Inv-2062

INTERSTATE COMMERCE COMMISSION

WASHINGTON

REPORT OF THE DIRECTOR

BUREAU OF SAFETY

ACCIDENT ON THE

ST. LOUIS, BROWNSVILLE & MEXICO RY.

BROWNSVILLE, TEX.

April 28, 1936

INVESTIGATION NO. 2062

SUMMARY

Railroad:	St. Louis, Brownsville & Mexico		
Date:	April 28, 1936		
Location:	Brownsville, Tex.		
Kind of accident:	Collision		
Trains involved:	Freight	:	Switch engine
Train numbers:	Extra 1024	:	
Engine numbers:	1024	:	9582
Consist:	5 cars, caboose	:	4 cars
Speed:	5-35 m.p.h.	:	Standing
Track:	Main track tangent; spur track curved to right; switch target of high banner type, equipped with reflex indicator; visible for 1,105 feet; switch was left open and unattended; accident occurred within yard limits.		
Weather:	Clear		
Time:	7:55 p.m. (dusk)		
Casualties:	1 killed; 3 injured		
Cause:	Failure to operate under proper control within yard limits		

June 20, 1936

To the Commission:

On April 28, 1936, there was a collision between a freight train and a switch engine on the St. Louis, Brownsville & Mexico Railway, Missouri Pacific Lines, at Brownsville, Tex., which resulted in the death of 1 employee and the injury of 3 employees.

Location and method of operation

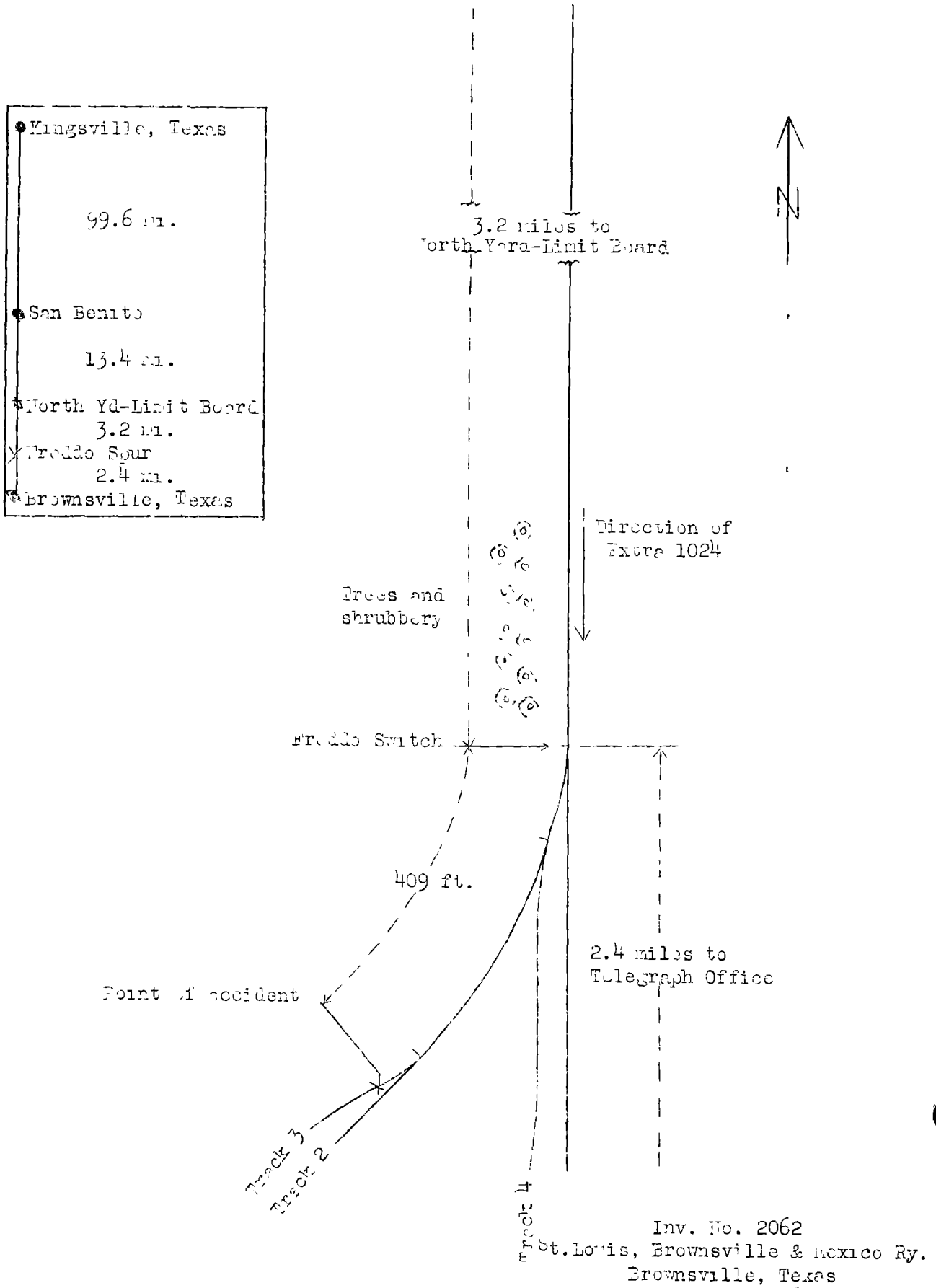
This accident occurred on the Brownsville District of the Kingsville Division, extending between Kingsville and Brownsville, Tex., a distance of 118.6 miles; this is a single-track line over which trains are operated by time table and train orders, no block-signal system being in use. The accident occurred on a spur track within yard limits, at a point about 3.2 miles south of the north yard-limit board; Freddo switch leads off the main track to the west through a No. 10 turnout to three spur tracks, this being a facing-point switch for south-bound trains, and the accident occurred on Freddo track 3 about 409 feet from the main-line switch. Approaching from the north, the main track is tangent for a distance of 7,380 feet to the switch, while the grade at the switch is level.

