INTERSTATE COMMERCE COMMISSION WASHINGTON

INVESTIGATION NO. 3214

SEABOARD AIR LINE RAILROAD COMPANY

REPORT IN RE ACCIDENT

AT EDISON, GA., ON

OCTOBER 31, 1948

SUMMARY

Railroad: Seabcard Air Line

Date: October 31, 1948

Location: Edison, Ga.

Kind of accident: Head-end collision

Trains involved: Freight : Passenger

Train numbers: Extra 538 East : 17

Engine numbers: 538 : 654

Consists: Auxiliary water : 2 cars

car, 35 cars, caboose

Caboos

Estimated speed: Standing : 30 m. p. h.

Operation: Timetable and train orders

Track: Single; 0°30' curve; 0.41 percent

ascending grade eastward

Weather: Clear

Time: 7 p. m.

Casualties: 2 killed; 12 injured

Cause: Copies of a meet order held by the

crews of trains affected not reading

alike

Recommendation: That the Seaboard Air Line Railroad Company install an adequate block system on the line on which this

accident occurred

INTERSTATE COMMERCE COMMISSION

INVESTIGATION NO. 3214

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

SEABOARD AIR LINE RAILROAD COMPANY

January 19, 1949

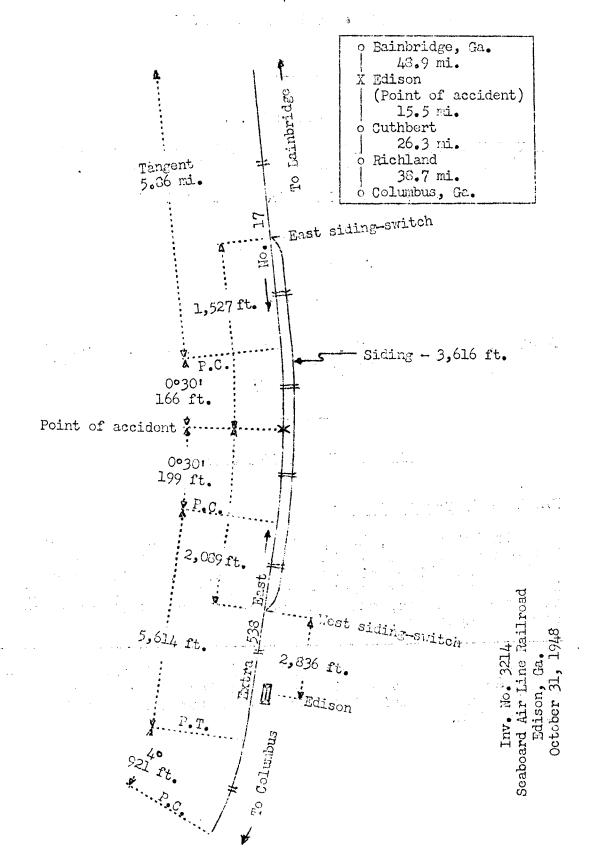
Accident at Edison, Ga., on October 31, 1948, caused by copies of a meet order held by the crews of trains affected not reading alike.

REPORT OF THE COMMISSION

PATTERSON, Commissioner:

On October 31, 1948, there was a head-end collision between a passenger train and a freight train on the Seaboard Air Line Railroad at Edison, Ga., which resulted in the death of two train-service employees, and the injury of six passengers, one express-messenger and five train-service employees.

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.



Location of Accident and Method of Coeration

This accident occurred on that part of the Alabama Division extending between Columbus and Bainbridge, Ga., 129.4 miles, a single-track line, over which trains are operated by timetable and train orders, and a manual-block system for only following first-class trains and trains carrying passengers. At Edison, 80.5 miles east of Columbus, a siding 3,616 feet in length parallels the main track on the south. The west switch of this siding is 2,836 feet east of the station. The accident occurred on the main track at a point 2,089 feet east of the west siding-switch. From the west there are, in succession, a 4° curve to the left 921 feet in length, a tangent 5,614 feet and a 0°30' curve to the left 199 feet to the point of accident and 166 feet eastward. From the east the track is tangent 5.86 miles to the curve on which the accident occurred. At the point of accident the grade is 0.41 percent ascending eastward.

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

71. A train is superior to another train by right, class or direction.

Right is conferred by train order; class and direction by time-table.

Right is superior to class or direction.

