

INTERSTATE COMMERCE COMMISSION

WASHINGTON

REPORT NO. 3434

MISSOURI-KANSAS-TEXAS RAILROAD COMPANY OF TEXAS IN RE ACCIDENT
NEAR RAY, TEX., ON OCTOBER 19, 1951

Report No. 3434

SUMMARY

Date:	October 10, 1951		
Railroad:	Missouri-Kansas-Texas of Texas		
Location:	Ray, Tex.		
Kind of accident:	Rear-end collision		
Trains involved:	Freight	:	Freight
Train numbers:	Extra 227 South	:	71
Engine numbers:	70, Diesel-electric	:	Diesel-electric
	units 227C, 227B		Units 204A,
	and 227A		204B and 204C
Consists:	Caboose, 104 cars,	:	82 cars, caboose
	caboose		
Estimated speeds:	10 m. p. h.	:	30 m. p. h.
Operation:	Signal indications; yard limits		
Track:	Single; tangent; level		
Weather:	Clear		
Time:	4:46 a.m.		
Casualties:	1 killed; 2 injured		

Cause: Failure properly to control speed of following train moving within yard limits

INTERSTATE COMMERCE COMMISSION

REPORT NO. 3434

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

MISSOURI-KANSAS-TEXAS RAILROAD COMPANY OF TEXAS

January 8, 1952

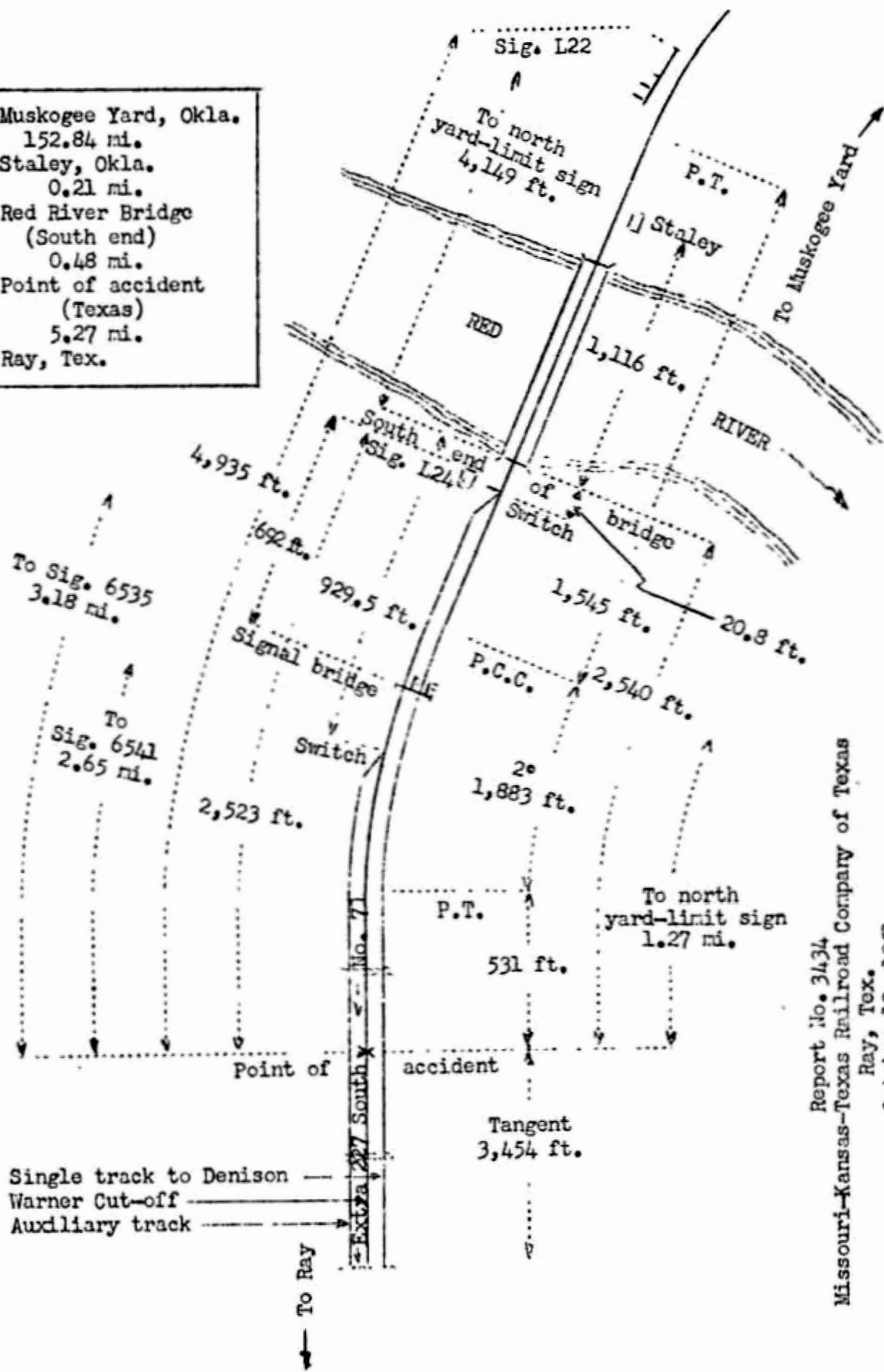
Accident near Ray, Tex., on October 19, 1951, caused by failure properly to control the speed of the following train moving within yard limits.

