INTERSTATE COMMERCE COMMISSION

WASHINGTON

INVESTIGATION NO. 2669

THE ATLANTIC COAST LINE RAILROAD COMPANY

REPORT IN RE ACCIDENT

AT ACREE, GA., ON

JANUARY 27, 1943

SUMMARY

Railroad:	Atlantic Coast Line	
Date:	January 27, 1943	
Location:	Acree, Ga.	
Kind of accident:	Side collision	
Trains involved:	Passenger	: Freight
Train numbers:	Extra 1709 South	: 210
Engine numbers:	1709	: 1606
Consist:	6 cars	: 44 cars, caboose
Estimated speed:	5 m. p. h.	: 20 m. p. h.
Operation:	Timetable and train orders	
Track:	Single; tangent; 0.33 percent descending grade northward	
Weather:	Hazy	
Time:	1:22 a. m.	
Casualties:	2 killed; 24 injured	
Cause:	Accident caused by failure to obey a stop indication displayed by train-order signal	
Recommendation:	That the Atlantic Coast Line Railroad Company establish an adequate block-signal system on the line involved in this accident	

INTERSTATE COMMERCE COMMISSION

INVESTIGATION NO. 2639

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

THE ATLANTIC COAST LINE RAILROAD COMPANY

March 2, 1943.

Accident at Acree, Ga., on January 27, 1943, caused by failure to obey stop indication displayed by a train-order signal.

REPORT OF THE COMMISSION[1]

PATTERSON, Commissioner:

On January 27, 1943, there was a side collision between a passenger train and a freight train on the Atlantic Coast Line Railroad at Acree, Ga., which resulted in the death of 2 employees, and the injury of 19 passengers and 5 employees.

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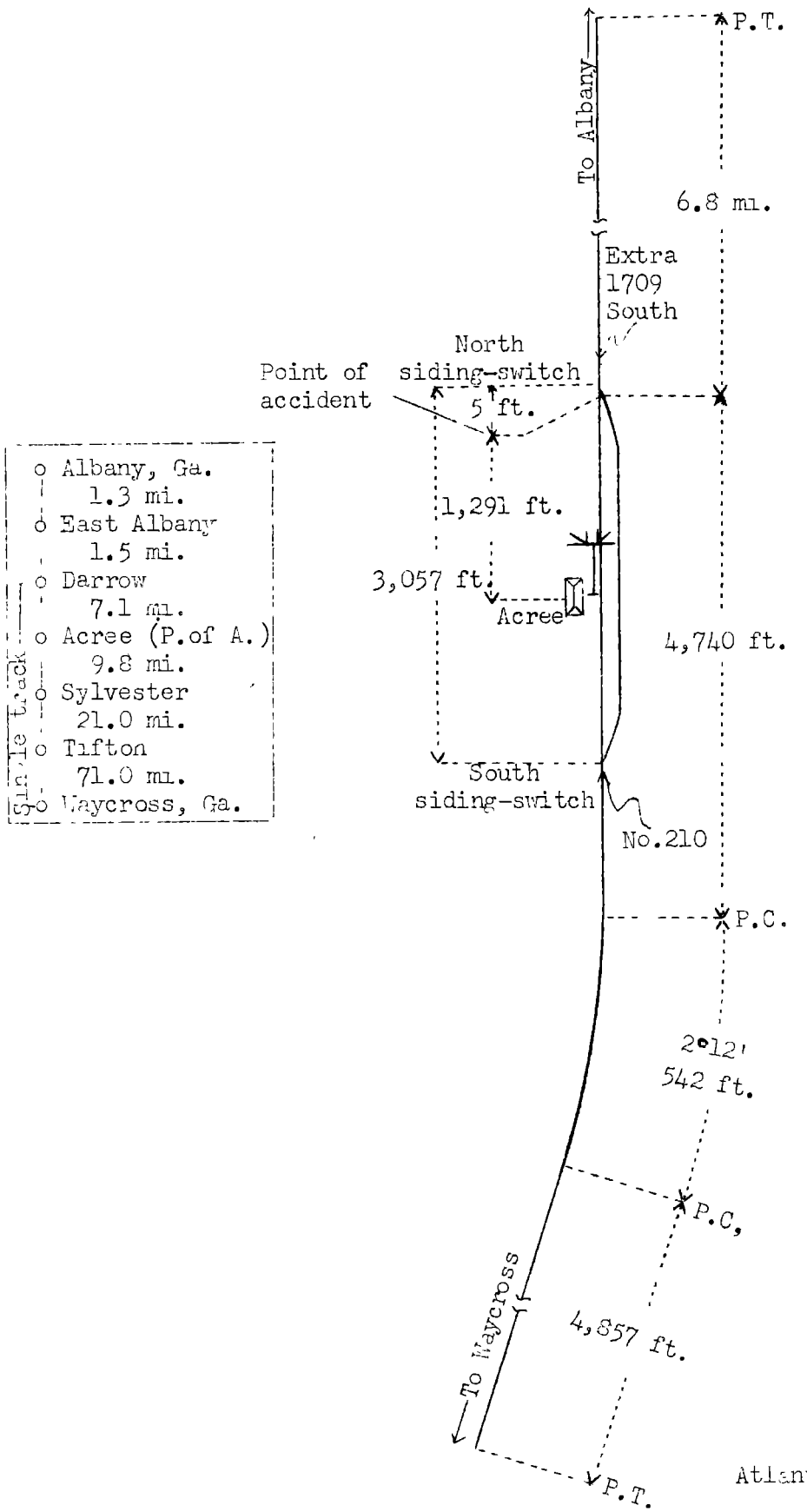
[1] Under authority of section 17 (2) of the Interstate Commerce Act the above-entitled proceeding was referred by the Commission to Commissioner Patterson for consideration and disposition.



