

INTERSTATE COMMERCE COMMISSION

WASHINGTON

REPORT NO. 3735

SEABOARD AIR LINE RAILROAD COMPANY

IN RE ACCIDENT

NEAR DELTA, S. C., ON

JANUARY 2, 1957

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SUMMARY

Date: January 2, 1957

Railroad: Seaboard Air Line

Location: Delta, S. C.

Kind of accident: Rear-end collision

Equipment involved: Track motor-car : Freight train
with trailer

Train number: : Extra 1799 East

Locomotive number: : Diesel-electric
units 1799 and
1813

Consist: : Caboose

Estimated speeds: Undetermined : 10-15 m. p. h.

Operation: Timetable, train orders, and automatic
block-signal system

Track: Single; tangent; vertical curve

Weather: Clear

Time: 9:50 a. m.

Casualties: 1 killed; 8 injured

Cause: Failure to provide protection for
movement of track motor-car

INTERSTATE COMMERCE COMMISSION

REPORT NO. 3735

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

SEABOARD AIR LINE RAILROAD COMPANY

March 20, 1957

Accident near Delta, S. C., on January 2, 1957, caused by
failure to provide protection for the movement of a
track motor-car.

REPORT OF THE COMMISSION¹

MURPHY, Commissioner:

On January 2, 1957, there was a rear-end collision
between a track motor-car with trailer and a freight train
on the Seaboard Air Line Railroad near Delta, S. C., which
resulted in the death of one maintenance-of-way employee,
and the injury of eight maintenance-of-way employees.

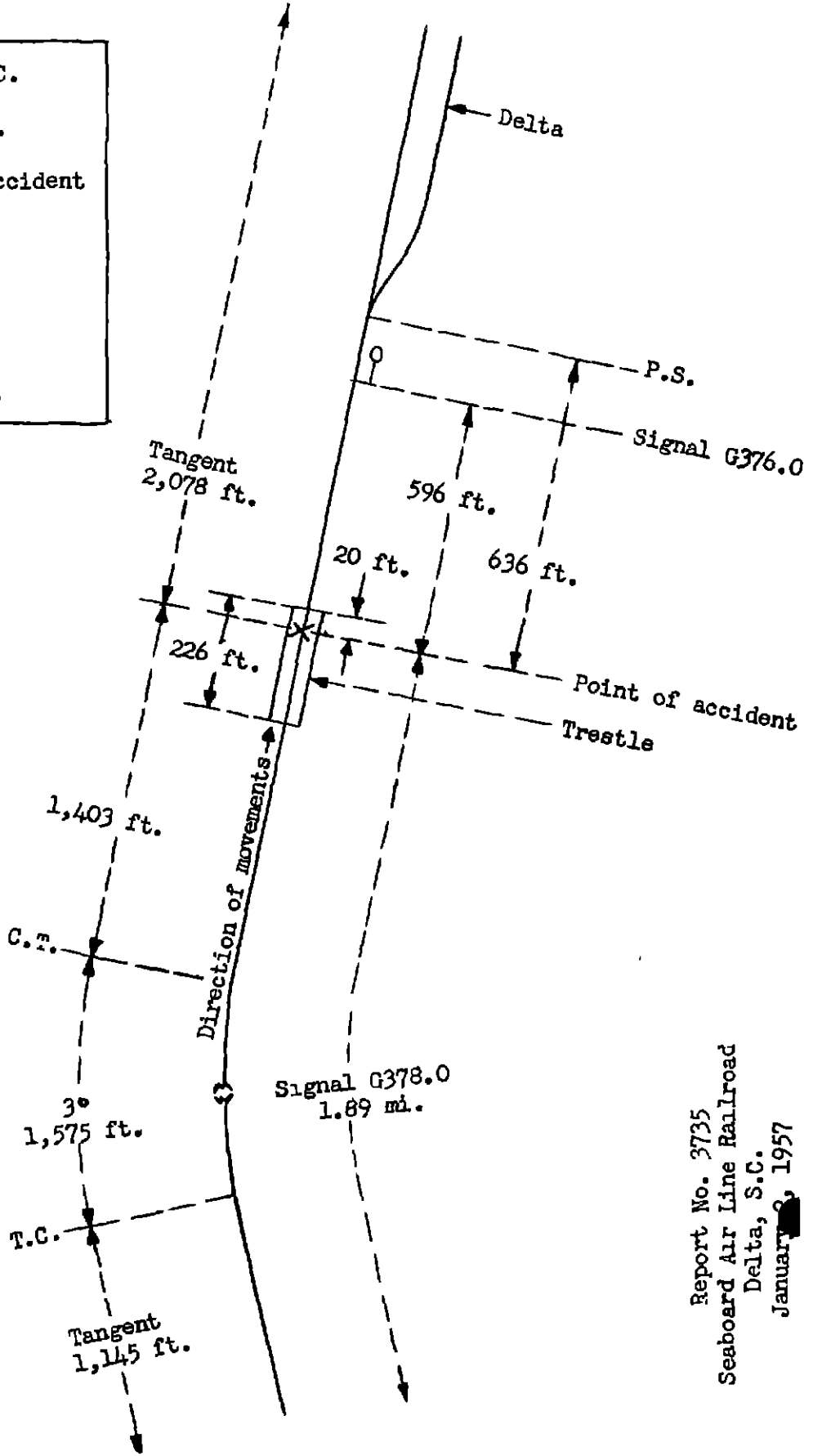
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Under authority of section 17 (2) of the Interstate Commerce
Act the above-entitled proceeding was referred by the Commis-
sion to Commissioner Murphy for consideration and disposition.

