

INTERSTATE COMMERCE COMMISSION
WASHINGTON

INVESTIGATION NO. 2805
THE OKLAHOMA RAILWAY COMPANY
REPORT IN RE ACCIDENT
AT BERRY, OKLA , ON
JUNE 17, 1944

SUMMARY

Railroad: Oklahoma

Date: June 17, 1944

Location: Berry, Okla.

Kind of accident: Rear-end collision

Trains involved: Passenger : Passenger

Train numbers: First 258 : Second 258

Engine numbers: Electric motor : Electric motor
219 224

Consist: Motor car, : Motor car
trailer

Estimated speed: Standing : 30 m. p. h.

Operation: Timetable and train orders

Track: Single; tangent; vertical curve

Weather: Clear

Time: 8:40 p. m.

Casualties: 4 killed; 35 injured

Cause: Failure of Oklahoma Railway Company
to provide adequate safeguards for
the movement of its trains

Recommendation: That the Oklahoma Railway Company
establish an adequate block system
on the line on which this accident
occurred

INTERSTATE COMMERCE COMMISSION

INVESTIGATION NO. 2805

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

THE OKLAHOMA RAILWAY COMPANY

July 31, 1944.

Accident at Berry, Okla., on June 17, 1944, caused by
failure of the Oklahoma Railway Company to provide
adequate safeguards for the movement of its trains.

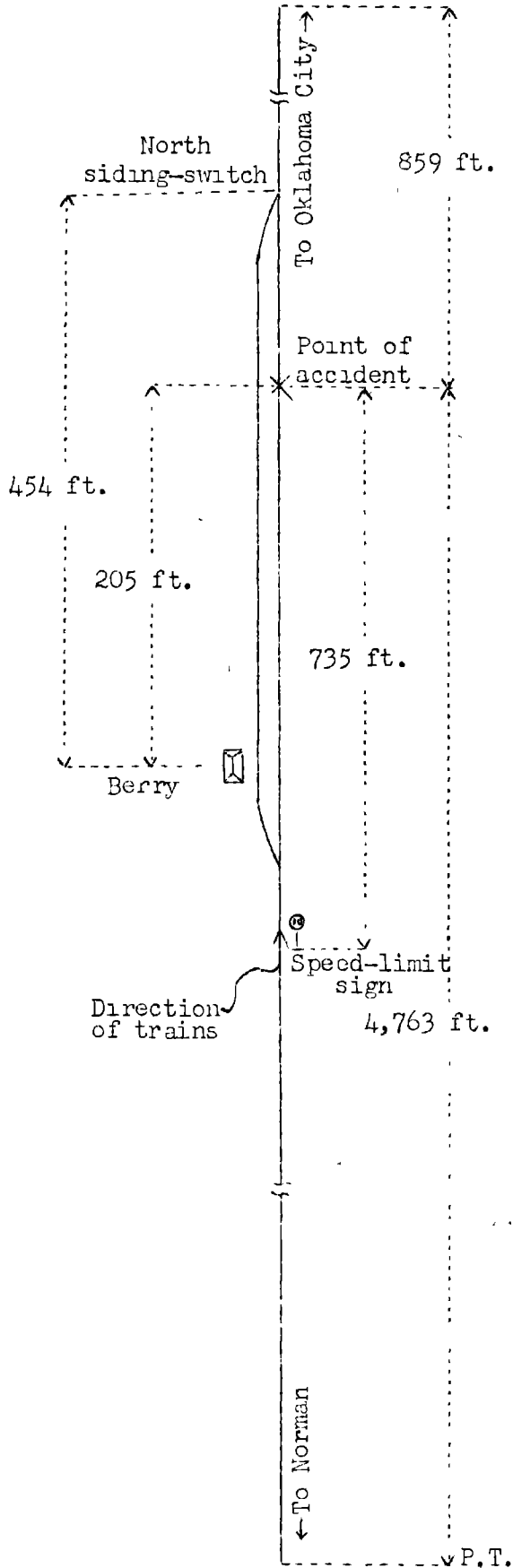
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REPORT OF THE COMMISSION

PATTERSON, Chairman:

On June 17, 1944, there was a rear-end collision between two passenger trains on the Oklahoma Railway at Berry, Okla., which resulted in the death of 3 passengers and 1 employee, and the injury of 35 passengers.