* * *

- 73. Extra trains are inferior to regular trains.
- 202. Each train order must be given in the same words to all employes or trains addressed.
 - 205. Each train order must be written in full in a book provided for the purpose at the office of the Superintendent, and with it recorded the names of those who have signed for the order; the time and the signals which show when and from what offices the order was repeated and the responses transmitted; and the train dispatcher's initials. These records must be made at once, and never from memory or memoranda.

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When train orders are transmitted by telegraph, the train dispatcher must underscore each word and figure in the body of the order at the time it is repeated. When transmitted by telephone, he must write the order as he transmits it and underscore as prescribed above.

208. A train order to be sent to two or more offices must be transmitted simultaneously to as many of them as practicable. * * * *

The several addresses must be in the order of superiority of trains, each office taking its proper address, * * *

* * *

- 209. Operators receiving train orders must write or typewrite them in manifold during transmission. * *
- 211. When a "19" train order has been transmitted, operators must (unless otherwise directed) repeat it at once from the manifold copy, in the succession in which the several offices have been addressed. Each operator receiving the order must observe whether the others repeat correctly. * * *

FORMS

OF

TRAIN ORDERS.

NOTE: Forms of train orders prefixed by letter "S", in addition to the symbol, apply only to single track,

分 分 茶

Form S-A. Fixing Meeting Points for Opposing trains.

EXAMPLES.

(1) * * *

* * *

"No. 5, Eng. 224, meet Extra 95, North at

* * *

* * *

In fixing meeting points for opposing trains and it is desired that the superior train (by Right or Class or Direction) take siding, the following may be added:

Under example (1) "No. 5 take siding."

Trains receiving these orders will run with respect to each other to the designated points and there meet in the manner prescribed by the rules.

TRAIN DISPATCHERS.

792. They must use care in transmitting orders, and must not transmit an order faster than the receiving operator can take and plainly write it. They will carefully note operators repeating orders to observe that they are correctly repeated.

In this territory the maximum authorized speed is 40 miles per hour for passenger trains and 35 miles per hour for freight trains.

Description of Accident

Extra 538 East, an east-bound freight train, consisted of engine 538, an auxiliary water car, 35 cars and a caboose. At Richland, 41.8 miles west of Edison, the crew of this train received copies of train order No. 99, reading as follows:

No 17 Eng 654 meet Extra 538 East at Edison No 17 take Siding

This train departed from Richland at 5:40 p. m., passed Cuthbert, the last open office, 15.5 miles west of Edison, at 6:28 p. m., and stopped on the main track at a point 1,527 feet west of the east siding-switch at Edison. Immediately afterward it was struck by No. 17.

At Bainbridge, 48.9 miles east of Edison, the crew of No. 17, a west-bound first-class passenger train, received copies of train order No. 99, reading as follows:

No 17 Eng 654 Meet Extra 558 East

This train consisted of engine 654, one combination motor-mail-baggage car with the motor not in operation, and one ceach, in the order named. The coach was of all-steel

construction. No. 17 departed from Bainbridge, the last open office, at 5:35 p. m., 50 minutes late, passed the east siding-switch at Edison, and while moving at an estimated speed of 30 miles per hour it struck Extra 538 East.

The engine of each train, the water car and the second car of Extra 538 East were derailed. The engine and the water car of Extra 538 East were considerably damaged, the second car was destroyed, and the first, third and fourth cars were slightly damaged. The engine and the first car of No. 17 were considerably damaged.

The engineer and the fireman of No. 17 were killed. The conductor and the flagman of No. 17, and the engineer, the fireman and the front brakeman of Extra 538 East were injured.

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

During the 30-day period preceding the day of the accident, the average daily movement in this territory was 11.5 trains.

Discussion

The rules governing operation on this line require that train orders be sent in the same words to all employees or trains addressed. When the telephone is being used for transmitting train orders, the dispatcher is required to write them in full during transmission in a book provided for the purpose. Operators receiving an order must write it in manifold during transmission on the prescribed form and then repeat it to the dispatcher, who must underscore in his train-order book each word and figure in the body of the order during each repetition. The time and signals which show when and from what offices the order was repeated, the responses transmitted, and the train dispatcher's initials must be recorded. These records must be made at once, and never from memory or memoranda.