The switch stand, located on the west side of the main track, is of the ground-throw, high-banner type, equipped with reflex indicators known as the "Reflex Switch Lamp," mounted above the target, the center line of the indicators being 7 feet 6 inches above the head block. The switch target is visible only when the switch is open. Night indications of the reflex indicators are green when the switch is closed and red when it is open, these indications being obtained from the reflection of the headlight of an approaching engine shining upon the reflex indicators.

The weather was clear at the time of the accident, which occurred about 7:55 p.m.

Description

Switch engine 9582, headed north, with four cars coupled behind, was in charge of Engine Foreman Hill and Engineman Wagner. It backed in at the switch leading to Freddo spur and stopped on track 3, the main-line switch being left open and unattended. While standing at this point, arranging to perform switching, it was struck by Extra 1024.



Inv. No. 2062
St. Louis, Brownsville & Mexico Ry.
Brownsville, Texas
April 28, 1936

Extra 1024, a south-bound freight train, consisted of five cars and a caboose, hauled by engine 1024, and was in charge of Conductor Struble and Engineman Broker. This train left San Benito, the last open office, 19 miles north of Brownsville, at 7:25 p.m., according to the train sheet, entered the yard limits at Brownsville at a speed estimated to have been between 40 and 45 miles per hour, and collided with engine 9582 while traveling at a speed variously estimated to have been between 5 and 35 miles per hour.

Engine 9582 was overturned on its right side and practically demolished, while engine 1024 turned over on its left side and was considerably damaged. The first car in Extra 1024 stopped on its side, while the front truck of the second car and the rear truck of the third car were derailed, and the fourth car was damaged. The employee killed was the engineman of engine 9582, while the employees injured were the fireman, conductor, and a brakeman of Extra 1024.

Summary of evidence

Engineman Broker, of Extra 1024, stated that he was operating his train between 40 and 45 miles per hour which was the usual rate of speed within yard limits at this point. Night was falling and he did not see the red indication displayed at the switch until it was only four pole lengths, or about 580 feet, distant; he immediately applied the air brakes in emergency, but his train entered the open switch and he estimated that the speed had been reduced to about 5 or 6 miles per hour when the collision occurred. He had not noticed any reflection from the headlight of the switch engine, and said he did not see that engine until his own engine had practically reached it, due to its being around the curve on the spur and hidden from view by trees and shrubbery along the right-of-way. Engineman Broker said that his own headlight was burning properly, that there was nothing about his engine to obstruct the view of the track ahead, and that the air brakes had been tested and worked properly; he did not think, however, that a reflex indicator on a switch stand could be seen as far as an oil lamp. Engineman Broker was thoroughly familiar with this territory and the location of the north yard-limit board, also with the requirement of rule 93 that he move prepared to stop unless the main track was seen or known to be clear, but said a switch engine seldom was encountered at this point, which was an out-of-the-way place, and he did not think that the switch crew should have left the switch open and unattended, even though it was within yard limits. Engineman Broker gave as his reason for the accident the fact that he could not see the reflex indicator until he was close to the switch.

Fireman Grissom had been blowing out the boiler from the left side of the engine when approaching the switch, although he said that this work did not interfere with the view ahead from either side of the cab, and he was closing the blow-off cock when he glanced ahead and saw the red indication at the switch. He thought that both he and the engineman saw the indication about as soon as it was possible to have seen it, saying that with this type of indicator its brilliancy depends upon the focus of the headlight. He estimated that his engine entered the open switch at a speed of about 25 or 30 miles per hour. The statements of Conductor Struble and three brakemen, all of whom were in the caboose, indicated that they did not know there was anything wrong until the brakes were applied in emergency. The conductor was working at his desk, and judging from the motion of the caboose he thought the speed was 20 or 25 miles per hour.