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

- o Terminal Station,
Oklahoma City, Okla.
6.5 mi.
- x Berry (P. of A.)
7.3 mi.
- o Harvest
4.6 mi.
- o Norman, Okla.



Inv. No. 2805
Oklahoma Railway
Berry, Okla.
June 17, 1944

Location of Accident and Method of Operation

This accident occurred on that part of the railroad designated as the Norman Division and extending northward from Norman to Terminal Station, Oklahoma City, Okla., 18.4 miles. In the immediate vicinity of the point of accident this was a single-track line, equipped with an overhead catenary system for the electric propulsion of trains, over which trains were operated by timetable and train orders. There was no block system in use. The accident occurred on the main track at Berry, 11.9 miles north of Norman, at a point 205 feet north of the station. The main track was tangent throughout a distance of 4,763 feet south of this point and 859 feet northward. The grade for north-bound trains was 0.55 percent ascending 1,925 feet, then there was a vertical curve 450 feet to the point of accident and 70 feet beyond.

At Berry a siding 586 feet long paralleled the main track on the west. The north switch of the siding was 454 feet north of the station.

Operating rules read in part as follows:

432. Passenger trains * * * will display the following signals:

Green lights to the front and side and red lights to the rear.

Markers must be lit and kept burning between sunset and sunrise and in case of foggy weather,
* * *

461. Unless some form of block signal be used, * * * trains running in the same direction must keep not less than two thousand feet apart, except in closing up at stations or meeting points. When the view is obscured by curves, fog, storms, or other causes, trains must be kept under such control that they may be stopped within the range of vision.

470. When a train stops or is delayed under circumstances under which it may be overtaken by another train, the REAR BRAKEMAN OR CONDUCTOR MUST GO BACK IMMEDIATELY WITH RED SIGNAL A SUFFICIENT DISTANCE TO INSURE FULL PROTECTION, NOT LESS THAN ONE THOUSAND (1,000) FEET. When recalled he may return to his train. * * * The duties herein required of the brakeman or conductor may be performed by either when desirable for any reason. Also, the duties required in this rule for protection of train by the brakeman or conductor will also be performed by the motorman or operator when necessary.

Time-table special instructions prescribe flagman's signals as follows:

FLAGMAN'S SIGNALS;

Day Signal: A red flag.

Night Signal: A red light.

A speed-limit sign, restricting the speed of north-bound trains to 10 miles per hour over the siding switches at Berry, was located 735 feet south of the point of accident.

No maximum authorized speed for passenger trains was specified by rule or by special instruction.

Description of Accident

First 258, a north-bound first-class passenger train, consisted of electric-motor passenger-car 219 and passenger trailer-car 239, in the order named. This train departed from Norman at 8:10 p. m., on time, departed from Harvest, 7.3 miles south of Berry, at 8:25 p. m., 5 minutes late, and stopped at Berry at 8:38 p. m. About 2 minutes later the rear end was struck by Second 258.

Second 258, a north-bound first-class passenger train, consisted of electric-motor passenger-car 224. This train departed from Norman at 8:11 p. m., 1 minute late, departed from Harvest at 8:26 p. m., 6 minutes late, and while moving at an estimated speed of 30 miles per hour it struck First 258.

The force of the impact moved First 258 northward about 40 feet. The equipment of both trains was derailed, and stopped upright and in line with the track. The front end of trailer car 239 was crushed inward 7 feet, and the rear end was crushed inward 13 feet. The front end of motor car 224 was crushed inward 16 feet, and the fatalities and most of the injuries occurred in this car.

It was clear and daylight at the time of the accident, which occurred about 8:40 p. m.

The employee killed was the motorman of Second 258.

During the 30-day period preceding the day of the accident the average daily movement in the vicinity of the point of accident was 113.86 trains.