The crew of Extra 538 East received copies of train order No. 99 at Richland at 5:34 p. m., departed from that station at 5:40 p. m., and passed Cuthbert, the last open office, at 6:28 p. m. As this train was approaching Edison the speed was about 10 miles per hour. The headlight was lighted brightly. The enginemen and the front brakeman were

on the engine and were maintaining a lookout ahead. The conductor and the flagman were in the caboose. The members of the crew understood from their copy of train order No. 99 that their train was to meet No. 17 at Edison and that No. 17 would enter the siding at that point at the east siding-switch. The engineer said that when his train was about 2,000 feet west of the east siding-switch he observed the reflection of an approaching headlight. As his view ahead from the right side of the engine was restricted to about 1.200 feet because of track curvature, he could not immediately determine if it was the headlight of a train or of an automobile on an adjacent highway. He made a service brake application, then he crossed over to the left side of the cab and immediately recognized the headlight as that of an approaching train, which then was in the vicinity of the east siding-switch. He observed that it was moving at a speed too high to be stopped short of a collision. He called a warning to the front brakeman and the fireman, and placed the brake valve in emergency position. His train stopped before the collision occurred. He estimated that the speed of No. 17 was about 30 miles per hour at the time of the collision.

The crew of No. 17 received copies of train order No. 99 at Bainbridge 1 hour 44 minutes prior to the time the accident occurred. The surviving members of the crew understood that their train was to meet Extra 538 East at Edison, and that their train, which was superior by class, would hold the main track at the meeting point. As No. 17 approached Edison the speed of the train was about 30 miles per hour. The engineer and the fireman were in the cab of the engine. The headlight was lighted brightly. The brakes of this train had been tested and had functioned properly when used en route. It could not be determined when the engineer and the fireman became aware that the opposing train was occupying the main track, as both were killed. The conductor, who was riding in the coach, said he thought there was no brake application made immediately prior to the time of the accident.

Immediately after the accident occurred, it was discovered that copies of the train order held by the crew of Extra 538 East required No. 17 to take the siding at Edison, but the copies bearing the same number held by the crew of No. 17 did not include the instruction for No. 17 to take siding. This train order was transmitted by telephone simultaneously to Bainbridge and to Richland. The order was repeated first by the operator at Bainbridge and immediately afterward by the operator at Richland, and was made complete

to both offices at 5:15 p. m. On that day the office at Edison was closed. During both the transmission and the repetition, the reception was good, and the dispatcher and each operator was heard clearly and distinctly. The train order was written in the dispatcher's train-order book in full and contained the instruction that No. 17 take siding. It was underscored by the dispatcher as each operator repeated the order after transmission. After the accident, the dispatcher first called the operator at Richland, who repeated the order from the file copy, and it was identical with the order as written in the dispatcher's train-order book. Immediately afterward he called the operator at Bainbridge, who repeated the order from the file copy at that station, but this copy did not contain the instruction that No. 17 take siding. The dispatcher and the operator at Richland each said that the order in question contained the instruction that No. 17 take siding, and was so repeated by each of the operators. The operator at Bainbridge said that when the order was transmitted it did not include the instruction that No. 17 take siding and that she repeated it in the same words in which it was transmitted. She said that she did not fall behind during the transmission, in writing the train order, and that she did not report the order to the dispatcher before she had written all of it on the form. She could not remember hearing the repetition made by the operator at Richland. The conductor of No. 17 was in the office at Bainbridge and heard the repetition of the order by the operator at that station. He said that the operator did not include during the repetition the instruction that No. 17 take siding.

As a result of the omission on the copies of the order delivered to the crew of No. 17 for that train to take siding at the meeting point, a lap of authority existed for the trains in question, as both had authority to hold the main track between the siding switches at Edison.

The book of operating rules of this carrier contains manual-block rules, which provide for blocking of opposing movements, but these rules were not in effect in the territory where the accident occurred. If an adequate block system had been in use in this territory, these opposing trains would not have been permitted to occupy the same block simultaneously, and this accident would have been averted.

Cause

It is found that this accident was caused by copies of a meet order held by the crews of trains affected not reading alike.

Recommendation

It is recommended that the Scaboard Air Line Railroad Company install an adequate block system on the line on which this accident occurred.

Dated at Washington, D. C., this nineteenth day of January, 1949.

By the Commission, Commissioner Patterson.

(SEAL)

W. P. BARTEL,

Secretary.