INTERSTATE COMMERCE COMMISSION

WASHINGTON

INVESTIGATION NO. 3013

TEXAS AND NEW ORLEANS RAILROAD COMPANY

REPORT IN RE ACCIDENT

AT FEODORA, TEX., ON

AUGUST 12, 1946

SUMMARY

Railroad:	Texas and New Orleans	
Date:	August 12, 1946	
Location:	Feodora, Tex.	
Kind of accident:	Rear-end collision	
Trains involved:	Freight	: Work
Train numbers:	First 244	: Work Extra 977
Engine numbers:	969	: 977
Consist:	15 cars, caboose	: 17 cars, caboose
Estimated speed:	Standing	: 20 m. p. h.
Operation:	Timetable, train orders and automatic block-signal system	
Track:	Single; tangent; 1.00 percent descending grade eastward	
Weather:	Clear	
Time:	6:58 a. m.	
Casualties:	1 killed; 2 injured	
Cause:	Failure properly to control speed of following train in accordance with signal indications	

INTERSTATE COMMERCE COMMISSION

INVESTIGATION NO. 3013

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

TEXAS AND NEW ORLEANS RAILROAD COMPANY

September 30, 1946.

Accident at Feodora, Tex., on August 12, 1946, caused by failure properly to control the speed of the following train in accordance with signal indications.

REPORT OF THE COMMISSION[1]

PATTERSON, Commissioner:

On August 12, 1946, there was a rear-end collision between a freight train and a work train on the Texas and New Orleans Railroad at Feodora, Tex., which resulted in the death of one employee and the injury of two employees.

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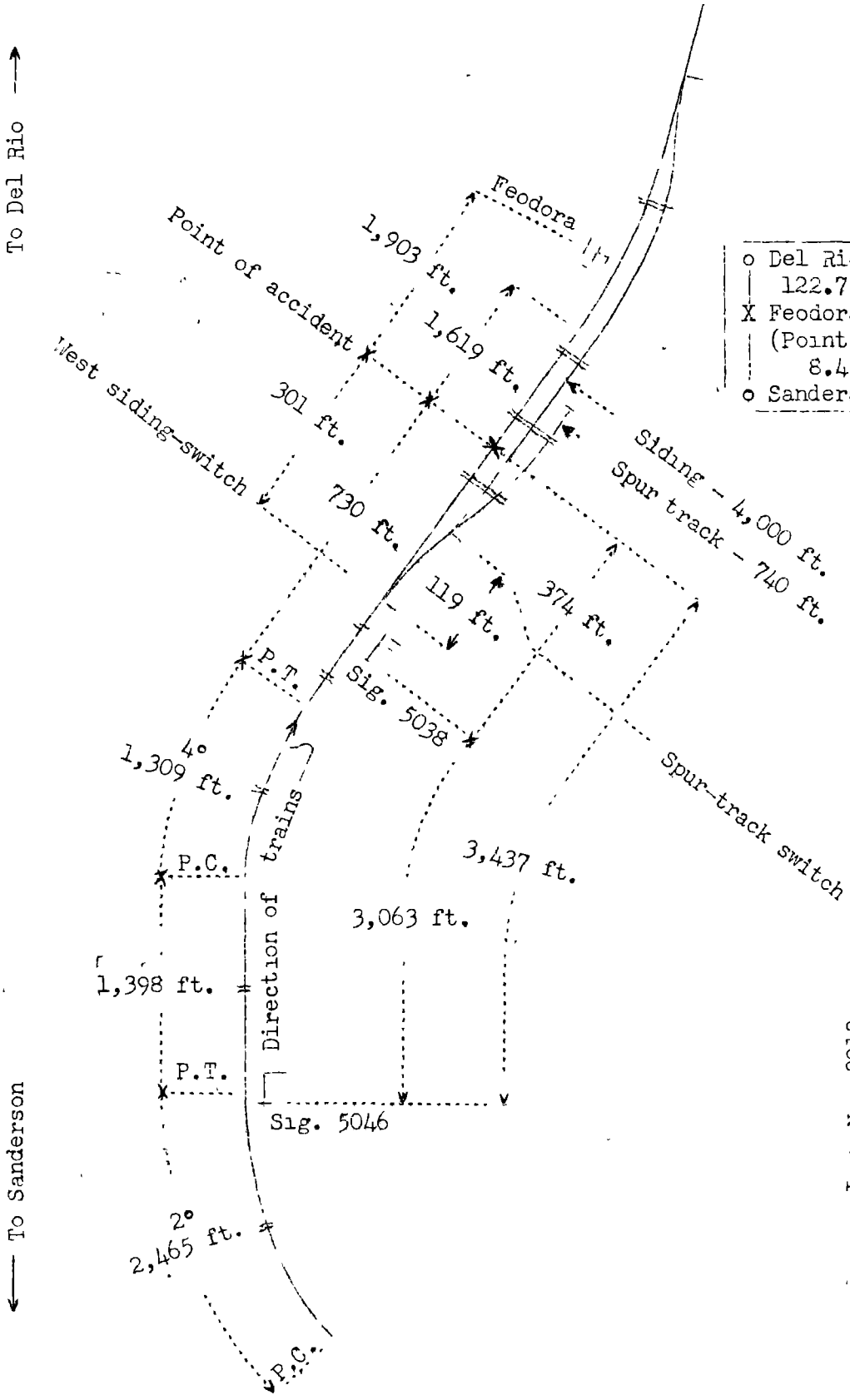
[1]Under authority of section 17 (2) of the Interstate Commerce Act the above-entitled proceeding was referred by the Commission to Commissioner Patterson for consideration and disposition.