Trailer car 239 was built in 1916. It was of conventional steel, plate, girder, side-post, end-sill and side-sill construction. The vestibule end-posts were 4-1/4-inch by 4-inch wood posts, and the vestibule center-posts were 3-1/2-inch by 3-1/4-inch by 1-3/4-inch V-shape wood posts. The end body-sheets and the inside vestibule-sheets were of 16-gage steel. The

end-sills and side-sills were of steel-angle construction 7 inches by 3-1/2 inches and 1/2 inch thick. The side posts were of steel 2 inches by 2 inches and 1/4 inch thick. The cross members were of steel. The car was 49 feet 8 inches in length, and weighed 43,600 pounds. It had seating capacity for 52 persons. Motor car 224 was built in 1923. It was of conventional, all-steel, plate, girder, post and sill construction. The side sheets were of 12-gage steel, the body sheets were of 10-gage steel and the inside vestibule sheets were of 16-gage steel. The end-sills were of channel-shape construction and of 3/16-inch steel. The side-sills were of steel-angle construction 5 inches by 3 inches and 3/8-inch thick. The center-sills were 3-inch Z-shape bars, the steel of which weighed 6.7 pounds per foot. The end posts consisted of 1-1/2-inch by 2-inch T-shape steel, the steel of which weighed 2.45 pounds per foot. The cross members were of steel. The car was 52 feet 8 inches in length, weighed 53,720 pounds, and was divided into a passenger compartment, a smoking compartment and a baggage compartment. It had seating capacity for 49 persons. The floor consisted of 1/4-inch metal covered with 13/16-inch maple flooring. The car was powered by four 275-horsepower electric motors, and was provided with straight air controlled by an M28 brake valve and a foot-operated R-3 self-lapping brake valve with a type E relay valve.

Discussion

About 2 minutes after First 258 stopped at Berry the rear end was struck by Second 258.

As Second 258 was approaching Berry the speed was about 30 miles per hour. The crew consisted of only a motorman, who was in the control compartment in the front end of the motor passenger-car. It could not be determined when he first became aware of anything being wrong, as he was killed in the accident. Several passengers in the motor car stated that the motorman apparently was not aware that the preceding train had stopped, as no action was taken by him to stop the car until just prior to the collision. The brakes had functioned properly when Second 258 stopped at Harvest, about 7 miles south of Berry, to meet opposing trains.

The investigation disclosed that operating officers of this carrier had orally instructed their employees that the flagging rule was not applicable to trains operating as sections of the same schedule unless the trains were sufficiently late on their schedule to be on the time of a train operating on another schedule. In this case there were four trains being operated as sections of No. 258. First 258 consisted of a motor passenger-car and a trailer passenger-car, and the crew consisted of a motorman and a conductor. When this train stopped at Berry

the motorman was in the control compartment at the front end of the first car and the conductor was in the front end of the second car. Because their train was not late enough on its schedule to be on the time of a train operating on another schedule, flag protection was not furnished. In this territory trains were operated by timetable and train orders only. The only provisions for the spacing of trains moving in the same direction was by the rule which required a following train to maintain a distance of not less than 2,000 feet between it and a preceding train, except in closing up at stations. If the flagging rule had been in effect in this case a member of the crew of First 258 would have been required to furnish protection for this train while it was stopped at Berry, and this accident might have been averted.

This carrier had an automatic block-signal system in operation between Norman and Harvest, 4.6 miles, and between a point 172 feet north of the north siding-switch at Berry and Oklahoma City, 6.4 miles. The accident occurred 7.3 miles north of the north end of the first-mentioned territory and 421 feet south of the south end of the latter. If an adequate block system had been in use in the territory involved, this accident would not have occurred.

Cause

It is found that this accident was caused by failure of the Oklahoma Railway Company to provide adequate safeguards for the movement of its trains.

Recommendation

It is recommended that the Oklahoma Railway Company establish an adequate block system on the line on which this accident occurred.

Dated at Washington, D. C., this thirty-first day of July, 1944.

By the Commission, Chairman Patterson.

(SEAL)

W. P. BARTEL,
Secretary.