Inv-2233

INTERSTATE COMMERCE COMMISSION

WASHINGTON

REPORT OF THE DIRECTOR

BUREAU OF SAFETY

ACCIDENT ON THE

SEABOARD AIR LINE RAILWAY

ARCADIA, FLA.

DECEMBER 7, 1937.

INVESTIGATION NO. 2233

SUMMARY

Inv-2233

Railroad:	Seaboard Air Line	
Date:	December 7, 1937.	
Location:	Arcadia, Fla.	
Kind of accident:	Rear-end collision	
Trains involved:	Freight	:freight
Train numbers:	Extra 540	:Extra 930
Engine numbers:	540	:930
Consist:	50 loaded cars, caboose	:34 loaded cars, :caboose
Speed:	Standing	:10-15 m.p.h.
Track:	3° curve to the right; .02 descending grade	
Weather:	Clear	
Time:	12:50 a.m.	
Casualties:	2 killed	
Cause:	Failure of Extra 930 to approach and enter yard limits under proper control; possibly due to some mental disorder of the engineman operating the locomotive of that train.	

To the Commission:

On December 7, 1937, there was a rear-end collision between two freight trains on the Seaboard Air Line Railway, at Arcadia, Fla., which resulted in the death of two employees.

Location and method of operation

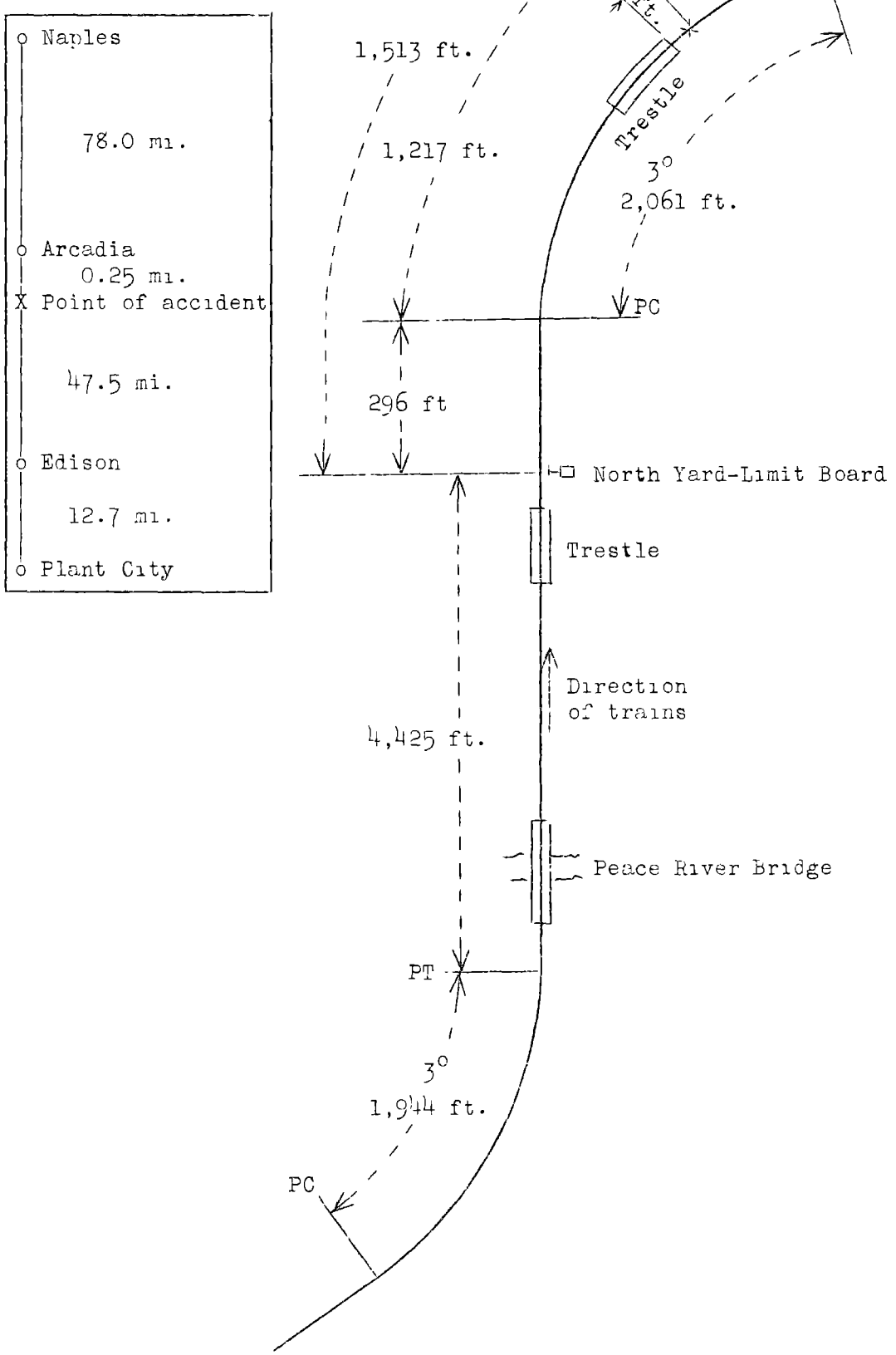
This accident occurred on the Fort Myers Subdivision of the South Florida Division which extends between Plant City and Naples, Fla., a distance of 138.6 miles. This is a single-track line over which trains are operated by timetable and train orders, no block-signal system being in use. The point of collision is on the main track within yard limits, 1,513 feet south of the north yard limit board. Approaching this point from the north there is a 3° curve to the left 1,944 feet long, followed by tangent track for a distance of 4,425 feet and then a 3° curve to the right which extends 1,217 feet to the point of accident and 844 feet beyond. The grade is .02 percent descending for south-bound trains for over a mile to the point of accident. The country in this vicinity is low and swampy and the track is laid on a fill averaging about 12 feet in height for a considerable distance. The Peace River bridge and two short trestles are located within a mile north of the point of accident, and the southernmost of these trestles is 334 feet long, its south end being 51 feet north of the point of accident. Forest growth and curvature limit the view from the engine of a south-bound train to about 1,000 feet. The maximum authorized speed for freight trains is 25 miles per hour.