To Monroe ↑

↓ To Shops

- Monroe, N.C. 69.4 mi.
- Delta, S.C. 0.6 mi.
- X Point of accident 3.7 mi.
- Whitmire 45.1 mi.
- Greenwood 15.0 mi.
- Abbeville 0.7 mi.
- Shops, S.C.



Report No. 3735
 Seaboard Air Line Railroad
 Delta, S.C.
 January 2, 1957

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Location of Accident and Method of Operation

This accident occurred on that part of the Georgia Division extending between Shops, near Abbeville, S. C., and Monroe, N. C., 134.5 miles. In the vicinity of the point of accident this is a single-track line over which trains are operated by timetable, train orders, and an automatic block-signal system. At Delta, S. C., 65.1 miles east of Shops, a siding parallels the main track on the south. The accident occurred on the main track at a point 636 feet west of the west siding-switch at Delta and 20 feet west of the east end of a ballast-deck trestle 226 feet in length. From the west there are, in succession, a tangent 1,145 feet in length, a 3° curve to the right 1,575 feet, and a tangent 1,403 feet to the point of accident and 2,078 feet eastward. From the west the grade is, successively, 1.00 percent descending 1,500 feet, 1.20 percent descending 1,550 feet, a vertical curve 250 feet to the point of accident and 350 feet eastward, and 1.20 percent ascending 1,350 feet.

Automatic signals G378.0 and G376.0, governing east-bound movements, are located, respectively, 1.89 miles west and 596 feet east of the point of accident. The signals in the vicinity of the point of accident are of the color-light type, and signal G376.0 is continuously lighted.

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

99. Except as otherwise provided, when a train is moving under circumstances in which it may be overtaken by another train, the flagman must take such action as may be necessary to insure full protection; * * *

Except as otherwise provided, 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 full protection * * *

Rules for the operation of track motor-cars read in part as follows:

753. When occupying main track with motor or push car, flag protection will be afforded in both directions in accordance with Rule 99, unless motor car is moving under authority of written line-up. * * *

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754. A line-up of trains will be transmitted by the dispatcher at three specified times during the day and forces will be instructed accordingly. These line-ups will include all scheduled trains and, if late, the location of the train at the time the line-up is given. Also, such line-up will include the location of extra trains then en route and point from which and time at which extras will be dispatched within one (1) hour from the time line-up is given. * * *

For one (1) hour immediately following the transmittal, such line-up may be used for the operation of track motor cars on main track without flag protection but they must clear by five (5) minutes trains shown on line-up due within the hour.

Additional line-ups may be secured * * * when needed. These additional line-ups will either be authority to operate motor cars for stated period of time between designated points without flag protection, or the dispatcher will give the location of all trains to enable the motor car operator to figure just what time he can have the use of the main track for a motor car movement without flag protection, * * *

The maximum authorized speeds in the vicinity of the point of accident are 50 miles per hour for freight trains and 30 miles per hour for track motor-cars.

Description of Accident

About 8:05 a. m. a track motor-car and trailer occupied by a maintenance-of-way foreman and eight trackmen departed east-bound from Whitmire, S. C., 4.3 miles west of Delta. After stopping at several points en route this force departed east-bound from a point 2,831 feet west of the west siding-switch at Delta. The track motor-car was occupied by the foreman and five trackmen, and the trailer was occupied by three trackmen. Several minutes later, while the track motor-car was moving at an undetermined rate of speed, the trailer was struck by Extra 1799 East. The accident occurred 636 feet west of the west siding-switch at Delta.

Extra 1799 East, an east-bound freight train, consisted of Diesel-electric units 1799 and 1813, coupled in multiple-unit control, and a caboose. This train departed from Whitmire, the last open office, at 9:40 a. m., passed signal G378.0, which indicated Proceed, and while moving at an estimated speed of from 10 to 15 miles per hour it struck the track motor-car and trailer.

