

INTERSTATE COMMERCE COMMISSION ;
WASHINGTON

INVESTIGATION NO. 5017
ATLANTIC COAST LINE RAILROAD COMPANY
REPORT IN RE ACCIDENT
AT STEDMAN, N. C., ON
AUGUST 20, 1946

SUMMARY

Railroad: Atlantic Coast Line
Date: August 30, 1946
Location: Stedman, N. C.
Kind of accident: Collision
Train involved: Cut of cars : Freight
Train number: : 209
Engine number: : 714
Consist: 23 cars : 40 cars, caboose
Estimated speed: Standing : 20 m. p. h.
Operation: Timetable and train orders
Track: Single; tangent; 0.11 percent
ascending grade westward
Weather: Cloudy
Time: 4 a. m.
Casualties: 2 killed; 1 injured
Cause: Open switch

INTERSTATE COMMERCE COMMISSION

INVESTIGATION NO. 3017

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

ATLANTIC COAST LINE RAILROAD COMPANY

October 21, 1946.

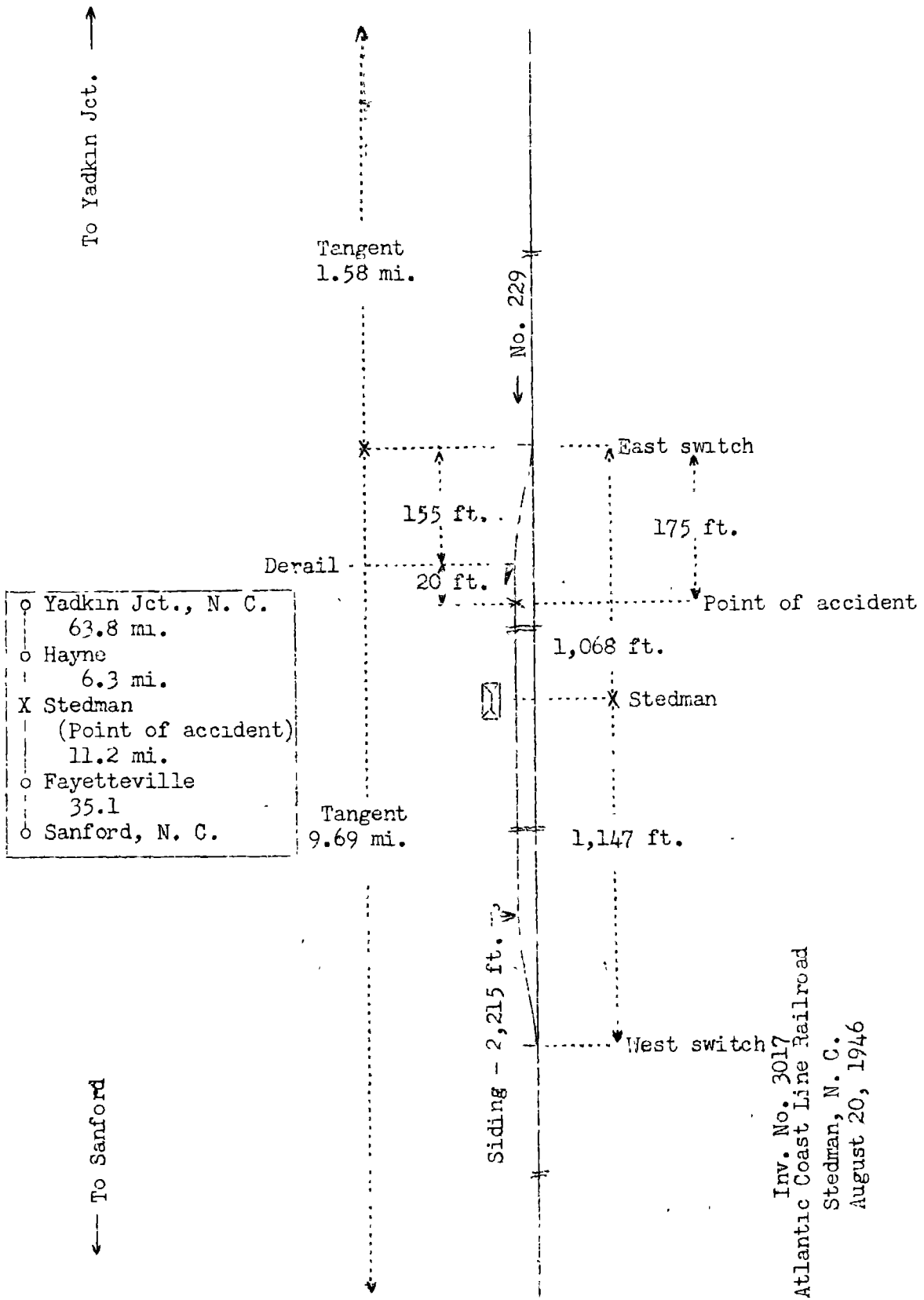
Accident at Stedman, N. C., on August 20, 1946, caused
by an open switch.

REPORT OF THE COMMISSION¹

PATTERSON, Commissioner:

On August 20, 1946, there was a collision between a freight train and cars on a siding on the Atlantic Coast Line Railroad at Stedman, N. C., which resulted in the death of two employees, and the injury of one employee.