The weather was clear at the time of accident which occurred about 12:50 a.m.

Description

Extra 540, a south-bound freight train, consisted of 50 loaded freight cars and a caboose, hauled by engine 540, and was in charge of Conductor Finlayson and Engineman Bear. This train left Edison, its initial station on this subdivision, at 7:11 p.m., December sixth, and about 12:30 a.m., December seventh, arrived at Arcadia where it stopped with the rear end within yard limits. After standing at this point for about 20 minutes the rear end was struck by Extra 930.

Extra 930, a south-bound freight train, consisted of 34 loaded freight cars and a caboose, and was in charge of Conductor



Inv No. 2233
Seaboard Air Line Ry
Arcadia, Florida
Dec 7, 1937

Lowe and Engineman Lyons. This train left Edison at 10 p.m. December sixth, and while approaching Arcadia at a speed estimated at from 10 to 15 miles per hour it collided with the rear end of Extra 540.

Engine 930 partly telescoped the caboose of Extra 540, and the caboose, engine and tender turned over to the east of the track and lay on their left sides about 12 or 14 feet from the track and parallel to it. The first car in Extra 930 stopped on its left side to the east of, and at about right angles to, the track. The forward truck of the second car was derailed. The employees killed were the engineman and fireman of Extra 930.

Summary of evidence

Engineman Bear, of Extra 540, stated that his train consisted of 50 loaded phosphate cars and a caboose, and that it arrived at Arcadia at 12:30 a.m. The engine was cut off for the purpose of taking coal and water and was recoupled to the train at about 12:50 a.m. A few seconds afterward he felt a slight surge of the train forward which led him to believe that the rear end of the train has been struck by a following train. When it was discovered that the brake pipe pressure could not be raised, the conductor and brakemen, who were all in the vicinity of the engine, went to the rear and found that Extra 930 had collided with their train. He further stated visibility was good, and that the brakes on the cars used in the phosphate service were usually in good condition.

Conductor Finlayson, of Extra 540, stated that his train arrived at Arcadia at 12:30 a.m. and stopped well within yard limits. He and the flagman started forward to inspect the train, but before leaving the rear end he noted that both markers were burning brightly and that there was a lantern hanging on the rear of the caboose. He and the flagman were at the head end of the train when the engine was recoupled to it at about 12:50 a.m., and when it was found impossible to recharge the brake pipe they realized that something had happened to the rear end of the train. He further stated that no air brake test had been made on his train when it was picked up but the brakes operated satisfactorily en route.

The statement of Flagman Duke, of Extra 540, corroborated that of Conductor Finlayson. He, too, was certain that the markers were burning when he and the conductor started toward the head end at Arcadia, and he called the attention of the conductor to this fact. Although he had seen no message to that effect he knew that Extra 930 was following them as he was able to see the reflection of the headlight of the engine of that

train. He further stated that trains within yard limits are not required to flag following trains, and trains moving into yard limits are required to be prepared to stop within one-half the range of vision.

