer were loaded with 12 tons of structural steel and rivets. The engine struck the motor truck at the rear of the cab. At the instant of impact the engine rose several feet and then was deflected to the north of the track.

The driver of the motor truck was an experienced driver and was familiar with the route being traversed at the time

the accident occurred. There were two warning signs for north-bound highway traffic immediately south of the crossing. Apparently the driver was aware of the location of the crossing, as he stopped his truck a few feet south of it. The weather was clear. If he had looked to his left he could have seen the approaching train throughout a distance of 2,100 feet immediately west of the crossing. Why he did not observe the approaching train is not known, as he was killed in the accident. The temperature was near the freezing point, and it is possible he had the cab windows closed. He had been on duty operating a motor truck an aggregate of 19 hours 31 minutes during a period of 24 hours 22 minutes immediately preceding the time of the accident. It is probable therefore that he was not as alert as is required in the safe operation of motor vehicles, and that his lack of adequate rest had an important bearing upon his failure to observe the approaching train.

Cause

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

Dated at Washington, D.C., this ninth day of
January, 1942.

By the Commission, Commissioner Patterson.

(SEAL)

W. P. BARTEL,

Secretary.