¹Under 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 Operation

This accident occurred on that part of the Wilmington District extending between Yadkin Jct. and Sanford, N. C., 116.4 miles, a single-track line, over which trains are operated by timetable and train orders. There is no block system in use. At Stedman, 70.1 miles west of Yadkin Jct., a siding 2,215 feet in length parallels the main track on the north. The east switch of this siding is 1,068 feet east of the station. Entry to the siding at the east switch is made through a No. 10 turnout. A hand-operated sliding block-type derail is located adjacent to the north rail of the siding and 155 feet west of the east switch. The normal position of the derail is in derailing position. The accident occurred on the siding 20 feet west of the derail. The main track is tangent throughout a distance of 1.58 miles immediately east of the east siding-switch and 9.69 miles westward. The grade for west-bound trains varies between 0.10 and 0.15 percent ascending throughout a distance of 3,734 feet to the east siding-switch, where it is 0.11 percent ascending.

The turnout of the east siding-switch consists of 85-pound switch points, frogs and rails laid on 69 switch ties. The switchstand is of the hand-throw intermediate-stand type, and is provided with two targets. The centers of the targets are 4 feet 10-1/2 inches above the tops of the ties and 6 feet 1-3/4 inches north of the gage side of the north rail of the main track. When the switch is lined normally a green circular target 15 inches in diameter is displayed at right angles to the track. When the switch is lined for entry to the siding a red arrow-shape target is displayed at right angles to the track. The operating lever is of the horizontal type, and is attached to a fulcrum about 3 feet above the base of the stand. A slot is provided in the lever for insertion of an eye-type hasp to lock the lever in either position. The stand of the derail is of the low-stand type. It is provided with a two-position lever mechanism mounted in a housing and with a lock. No lamp or other illuminating device is provided on either the stand of the east siding-switch or the stand of the derail.

Operating rules read in part as follows:

DEFINITIONS

* * *

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

10. Color Signals

Color	Indication
(a) Red.	Stop.

* * *

(c) Green.	Proceed, * * *
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104. * * * Switches must be left in proper position after having been used.

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The maximum authorized speed for freight trains is 35 miles per hour, and for passenger trains, 50 miles per hour.

Description of Accident

No. 229, a west-bound third-class freight train, consisting of engine 714, 40 cars and a caboose, passed Hayne, the last open office, 6.3 miles east of Stedman, at 3:45 a. m., 1 hour 35 minutes late, and while moving at an estimated speed of 20 miles per hour it entered the siding at Stedman at the east switch, and the engine struck the derail then collided with the east car of a cut of 23 cars, which were standing on the siding immediately west of the derail.

The engine, the tender, and the first three cars were derailed. The engine stopped on its right side, 78 feet west of the derail, north of the siding and at right angles to it. The cab of the engine was demolished, and the engine was otherwise badly damaged. The first two cars of No. 229 and the most easterly two cars of the 23 cars on the siding were considerably damaged.

The weather was cloudy and it was dark at the time of the accident, which occurred about 4 a. m.

The engineer and the front brakeman were killed, and the fireman was injured.

Discussion

No. 229 was moving at a speed of about 20 miles per hour, in territory where the maximum authorized speed was 35 miles per hour, when it entered the east siding-switch at Stedman, which was lined for entry to the siding, and the engine struck the derail, which was in derailing position, and collided with the east end of a cut of cars standing on the siding.

As No. 229 was approaching Stedman the speed was about 35 miles per hour. The headlight was lighted brightly. The brakes of this train had been tested and had functioned properly en route. The fireman was in the gangway of the engine tending the fire. He said that when the engine was about 2,500 feet east of the east siding-switch the engineer made a service brake-pipe reduction, and the speed of the train was reduced to about 20 miles per hour. When the engine was about 200 feet east of the switch the fireman looked ahead from the left side of the gangway and saw that the switch was lined for entry to the siding. He called a warning to the engineer, who immediately moved the brake valve to emergency position. The fireman jumped from the engine just as the engine entered the turnout. The front brakeman, who was on the engine, and the engineer were killed in the accident, therefore, it could not be determined when they first became aware that the switch was improperly lined. If the switchstand had been provided with a lamp or other illuminating device, it is probable that the members of the crew on the engine would have seen the warning indication in time to take necessary action to avert the accident. The conductor and the flagman were in the caboose, and the first they knew of anything being wrong was when the brakes were applied in emergency.

The investigation disclosed that No. 228, an east-bound freight train, which arrived at Stedman about 2:50 a. m., had performed switching service in the vicinity of the east siding-switch immediately prior to the accident. When the accident occurred the engine of No. 228 was coupled to the west end of a cut of 23 cars standing on the east end of the siding, and the remainder of this train was on the west end of the siding. The conductor of No. 228 said that several minutes before the accident occurred he observed that the east siding-switch was lined for movement on the main track but was not locked and, at that time, the derail was in non-derailing position. He instructed the front brakeman to place the derail in derailing position and to lock the derail and the switch. When the accident occurred the conductor was in his caboose near the west siding-switch, the enginemen were on the engine about midway of the siding, and the front

brakeman was in the vicinity of the engine... The front brakeman said that, in compliance with the conductor's instructions, he placed the derail in derailing position and locked it, then locked the switch. He was positive that at that time the switch was in position for movement on the main track and that the switch points were in proper position. No member of the crew of No. 228 saw any unauthorized person in the vicinity of the east siding-switch.

Cause

It is found that this accident was caused by an open switch.

Dated at Washington, D. C., this twenty-first day of October, 1946.

By the Commission, Commissioner Patterson.

(SEAL)

W. P. BARTEL,

Secretary.