Fireman Moreman, of engine 9582, stated that his engine had been standing from 4 to 6 minutes when Extra 1024 entered the open switch. He did not see the freight train until its engine was about 250 feet away, at which time he shouted a warning of danger and jumped, and he estimated its speed to have been about 25 miles per hour. Fireman Moreman said that the headlight on the freight engine was lighted, but he was not positive about the headlight on his own engine, although he thought that it was burning. Fireman Moreman agreed with the statements of other witnesses that the reflex indicators do not give quite as brilliant light as an oil lamp, and said that their brilliancy depends upon headlight conditions.

Engine Foreman Hill, of switch engine 9582, stated that Yardmaster Roy instructed him to take some cars to Freddo spur, and on inquiring as to when the freight train was due, the yardmaster told him it would arrive about 8:30 p.m. The engine and cars then proceeded northward to Freddo spur and backed in, the switch being left open and unattended. After receiving instructions concerning work to be done, the engine foreman returned to the engine, and at this time Switchman Mitchell told him that he had heard a whistle sounded by the approaching freight train; consequently the engine foreman instructed him to go to the switch and close it and let the freight train pass; the switchman started running toward the switch, but had not gone very far before the freight train entered the switch and collided with the switch engine. Engine Foreman Hill said that the front headlight on the switch engine was burning when the accident occurred, and he also said that had he thought the freight train would arrive ahead of the line-up he obtained on it, he would have left a switchman to attend the switch and let the freight train pass without delay.

Yardmaster Roy stated that he told the switch crew there was a hurry-up job to perform, and to take one iced refrigerator car and three empties to Freddo spur, set out the three empties on track 3 and the iced car on track 2, and then pick up an express car from track 4 and get it back to Brownsville in time to re-ice it for Train No. 16, which is due to leave Brownsville at 9 p.m. The switch crew inquired about the freight extra and he informed them that Freddo spur switch was within yard limits and that the freight train was due to arrive at Brownsville about 8:30 p.m., and to look out for that train coming around the curve and to look out for it afterwards, whereupon the switch engine picked up the cars and departed northward about 7:30 or 7:31 p.m. He said that it was customary to obtain a line-up each night from the dispatcher before the switch engine started out and that he had never instructed switch crews to keep Freddo spur switch closed; whenever he accompanied the engine to the spur, however, he always left a switchman on track 4, paralleling the main track, as a matter of extra precaution, so that any approaching south-bound train could be seen, and also because it would be easier to pass signals around the curve of the spur. Under the rules, protection is not required, but switch crews are instructed to look out and give a man a chance. He said that he had been yardmaster at Brownsville for 24 years and that during that time there had never before been a collision between a yard engine and a road train within the yard limits, nor any condition similar to this where trains have headed in at Freddo spur.

Trainmaster Patrick stated that the purpose of locating the north yard-limit board at a point 5.6 miles north of Brownsville telegraph office is to protect yard engines while switching industrial tracks, and that the board had been at its present location for at least 24 years. At present two passenger trains and two freight trains per day are operated in each direction and he did not think that it was necessary to provide any additional protection.

Tests were made under conditions similar to those that obtained at the time of the accident, with an engine of the same type as engine 1024, to determine the distance that the headlight would illuminate the indications displayed by the reflex indicators at the switch, and also the switch target; the green indication was dimly visible with this particular headlight at a distance of 1,818 feet and plainly visible at a distance of 1,699 feet, while at a point 1,312 feet distant the red indication was dimly visible and at 1,105 feet it was plainly visible. At a distance of 699 feet the red target was dimly visible and at 616 feet it was plainly visible.

Discussion

Rule 93 of the operating rules of this railway provides that within yard limits the main track may be used, protecting against first-class trains; second and inferior class and extra trains must move prepared to stop unless the main track is seen or known to be clear. Notwithstanding the requirements of the rule, however, the evidence shows that Extra 1024 was well inside of the yard limits and was moving at a speed of 40 or 45 miles per hour when the engine crew observed the red indication at the switch, which at that time was not more than 600 feet distant; the enginemen at once applied the air brakes in emergency but it was too late to avert the accident. This enginemen was familiar with the territory and rules, and was aware of his location, but he thought the accident was due to the fact that he could not see the reflex indicator until he was too close to the switch The conductor was working at his desk and did not know that the train was being operated at a high rate of speed within yard limits, while none of the brakemen called his attention to the fact that the speed of the train was excessive.

Conclusion

This accident was caused by the failure of Extra 1024 to be operated under proper control within yard limits.

Respectfully submitted,

W. J. PATTERSON,

Director.