Conductor Lowe, of Extra 930, stated that his train consisted of 34 loaded cars and a caboose, and that an air brake test made before leaving Bradley had shown that all brakes were operative. During the entire trip to Arcadia the weather was clear and visibility was good. As his train approached Arcadia he was in the caboose and noticed a service application of the brakes. At that time the speed of the train was 20 to 25 miles per hour but this speed was reduced materially by the brake application. Two or three minutes later he felt a shock which he ascribed to either the collision or an emergency application of the brakes. He was unable to say whether the brakes had been released in the meantime. At the last stop prior to arrival at Arcadia he had talked to Engineman Lyons and had told him that the other extra was ahead of them; at that time the engineman seemed to be in normal condition. The speed limit of 25 miles per hour was not exceeded at any time en route. At Arcadia their caboose was within yard limits when the collision occurred.

Brakeman Scott, of Extra 930, stated that he assisted in testing the air brakes when his train was made up and all the brakes he examined were operating. Between 2 and 3 miles north of Arcadia he mentioned to Engineman Lyons that Extra 540 would probably be at Arcadia. Approaching Arcadia he was on the fireman's seatbox and he noted that the engineman made a service application of the brake when they were near the Peace River bridge, but he was unable to say whether the brakes were released subsequently. In a short time the engineman called out that the markers were in sight; he then crossed over to the right gangway and saw that the rear end was 10 or 15 car lengths distant. After a few seconds he jumped from the gangway on the right side and landed alongside of the trestle; he did not fall when he landed although the drop was about 10 feet. Just before he jumped he saw that the hand of the engineman was on the brake valve handle, but he did not know whether any application of the brake was made before the collision. During the trip Engineman Lyons seemed to be in normal condition but after calling the warning at the time he saw the marker lights the engineman appeared to be highly excited. At no time during the trip was the speed in excess of 25 miles per hour, and at the time he jumped from the engine it was not more than 10 or 15 miles per hour.

Road Foreman of Engines Campbell stated that he made an examination of engine 930 at the scene of the accident while it was still in the position in which it stopped. He found both

the automatic and the independent brake valves in running position and the cutout cock open. The valve gear was in forward motion, and the throttle in drifting position.

Master Mechanic Quarles confirmed the statement of Road Foreman of Engines Campbell with regard to the position of the various operating devices. He supervised an air brake test of the train of Extra 930 after the accident and all brakes were operative and had proper piston travel and cleaning dates. Due to switching made necessary in clearing the main track for traffic, the position of some of the cars in the train had been changed before the air brake test was made.

Assistant Trainmaster Lineberger stated that he considered Engineman Lyons a very good engineman, and that he had never found it necessary to caution him for exceeding speed limits or for violating other rules. After the accident he made visibility tests and determined that a rear end standing at the point of accident could be seen for about 900 feet from the engineman's side of a south-bound train.

Discussion

The evidence is to the effect that Extra 540 had been standing with the caboose 1,513 feet inside the yard limits for about 20 minutes when it was struck by Extra 930. Rule 93 in part, reads as follows:

> "All trains will approach and move between yard limit boards under control with the ability to stop within one-half the range of vision, unless the track is seen or known to be clear. When the view is obstructed additional precaution must be taken.
>
> Within yard limits the main track may be used without protecting against second class and inferior trains."

The engineman of Extra 930 was informed that Extra 540 would probably be at Arcadia. At a point about three-fourths of a mile north of the north yard-limit board at that place he was operating his train at a speed of about 25 miles per hour and made a service application of the train brakes which materially reduced the rate of speed. The engineman and the fireman of Extra 930 were killed in the accident, and the head brakeman, who was the only other occupant of the cab of engine 930 as the train approached the scene of the accident, was unable to give any information regarding the manipulation of the brake valve subsequent to the

above-mentioned service application. After the accident both the automatic and the independent brake valves on engine 930 were found in running position which indicated that the brakes had been released following the service application made approaching the scene of the accident, and it also indicated that the engineman made no effort to stop his train after the markers of the preceding train came into his range of vision. The reason for this failure could not be determined, but the head brakeman, who jumped from the engine when it was between 10 and 15 car lengths from the rear end of Extra 540, stated that after the markers came into view the engineman seemed highly excited. The fact that the brakeman did not fall when he landed on the ground after jumping about 10 feet from the deck of the engine, and the further fact that he was practically unhurt after the jump indicates that the speed of Extra 930 was low at the time of the collision. An air brake test was made on Extra 930 when it was made up, and the air brakes operated satisfactorily en route; furthermore, after the accident a test of the air brakes on the cars of that train was made and they were found to be in good operating condition.

Conclusion

This accident was caused by failure properly to control the speed of an extra train entering yard limits, possibly due to some mental disorder of the engineman operating the locomotive of that train.

Respectfully submitted,

W. J. PATTERSON,

Director.