INTERSTATE COMMERCE COMMISSION WASHINGTON

REPORT NO. 3375

FORT WORTH AND DENVER CITY RAILWAY COMPANY
IN RE ACCIDENT
AT QUANAH, TEX., ON
CCTOBER 25, 1950

SUMMARY

Date: October 25, 1950

Railroad: Fort Worth and Denver City

Location: Quanah, Tex.

Kind of accident: Rear-end collision

Equipment involved: Engine with cars : Passenger train

Train number: : 7

Engine numbers: 456 : Diesel-electric

units 9938B, 9906B and 9938A

Consists: 11 cars : 10 cars

Estimated speeds: 3 m. p. h. : 36 m. p. h.

Operation: Timetable and train orders

Track: Single; tangent; 0.33 percent

descending grade southward

Weather: Clear

Time: 12:42 p. m.

Casualties: 1 killed; 5 injured

Cause: Open switch

INTERSTATE COMMERCE COMMISSION

REPORT NO. 3375

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

FORT WORTH AND DENVER CITY RAILWAY COMPANY

January 8, 1951

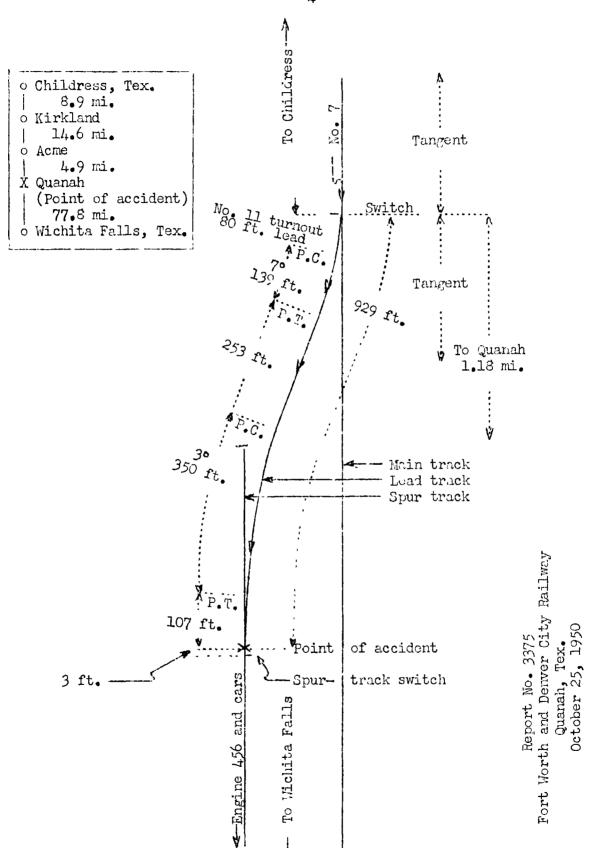
Accident at Quanah, Tex., on October 25, 1950, caused by an open switch.

REPORT OF THE COMMISSION

PATTERSON, Commissioner:

On October 25, 1950, there was a rear-end collision between an engine with a cut of cars and a passenger train on the Fort Worth and Denver City Railway at Quanah, Tex., which resulted in the death of a supervisor of automotive equipment of that carrier, and the injury of two passengers and three train-service employees.

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.



Location of Accident and Method of Operation

This accident occurred on that part of the Wichita Falls Division extending between Childress and Wichita Falls, Tex., 106.2 miles, a single-track line, over which trains are operated by timetable and train orders. is no block system in use. At Quanah, 28.4 miles south of Childress, a lead track diverges from the main track on the west. The north switch of the lead track, which is facing-point for south-bound movements, is located 1.18 miles north of Quanah station. From the north on the lead track there are, in succession, a No. 11 turnout lead 80 feet in length, a 7° curve to the right 139 feet, a tangent 253 feet, a 3° curve to the left 350 feet and then a tangent 107 feet to the point of accident and a considerable distance southward. South of the point of accident the lead track parallels the main track. A spur track connects with the lead track at a point 932 feet south of the north lead-track switch. The spur track extends northward and is parallel to the main track. The Fort Worth and Denver City Railway Company and the Quanah, Acme & Pacific Railway Company jointly use the lead track and the spur track for switching operations. The accident occurred on the lead track at a point 929 feet south of the north lead-track switch. The main track is tangent a considerable distance north of the north leadtrack switch. In the vicinity of the point of accident the grade for south-bound movements is 0.33 percent descending.

The switch stand at the north switch of the lead track is of the intermediate-stand hand-throw type, and is located 9 feet 6 inches west of the center-line of the main track. It is equipped with a round red target 17-5/8 inches in diameter. It also is equipped with reflector lenses 4-3/4 inches in diameter. The center of the target and the centers of the reflector lenses are, respectively, 5 feet 4 inches and 6 feet 8 inches above the level of the tops of the ties. When the switch is lined for movement from the main track to the lead track the switch target is at right angles to the main track.