Inv. No. 3013
Texas and New Orleans Railroad
Feodora, Tex.
August 12, 1946

Location of Accident and Method of Operation

This accident occurred on that part of the San Antonio Division extending between Sanderson and Del Rio, Tex., 131.1 miles, a single-track line in the vicinity of the point of accident, over which trains are operated by timetable, train orders and an automatic block-signal system. At Feodora, 8.4 miles east of Sanderson, a siding 4,000 feet in length parallels the main track on the south. The west switch of this siding is 2,204 feet west of the station. A spur track 740 feet in length parallels the siding on the south. The spur-track switch is facing-point for east-bound movements, and is 119 feet east of the west siding-switch. The accident occurred on the main track at a point 1,903 feet west of the station and 301 feet east of the west siding-switch. From the west there are, in succession, a 2° curve to the right 2,465 feet in length, a tangent 1,398 feet, a 4° curve to the right 1,309 feet and a tangent 730 feet to the point of accident and 1,619 feet eastward. The grade for east-bound trains varies between 0.40 and 0.64 percent descending 2,500 feet, then it is, successively, practically level 1,500 feet, 0.90 percent descending 800 feet and 1.00 percent descending 808 feet to the point of accident and 192 feet eastward.

Distant signal 5046 and home signal 5038, governing east-bound movements, are, respectively, 3,437 feet and 374 feet west of the point of accident. Signal 5046 is of the one-arm, two-indication, lower-quadrant, semaphore type. Signal 5038 is of the two-arm, three-indication, lower-quadrant, semaphore type. These signals are approach lighted. The involved aspects and corresponding indications of these signals are as follows:

Signal	Aspect	Indication
5046	Yellow, horizontal	Proceed, with caution
5038	Red-over-yellow, both arms horizontal	Stop

The controlling circuits of these signals are so arranged that when the block extending between signal 5038 and the next signal eastward is occupied, signal 5046 displays proceed-with-caution and signal 5038 displays stop.

Operating rules read in part as follows:

DEFINITIONS

* * *

With Caution--To run at reduced speed, according to conditions, prepared to stop short of a train, * * * or before reaching a stop signal. * * *

* * *

14. ENGINE WHISTLE SIGNALS

Note--The signals prescribed are illustrated by "o" for short sounds; "___" for longer sounds.
* * *

* * *

SOUND	INDICATION
* * *	
(c) ___ o o o	Flagman protect rear of train.
* * *	

15. The explosion of one torpedo is a signal to stop. * * *

The explosion of two torpedoes is a signal to proceed with caution for not less than one mile.

* * *

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

35. The following signals must be used by flagman:

Day signals--A red flag,
torpedoes and
fusees.

* * *

99. * * *

When a train stops under circumstances in which it may be overtaken by another train, the flagman must go back immediately with flagman's signals a sufficient distance to insure protection.

* * *

If not recalled, one-half mile from rear of train he must place one torpedo on the rail; one mile from rear of train, or when recalled, if one-half mile or more from rear of train, he must place two torpedoes on the rail three rail-lengths apart. If conditions such as curves, * * * or descending grade require, he must continue back a greater distance, placing two additional torpedoes.

* * *

When flagman has reached the required flagging distance and has placed torpedoes as required, he may then return to the single torpedo where he must remain until relieved by another flagman or recalled. When recalled, he may remove the single torpedo and return, leaving lighted fusee at such intervals as conditions warrant.

509 (F). When an automatic block signal indicates "stop", train, after stopping, may proceed with caution, not exceeding twelve miles per hour, under the following conditions:

(g) On single track, when a preceding train is seen in the block, and the intervening track is seen to be clear.

* * *

In this territory the maximum authorized speed for passenger trains is 60 miles per hour and for freight trains, 40 miles per hour. Special instructions restricted the speed of the freight train involved to 25 miles per hour and the work train to 35 miles per hour.