Inv. No. 2669
Atlantic Coast Line Railroad
Acree, Ga.
January 27, 1943

Location of Accident and Method of Operation

This accident occurred on that part of the Waycross District extending between Albany and Waycross, Ga., a distance of 111.7 miles. In the vicinity of the point of accident this is a single-track line over which trains are operated by time-table and train orders. There is no block system in use. At Acree a siding 3,057 feet in length parallels the main track on the east. The north siding-switch is 1,291 feet north of the station. The accident occurred at a point 5 feet south of the north siding-switch. Approaching from the north the track is tangent 6.8 miles to the point of accident. Approaching from the south there are, in succession, a tangent 4,857 feet in length, a 2°12' curve to the left 542 feet and a tangent 4,740 feet to the point of accident. The grade for north-bound trains varies between 0.18 and 0.38 percent descending throughout a distance of 3,162 feet to the point of accident where it is 0.38 percent descending.

The train-order signal at Acree is of the 2-arm, three-indication, upper-quadrant, semaphore type, and is oil-lighted. It is mounted on a mast located on the west side of the main track in front of the station. The lenses, which display the night aspects, are 6 inches in diameter, and are about 31 feet above the level of the rail. The night aspects and corresponding indications and names are as follows:

Aspect	Indication	Name
Red	Stop and receive train orders	Stop Signal
Yellow	Receive train orders without stopping	Restricting Signal
Green	Proceed	Clear Signal

Operating rules read in part as follows:

DEFINITIONS.

Fixed Signal.---A signal of fixed location indicating a condition affecting the movement of a train.

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

208. * * *

A train order must not be sent to a superior train at the meeting or waiting point if it can be avoided. When an order is so sent, the fact will be stated in the order and special precautions must be taken to insure safety.

210. When a "31" order has been transmitted, * * *

Those to whom the order is addressed, except enginemen, must read it to the operator and then sign it, * * *

* * *

211(a). The "19" train order restricting the superiority of a train will not be used * * *

221. A fixed signal must be used at each train order office which will have three indications.

Stop Position--
Arm extended horizontally or red light indicating trains are to be stopped for train orders.

* * *

When an operator receives the signal "31", * * * followed by the direction, he must immediately display the "stop" signal for the direction indicated when "31" orders, * * * are to be delivered, and then reply "signal displayed," adding the direction, and until the orders have been delivered * * * the signal must not be restored to "proceed." Where the signal is displayed in stop * * * position trains must not proceed without Clearance Card, Form A.