REPORT OF THE COMMISSION 1

PATTERSON, Commissioner:

On October 19, 1951, there was a rear-end collision between two freight trains on the Missouri-Kansas-Texas Railroad of Texas near Ray, Tex., which resulted in the death of one employee and the injury of two employees.

- o Muskogee Yard, Okla.
152.84 mi.
- o Staley, Okla.
0.21 mi.
- o Red River Bridge
(South end)
0.48 mi.
- X Point of accident
(Texas)
5.27 mi.
- o Ray, Tex.



Report No. 3434
 Missouri-Kansas-Texas Railroad Company of Texas
 Ray, Tex.
 October 19, 1951

Location of Accident and Method of Operation

This accident occurred on that part of the North Texas Division designated as the Warner cut-off and extending between the south end of Red River Bridge and Ray, Tex., 5.75 miles. This is a single-track line, over which trains are operated in either direction by signal indications. Between Muskogee Yard, Okla., and Red River Bridge, 153.05 miles, trains are operated over the Southern Division of the Missouri-Kansas-Texas Railroad by timetable, train orders and an automatic block-signal system. This line is single track over Red River Bridge. The junction switch of the Warner cut-off is 20.8 feet south of Red River Bridge. An auxiliary track parallels the Warner cut-off on the west. The north switch of this track is 929.5 feet south of the bridge. Yard limits extend northward from Ray to a point 4,149 feet north of the south end of the bridge. Staley, Okla. interlocking station is located 1,116 feet north of the south end of the bridge. Interlocking limits extend 713 feet south of the bridge. The accident occurred within yard limits at a point 1.27 miles south of the north yard-limit sign and 2,540 feet south of Red River Bridge. From the north there are, in succession, a tangent 1,545 feet in length, a compound curve to the left having a maximum curvature of 2 degrees, 1,883 feet, and a tangent 531 feet to the point of accident and 3,454 feet southward. The grade is level at the point of accident.

Automatic signals 6535 and 6541, and interlocking signals L22 and L24, governing south-bound movements, are located, respectively, 3.18 miles, 2.65 miles, 4,935 feet and 2,523 feet north of the point of accident. Signals L22 and L24 are controlled from the interlocking station at Staley, Signals 6535 and 6541 are of the searchlight type. Signal 6535 is continuously lighted and signal 6541 is approach-lighted. Signal L22 is of the three-arm upper-quadrant semaphore type and is approach-lighted. Signal L24 is a three-unit color-light dwarf signal and is approach-lighted. The aspects applicable to this investigation and their corresponding indications and names are as follows:

Signal	Aspect	Indication	Name
6535	Yellow	Proceed, immediately	APPROACH
	reducing to 30 MPH		
	or slower if necessary,		
	prepared to stop before		
	leading wheels pass		
	the next signal.		
6541	Yellow-	Proceed, immediately	APPROACH

	over-	reducing to 30 MPH	
	Red	or slower if necessary,	
	prepared to stop before		
	leading wheels pass		
	the next signal.		
L22	Red-over-	Stop.	STOP
	Red-over-		
	Red		
L22	Red-over-	Proceed via diverging	DIVERGING
	Yellow-	route not exceeding	APPROACH
	over-Red	30 MPH, or slower if	
	necessary, prepared		
	to stop before reach-		
	ing next signal * * *		
L24	Red	Stop.	STOP

The controlling circuits of these signals are so arranged that when signal L24 indicates Stop, signal L22 also indicates Stop. When the route is lined for south-bound movements on the Warner cut-off and the block of signal L24 is occupied, signals 6535 and 6541 each will indicate Approach, and signals L22 and L24 each will indicate Stop.

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

DEFINITIONS.

RESTRICTED SPEED.--Proceed prepared to stop short of train, engine, obstruction or switch not properly lined.

34. **CALLING OF SIGNALS.**--All members of engine and train crews must, when practicable, communicate to each other by its name the indication of each signal affecting the movement of their train or engine.

Signal indications * * * must be seen before being communicated to each other.

93. YARD LIMIT RULE. * * *

* * *

Within yard limits; the main track may be used without protecting against second and inferior class trains, extra trains and engines.

Within yard limits, second and inferior class trains, extra trains and engines must move at restricted speed.