Description of Accident

First 244, an east-bound second-class freight train, consisting of engine 969, 14 cars and a caboose, departed from Sanderson, 8.4 miles west of Feodora, at 6:15 a. m., 6 hours 10 minutes late, and stopped on the main track between the siding switches at Feodora at 6:40 a. m. About 18 minutes later, after a car had been picked up from the spur track and placed in the train, First 244 was struck by Work Extra 977.

Work Extra 977, an east-bound work extra, consisting of engine 977, 17 ballast cars loaded with slag, and a caboose, departed from Sanderson at 6:45 a. m., passed signal 5046, which displayed proceed-with-caution, passed signal 5038, which displayed stop, and while moving at an estimated speed of 20 miles per hour it struck First 244 at a point 374 feet east of signal 5038.

The caboose and the rear four cars of First 244 were derailed, and were badly damaged. The engine of Work Extra 977 stopped 466 feet east of the point of collision. The engine-truck wheels were derailed, and the front end of the engine was badly damaged.

The weather was clear at the time of the accident, which occurred about 6:58 a. m.

The engineer of Work Extra 977 was killed, and the fireman and the front brakeman were injured.

Discussion

First 244, an east-bound freight train, stopped about 6:40 a. m., on the main track between the siding switches at Feodora. The engineer immediately sounded the engine-whistle signal for the flagman to protect the rear of the train. Then the engine was detached and moved westward on the siding to the spur-track switch. A car was picked up from the spur track and placed in the train immediately ahead of the caboose. About 6:58 a. m., after the engine had proceeded eastward on the siding to the main track and was recoupled to the train, the rear end of First 244 was struck by Work Extra 977.

The flagman of First 244 said that when his train stopped he proceeded westward and placed one torpedo on the rail about 1,200 feet from the rear of his train. Then he continued westward to a point about 4,000 feet from the rear of his train, where he placed two torpedoes on the rail. Soon afterward, he returned to the point where the first torpedo had been placed and, after removing this torpedo, proceeded toward the rear of his train. He was in the vicinity of the west siding-switch when he heard the approaching train. Then he ran westward, placed a torpedo on the rail about 700 feet west of his caboose, and was giving stop signals with a red flag when the engine of Work Extra 977 passed him. The conductor of First 244, who was in the vicinity of the caboose when the accident occurred, and the flagman thougnt the flag protection furnished their train was sufficient.

As Work Extra 977 was approaching signal 5046, located 3,063 feet west of signal 5038, the speed was about 40 miles per hour. The brakes of this train had been tested and had functioned properly en route. Brake-pipe pressure of 80 pounds was being maintained. The enginemen and the front brakeman were maintaining a lookout ahead. The front brakeman, who was on the right side of the engine, said that when the engine was in the vicinity of signal 5046 he called the proceed-with-caution indication displayed by this signal. The fireman said

that he could not see the signal from his location on the left side of the engine, but he heard the front brakeman call the indication, and the engineer indicated to the fireman that he had seen the signal. The front brakeman and the fireman heard two torpedoes explode when the engine was in the immediate vicinity of signal 5046. Then the engineer made a service brake-pipe reduction, which the fireman thought was not released. When the engine was a few hundred feet west of signal 5038 a third torpedo was exploded. Because of the curve to the right the fireman's view of the track ahead was restricted. He first saw the stop indication displayed by signal 5038 and the preceding train when his engine was about 550 feet west of the signal, and he jumped from the left side of the engine. At that time, the front brakeman and the engineer were preparing to jump from the right side of the engine. The front brakeman said that soon after the third torpedo was exploded he saw stop signals being given with a red flag a few hundred feet distant, and he called a warning to the engineer. Then he saw the stop indication displayed by signal 5038 and the preceding train. Immediately afterward the engineer moved the brake valve to emergency position, opened the sander valve, placed the reverse lever in position for backward motion and opened the throttle lever. The speed of Work Extra 977 was about 25 miles per hour when the front brakeman jumped from the engine in the immediate vicinity of signal 5038. The engineer was killed, therefore, it could not be determined why proper action was not taken by him to control the speed of his train in accordance with the indications displayed by the signals involved. The conductor and the flagman were in the caboose. They said that a service brake-pipe reduction was made in the vicinity of signal 5046, and that the brakes were applied in emergency when the caboose was about 900 feet west of signal 5038. The speed was about 40 miles per hour when the service application was made and about 25 miles per hour when the brakes were applied in emergency.

Cause

It is found that this accident was caused by failure properly to control the speed of the following train in accordance with signal indications.

Dated at Washington, D. C., this thirtieth day of September, 1946.

By the Commission, Commissioner Patterson.

W. P. BARTEL,
Secretary.

(SEAL)