* * *

* * * In the absence of a light at night in the fixed signal at train order office trains will come to a stop and will then be governed by the day indication of signal. * * *

* * *

The maximum authorized speed for the freight train involved is 45 miles per hour.

Description of Accident

Extra 1709 South, a south-bound passenger train, consisted of engine 1709, one express-refrigerator car and five coaches, in the order named. The first car was of steel-underframe construction and the remainder were of all-steel construction.

This train departed from Albany, 9.9 miles north of Acree, at 1:01 a. m., according to the dispatcher's record of movement of trains. At East Albany, 2.6 miles north of Acree and the last open office north of Acree, the crew received a clearance card and copies of two train orders, of which one was train order No. 205, Form 19, reading as follows:

> Extra 1709 South meet No. 210
> and First Second and Third
> 94 at Acree
> No 210 First Second and Third
> 94 gets this at Acree

Train order No. 205, Form 31, was sent to Acree for delivery to No. 210. Extra 1709 departed from East Albany at 1:09 a. m., and when it was entering the north siding-switch at Acree and moving at a speed of about 8 miles per hour the engine was struck by No. 210.

No. 210, a north-bound third-class freight train, consisted of engine 1608, 37 loaded and 7 empty cars and a caboose. This train departed from Tifton, 30.8 miles south of Acree, at 12:35 a. m., according to the dispatcher's record of movement of trains, 3 hours 29 minutes late, passed Sylvester, 9.8 miles south of Acree and the last open office south of Acree, at 1:08 a. m., 3 hours 28 minutes late, passed the train-order signal at Acree, which was displaying stop, and while moving at a speed of about 20 miles per hour it struck the engine of Extra 1709 South on the turnout at a point 5 feet south of the north siding-switch. The air brakes of No. 210 had been tested previously and had functioned properly at all points where used en route. There was no condition of the engine that obscured the vision or distracted the attention of the employees who were on the engine.

Engine 1709 was derailed and stopped, badly damaged, on its left side east of the track. The tender was against the boiler-head of the engine. The first car of Extra 1709 was derailed and demolished, and the second car was slightly damaged. Engine 1608 was derailed and badly damaged. The boiler was torn from the engine frame and stopped east of the track. The tender stopped on its right side on the main track. The first thirteen cars of No. 210 were derailed, nine were destroyed and the remainder were badly damaged. The front truck of the fourteenth car was derailed and this car was slightly damaged.

It was hazy at the time of the accident, which occurred at 1:22 a. m.

The employees killed were the fireman of Extra 1709 South and the engineer of No. 210. The employees injured were the engineer, the flagman and the porter of Extra 1709 South, and the fireman and the front brakeman of No. 210.

Data

During the 30-day period preceding the day of the accident the average daily movement in the vicinity of the point of accident was 15.43 trains.

Discussion

Under the rules governing operation on the line involved, when the fixed signal at a train-order office displays stop a freight train must be stopped short of the signal and receive authority to proceed. In addition, 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. The absence of a light at night in a train-order signal requires a train to be stopped short of the signal. A train order must not be sent to a superior train at a meeting or waiting point if it can be avoided. When an order is so sent, the fact must be stated in the order and special precautions must be taken to insure safety. All the surviving employees involved understood these requirements.

The investigation disclosed that train order No. 205, which established Acree as the meeting point between Extra 1709 South, a south-bound passenger train, and No. 210, a north-bound third-class freight train, and First, Second and Third 94, north-bound first-class passenger trains, was sent to East Albany, 8.6 miles north of Acree, for delivery to Extra 1709, and to Acree for delivery to No. 210 and First, Second and Third 94. The train-order signal at Acree displayed stop. The crew of Extra 1709 received copies of order No. 205 and departed from East Albany at 1:09 a. m. About 13 minutes later, when Extra 1709 was entering the north siding-switch at Acree the engine was struck by No. 210.

The crew of No. 210 did not hold copies of order No. 205 when the accident occurred, as No. 210 failed to stop at the train-order signal at Acree. The train order required No. 210 not to pass the fouling point at the north siding-switch until Extra 1709 South was into clear. Under the rules, No. 210 was required to stop at the train-order signal at Acree and not to proceed until the crew had received a train order and a clearance card or a clearance card only.