93 (a). Block Signals in Yard Limits.--Block signal indications within yard limits do not relieve trains and engines from moving at restricted speed as required by Rules 93 * * *.

The maximum authorized speed for the trains involved was 30 miles per hour.

Description of Accident

Extra 227 South, a south-bound freight train, consisted of Diesel-electric units 227C, 227B and 227A, coupled in multiple-unit control, 104 cars and a caboose. This train departed from Muskogee Yard at 9:35 p.m. and stopped on the Warner cut-off south of Red River Bridge with the rear end of the train standing in the vicinity of the north auxiliary-track switch. After a helper engine and a caboose were coupled to the front of the train Extra 227 South proceeded southward and while moving at an estimated speed of 10 miles per hour the rear end was struck by No. 71.

No. 71, a south-bound third-class freight train, consisted of Diesel-electric units 204A, 204B and 204C, coupled in multiple-unit control, 82 cars and a caboose. This train departed from Muskogee Yard at 12:30 a.m., 4 hours 20 minutes late, passed signals 6535 and 6541, each of which indicated Approach, passed signal L22, which indicated Stop, passed Staley, the last open office, at 4:45 a.m., 1 hour 5 minutes late, passed signal L24, which indicated Stop, and while moving at an estimated speed of 30 miles per hour it struck the rear end of Extra 227 South.

The rear six cars and the caboose of Extra 227 South were derailed. Six cars were somewhat damaged, one car was badly damaged, and four cars and the caboose were demolished. The Diesel-electric units of No. 71 were derailed and stopped across the track with the front end of the first unit 230 feet south of the point of accident. The first eleven cars and the eighteenth to the thirty-eighth cars, inclusive, were derailed. The Diesel-electric units were badly damaged. Twenty-two of the derailed cars were demolished, nine were badly damaged, and one was somewhat damaged.

The flagman of Extra 227 South was killed. The conductor of Extra 227 South and the front brakeman of No. 71 were injured.

The weather was clear at the time of the accident, which occurred about 4:46 a.m.

Discussion

As Extra 227 South proceeded southward after the helper engine and caboose were coupled to the front end of the train, the engineer and the front brakeman were in the control compartment of the first Diesel-electric unit, the fireman was in the cab of the helper engine, and the conductor and the flagman were in the rear caboose. Both the conductor and the flagman observed No. 71 approaching but the conductor said he thought that the speed of his train was increasing at a sufficient rate to prevent a collision. He also said that the marker lights at the rear of the caboose of Extra 227 South were lighted when the collision occurred. The engineer said that after the train departed from Muskogee Yard he observed on several occasions that the marker lights at the rear of the caboose were lighted. The fireman said he observed that the marker lights were lighted as the train moved on a curve 26.4 miles north of the point of accident. The front brakeman said he observed that the marker light on the left side of the caboose was lighted as the train moved on a curve approximately 8 miles north of the point of accident.

As No. 71 was approaching the point where the accident occurred the engineer, the fireman and the front brakeman were in the control compartment of the first Diesel-electric unit, and the conductor and the flagman were in the caboose. The headlight was lighted brightly. The brakes of this train had been tested and had functioned properly when used en route. After the train passed signal 6541, which indicated Approach, the engineer initiated a brake application. He said that signal L22 indicated Diverging Approach and that he called the indication of the signal. He said that both the fireman and the front brakeman answered him. The fireman said that he answered the engineer but he did not observe the aspect of the signal. The front brakeman said that he did not remember observing the aspect of the signal. The brakes were released before the engine passed signal L22. The engineer said that signal L24 displayed a red aspect but neither the fireman nor the front brakeman observed the aspect of the signal. The engineer said he thought that the signal was a route signal and that signal L22 governed south-bound movements to the Warner cut-off. He also said it was the first time he had observed signal L24 while it was displaying a red aspect. When the enginemen first observed the caboose of Extra 227 South they thought that it was on the auxiliary track. When the engineer became aware that Extra 227 South was on the main track, he placed the automatic brake valve in emergency position. However, the speed of the train was not materially reduced before the collision occurred. The engineer, the fireman and the front brakeman said that they did not see the marker lights on the rear of the caboose of Extra 227 South.

After the accident occurred the signal system in the vicinity of the point of accident was tested and was found to be functioning properly.

The rules of this carrier require that when a signal indicates Stop a train must not pass that signal until the indication changes to a less restricting one. This accident occurred within yard limits, and therefore the following movement was required to proceed in such manner that it could be stopped short of a train ahead. All members of the crew of No. 71 were aware that their train was moving within yard limits and each understood the requirements of the yard-limit rule.

Cause

It is found that this accident was caused by failure properly to control the speed of the following train moving within yard limits.

Dated at Washington, D. C., this eighth day of January, 1952.

By the Commission, Commissioner Patterson.

(SEAL) W. P. BARTEL,

Secretary.

FOOT NOTE:

1. 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.