This carrier's operating rules read in part as follows:

104. Conductors are responsible for the position of switches used by them and their trainmen, * * * Switches must be properly lined after having been used.

* * *

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The maximum authorized speed for the passenger train involved was 65 miles per hour.

Description of Accident

Extra 456 South, a south-bound freight train, stopped at Quanah about 11:20 a.m., and switching operations were performed in the vicinity of the station. About 12:25 p.m. Il cars were pushed northward on the main track to a point north of the north switch of the lead track. The engine and the cut of cars then proceeded southward and stopped on the lead track, with the last car of the cut of cars clear of the main track. About 12 minutes later the engine with the cut of cars proceeded southward and while moving at an estimated speed of 3 miles per hour the most northerly car was struck by No. 7.

No. 7, a south-bound first-class passenger train, consisted of Diesel-electric units 9238B, 9906B and 9958A, coupled in multiple-unit control, one mail car, one mail-baggage car, five baggage cars, one sleeping car, one coach and one dining car, in the order named. The first, second, fourth, and the eighth to tenth cars, inclusive, were of all-steel construction, and the other cars were of steel-underframe construction. This train departed from Kirkland, the last open office, 8.9 miles south of Childress, at 12:19 p. M., 3 minutes late, entered the lead track at Quanah, and while moving at a speed of 36 miles per hour it struck the cut of cars on the lead track.

No. 7 stopped with the front and of the first Dieselectric unit 235 feet south of the point of accident. The first Dieselectric unit was decailed to the cast. It stopped approximately in line with the track and leaned to the east at an angle of about 10 degrees. The south trucks of the second and the third Dieselectric units were decailed. None of the cars of No. 7 was decailed. The control compartment of the first Dieselectric unit was demolished. All of the Dieselectric units were badly damaged. The eleventh car of the cut of cars stopped 24 feet east of the second Dieselectric unit and parallel to the lead track. The north end of the tenth car stopped on top of the control compartment of the first Dieselectric unit. The eleventh car was destroyed The tenth car was badly damaged. The eight and the ninth cars were somewhat damaged.

The engineer and the fireman of No. 7 and the fireman of Extra 456 South were injured.

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The weather was clear at the time of the accident, which occurred about 12:42 p. m.

Discussion

Engine 456, headed south and pushing a cut of 11 cars, departed northward from the station at Quanah about 12:25 p. m. When this movement was closely approaching the north lead-track switch, the conductor, the brakeman and the flagman alighted. The conductor proceeded to the west side of the spur track to check the cars on that track and to consult with the superintendent of an industry adjacent to the spur track concerning switching operations to be performed. After engine 456 passed the north lead-track switch the brakeman lined the switch for entry to the lead track, and the flagman placed the lead-track derail in non-derailing position. As engine 456 moved southward with the cut of cars and entered the lead track the flagman and the brakeman boarded the engine. Immediately before the movement was stopped on the lead track the flagman alighted and proceeded to the spur track to consult with the conductor. About 12 minutes after the movement was stopped the flagman gave a proceed signal to the brakeman, who releyed the signal to the engineer. movement proceeded southward and had attained a speed of about 3 miles per hour when the collision occurred.

As No. 7 was approaching the point where the accident occurred the speed was about 65 miles per hour. The brakes of this train had been tested and had functioned properly when used en route. The engineer and the fireman were maintaining a lookout ahead from the control compartment of the first Diesel-electric unit. A supervisor of automotive equipment was seated between the engineer and the fireman. The conductor, the brakeman and the flagman were in the ninth car. When No. 7 was about 900 feet north of the north lead-track switch the engineer and the fireman observed that the switch was lined for entry to the lead track. They said that before that time their view of the switch target was obscured by smoke and dust. The engineer immediately made an emergency application of the brakes, and the speed of the train was reduced to 36 miles per hour when the collision occurred.

Under the rules of this carrier switches are required to be properly lined after having been used. All of the members of the crew of Extra 456 South understood this requirement. The conductor said that after the movement was stopped on the lead track he observed the north lead-track switch from a position west of the spur track and approximately at a right angle to the main track. He said he thought the switch was

properly lined at that time. No. 7 was due to leave Acme, 4.9 miles north of Quanah, at 12:34 p.m., and each member of the crew had been informed that it was on time. The flagman said that he thought that No. 7 was due to leave Acme at 12:50 p.m., but he did not consult a timetable. He said that he thought there would be sufficient time to perform switching operations before No. 7 arrived. He said that as a result he did not restore the north lead-track switch to normal position because he expected to use the main track for switching operations. Both the engineer and the fireman said they thought that the flagman had restored the north lead-track switch to normal position. After the movement was stopped on the lead track, the north lead-track switch could not be seen from the cab of the engine because of the curvature of the lead track.

Cause

It is found that this accident was caused by an open switch.

Dated at Washington, D. C., this eighth day of January, 1951.

By the Commission, Commissioner Patterson.

(SEAL)

W. P. BARTEL.

Secretary.