As No. 210 was approaching Acree the speed was about 45 miles per hour. The enginemen, who were on their respective seatboxes, the front brakeman, who was on the left seatbox, and the conductor and the flagman, who were in the cupola of the caboose, were maintaining a lookout ahead. The front brakeman and the fireman said they were unable to see the train-order signal, but did not inform the engineer. The first they knew of anything being wrong was when they saw the reflection of a headlight in the vicinity of the north siding-switch. At that time their engine was about 3,000 feet south of the north

siding-switch, and they called a warning to the engineer. The engineer immediately made a service brake-pipe reduction, and a few seconds later moved the brake valve to emergency position, but the distance was insufficient to stop short of the fouling point of the north siding-switch, located almost 1,300 feet north of the train-order signal. The speed of No. 210 was about 20 miles per hour when the collision occurred. Why the engineer failed to take action to stop his train before it passed the train-order signal could not be determined, as he was killed in the accident. The conductor and the flagman said that because of smoke trailing from their engine, they were unable to see the train-order signal, but they took no action to control the speed of their train. The rules required the crew of No. 210 to communicate to each other the indication of each signal affecting the movement of their train. In addition, if these employees could not see a light in the train-order signal at Acree, they were required to take action to control the speed so that their train could be stopped short of the signal. If action had been taken by some member of the crew of No. 210, as required by the rules, this accident would have been prevented.

Visual tests conducted under conditions similar to those existing at the time of the accident disclosed that the red aspect of the train-order signal involved could be seen from a north-bound engine a distance of 3,225 feet. In tests made with a train consisting of equipment similar to that of No. 210 at the time of the accident, the train was stopped from a speed of 45 miles per hour at a point 748 feet north of the train-order signal involved, and about 473 feet south of the north siding-switch, by a full-service application of the brakes initiated at a point 3,225 feet north of the signal.

The train dispatcher said that it was not possible for him to arrange a meeting point between the trains involved until he received information that Extra 1709 had departed from Albany. When he received this information, he sent order No. 205 to Acree for delivery to No. 210 and to First, Second and Third 94, which were following No. 210 closely, because he expected Extra 1709 to clear at Acree sufficiently in advance of the arrival of No. 210 to permit him to annul the order and to avoid the necessity of stopping No. 210. He thought No. 210 might go into clear at a blind siding south of Sylvester to permit First, Second and Third 94 to pass it, and he did not know that No. 210 was proceeding to Sylvester until the operator at Sylvester reported its approach a short distance away. He said that if he had sent the order to Sylvester, the last open office south of Acree, No. 210 would have been stopped at that point to receive the order, the four north-bound trains would have been delayed considerably, and it would have been necessary to establish a meeting point south of Acree. In addition, because of close headway between No. 210 and First 94, he thought if he

caused No. 210 to stop suddenly at Sylvester the flagman of No. 210 would not have sufficient time to provide adequate flag protection. If the train order involved had been sent to Sylvester for delivery to No. 210, this accident would have been averted; however, the investigation disclosed that it is not unusual to address train orders to the superior train at a meeting or waiting point. The operator at Acree said that in addition to displaying his train-order signal at stop for No. 210, he took special precaution by giving stop signals with a lighted red lantern from a position opposite the station on the main track when the engine was about 1,500 feet south of the station. The brakes of No. 210 were applied when the engine was about 800 feet south of the station, and the speed was about 30 miles per hour when the engine passed the station.

On July 1, 1942, a head-end collision, resulting in the death of 1 person and the injury of 110 persons, occurred on the line of this carrier at Whigham, Ga. There was no block system in use on that part of the railroad. The report of the Commission covering the investigation of that accident stated that if an adequate block system had been in use on this line the accident would not have occurred, and recommended the establishment of an adequate block system on the line involved. In the territory involved in the present case, trains are operated by timetable and train orders only. If an adequate block system had been in use, this accident would not have occurred.

Cause

It is found that this accident was caused by failure to obey a stop indication displayed by a train-order signal.

Recommendation

It is recommended that the Atlantic Coast Line Railroad Company establish an adequate block-signal system on the line involved in this accident.

Dated at Washington, D. C., this second day of March, 1943.

By the Commission, Commissioner Patterson.

W. P. BARTEL,

(SEAL)

Secretary.