The track motor-car and trailer, which were not derailed, were slightly damaged. Extra 1799 East stopped with the front of the locomotive about 850 feet east of the point of collision. No equipment of the train was derailed or damaged.

One of the trackmen who was on the track motor-car was killed. The foreman and seven trackmen were injured.

The weather was clear at the time of the accident, which occurred about 9:50 a. m.

During the 30-day period preceding the day of the accident the average daily movement in the vicinity of the point of accident was 12.27 trains.

The track motor-car was of the belt-drive type, was powered by a 1-cylinder 8 to 13 horsepower engine, and was equipped with four-wheel brakes. It was provided with safety railings at each end. It weighed approximately 1,050 pounds and had seating capacity for eight persons. The trailer was constructed with a flat wooden deck and weighed approximately 700 pounds. Track motor-cars cannot be depended upon to shunt the track circuits of an automatic block-signal system, and the car and trailer involved were insulated so that they would not shunt a track circuit at any time.

Discussion

On the day of the accident the maintenance-of-way foreman obtained a copy of a line-up which the operator at Whitmire had received from the train dispatcher at 7:54 a. m. and which read in part as follows:

7:50 A. M. Line-up - Abbeville Sub-Division:
 Extra 1799 East Local left Greenwood 7:28 A. M.
 * * *
 Regular trains on time.
 * * *

Greenwood is 45.1 miles west of Whitmire. After leaving the station the foreman read the line-up to the trackmen. These employees then proceeded eastward on the track motor-car and trailer. They stopped at several points between Whitmire and Delta and completed their work between these stations at a point 2,831 feet west of the west siding-switch at Delta. The foreman then instructed the other members of the force that the track motor-car and trailer were to be placed on the siding at Delta. After the track motor-car entered the tangent on which the accident occurred the employees on the trailer saw Extra 1799 East approaching. They called a warning, and the trackman who was operating the track motor-car

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applied the brakes. The foreman instructed the trackman not to stop but to increase the speed and stay ahead of the train. The trackman then released the brakes and opened the throttle. The track motor-car was overtaken by the train at a point 636 feet west of the west siding-switch.

As Extra 1799 East was approaching the point where the accident occurred the enginemen and the front brakeman were maintaining a lookout ahead from the control compartment of the first Diesel-electric unit. The conductor and the flagman were in the caboose. The headlight was lighted brightly. The brakes of the train had been tested and had functioned properly when used en route. Because of vegetation adjacent to the track on the curve immediately west of the point of accident, the view of a preceding track motor-car from an east-bound locomotive is considerably restricted. The engineer said that when the locomotive reached a point about 3,000 feet west of the point of accident he saw the track motor-car ahead at a distance which he thought was about 1,200 feet. When he saw the car he immediately made an emergency application of the brakes, applied the independent brake, and sounded a series of warning blasts on the horn. He said that at this time the speed of the train was about 50 miles per hour. The members of the crew on the locomotive estimated that the speed had been reduced to 10 or 15 miles per hour when the collision occurred.

The rules of this carrier provide that a track motor-car must not occupy the main track without flag protection unless the operator of the car has received a current line-up. During a period of 1 hour immediately following the transmittal of a line-up a track motor-car may be operated on the main track without flag protection provided the times of trains shown on the line-up are cleared by 5 minutes. A table is provided in the timetable showing the running times of trains for various distances at various maximum authorized speeds. In the instant case the line-up held by the maintenance-of-way foreman was issued approximately 2 hours before the accident occurred, but flag protection for the movement of the track motor-car was not provided. The foreman understood that the line-up could not be used after a period of 1 hour from the time it was issued. He said he expected that Extra 1799 East would not leave Whitmore until some time between 10:30 a. m. and 12 noon, the usual leaving time, and he thought the movement to Delta ahead of the train could be made with safety. The dispatcher's telephone had been inoperative at the time the foreman departed from Whitmore, and the foreman did not attempt to communicate with the dispatcher by use of a portable telephone with which the track motor-car was equipped. The accident occurred on the day following

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a holiday, and the crew of Extra 1799 East performed less switching service than usual between Shops and Delta.

During the past 10 years the Commission has investigated 69 collisions, including the present case, in which track motor-cars were involved. These accidents resulted in the death of 93 persons and the injury of 202 persons.

Cause

This accident was caused by failure to provide protection for the movement of a track motor-car.

Dated at Washington, D. C., this twentieth day of March, 1957.

By the Commission, Commissioner Murphy.

(SEAL)

HAROLD D. McCOY,

Secretary.