INTERSTATE COMMERCE COMMISSION

WASHINGTON

REPORT NO. 3572

ATLANTIC COAST LINE RAILROAD COMPANY

IN RE ACCIDENT

AT BIRMINGHAM, ALA., ON

MAY 8, 1954

SUMMARY

Date.	May 8, 1954	
Railroad.	Atlantic Coast Line	
Location:	Birmingham, Ala.	
Kind of accident:	Collision	
Equipment involved:	Transfer train	Motor-truck
Engine number:	S.L S.F. Diesel-electric unit 309	
Consist:	42 cars	
Estimated speeds:	5-10 m. p. h.	Standing
Operation.	Operating rules	
Track:	Single; tangent; 0.08 percent descending grade southward	
Highway:	Tangent; crosses track at angle of 29°54', 0.59 percent ascending grade eastward	
Weather:	Clear	
Time:	8:05 a. m.	
Casualties:	4 injured	
Cause:	Motor-truck occupying rail-highway grade crossing immediately in front of approaching train	

INTERSTATE COMMERCE COMMISSION

REPORT NO. 3572

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

ATLANTIC COAST LINE RAILROAD COMPANY

June 24, 1954

Accident at Birmingham, Ala., on May 8, 1954, caused by a motor-truck occupying a rail-highway grade crossing immediately in front of an approaching train.

REPORT OF THE COMMISSION[1]

CLARKE, Commissioner:

On May 8, 1954, there was a collision between a transfer train on the Atlantic Coast Line Railroad and a motor-truck at a rail-highway grade crossing at Birmingham, Ala., which resulted in the injury of three train-service employees and the driver of the motor-truck.

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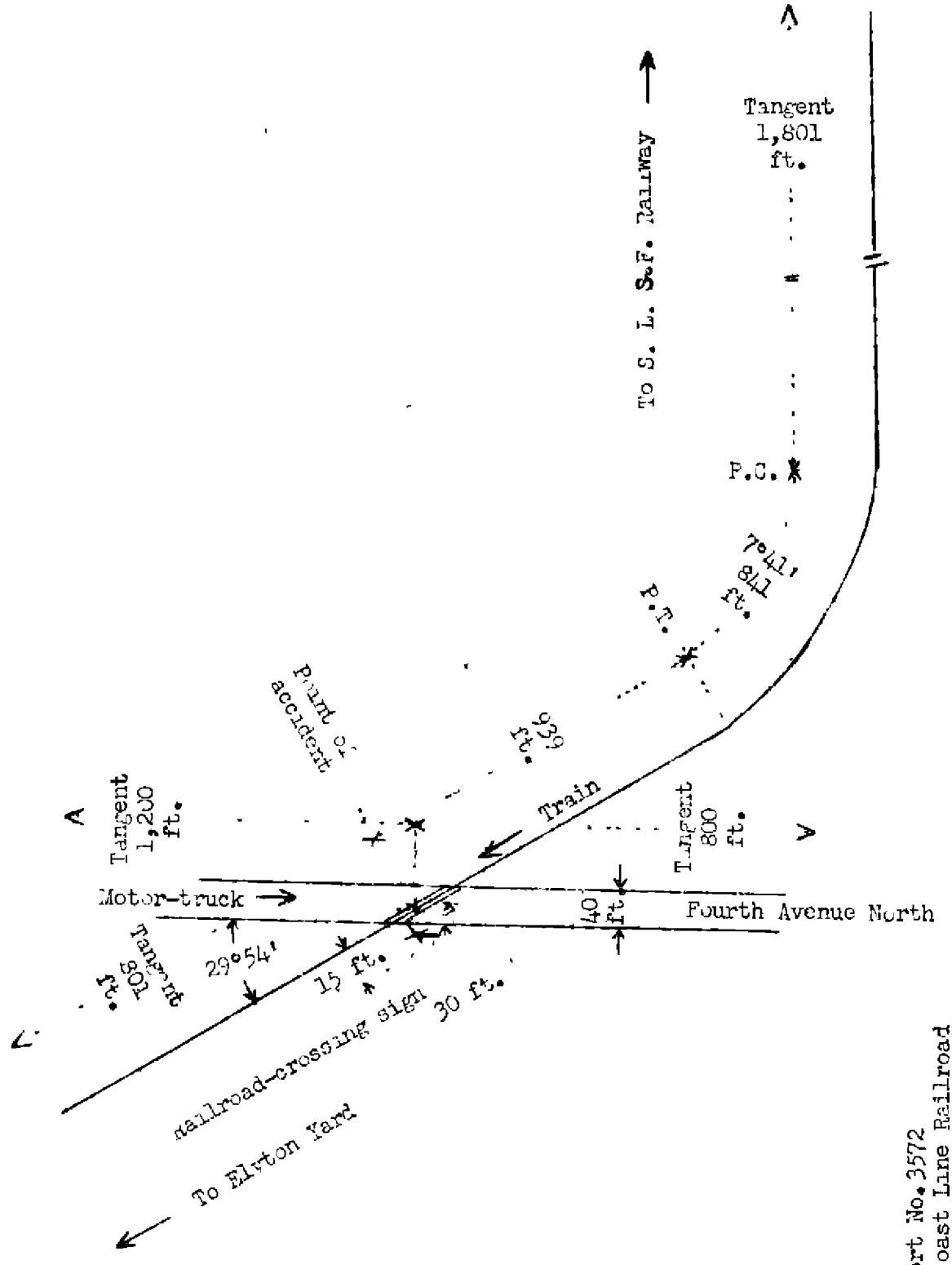
[1] Under authority of section 17 (2) of the Interstate Commerce Act the above-entitled proceeding was referred by the Commission to Commissioner Clarke for consideration and disposition.



Report No. 3572
Atlantic Coast Line Railroad
Birmingham, Ala.
May 8, 1954

Location of Accident and Method of Operation

This accident occurred on the Western Division at Birmingham, Ala., on a track which extends between a connection with the St. Louis-San Francisco Railway, near Freight Yard Junction, and Elyton Yard, 1.11 miles. Transfer trains of the St. Louis-San Francisco Railway regularly are operated over this track, which is designated in this report as track No. 1. Movements on track No. 1 are governed by operating rules There is no block system in use. The accident occurred at the point at which the track is crossed at grade by Fourth Avenue North. From the north on the railroad there are, in succession, a tangent 1,801 feet in length, a 7°41' curve to the right 841 feet, and a tangent 939 feet to the point of accident and 801 feet southward. The grade is 0.08 percent descending southward at the crossing. The northeast angle of the intersection of the railroad and Fourth Avenue North is 29°54'. The street is tangent throughout a distance of over 1,200 feet immediately west of the crossing and 800 feet eastward. It is surfaced with bituminous material and is 40 feet in width. Planking 9-1/2 inches in width is provided on the gage side of each rail at the crossing, and the remaining area of the crossing is surfaced with bituminous material to the level of the tops of the rails. The grade for east-bound vehicles is, successively, 1.38 percent ascending 375 feet, 1.98 percent descending 380 feet, and 0.59 percent ascending 445 feet to the crossing

A standard cross-buck railroad-crossing sign is located in the southeast angle of the intersection, approximately 30 feet south of the center-line of the street and 15 feet east of the center-line of the track. This sign is mounted on a mast 9 feet 7 inches above the level of the street and bears the words "RAILROAD CROSSING" in black on a white background. Another sign, which bears the words "ATLANTIC COAST LINE" in black on a white background, is mounted on the same mast 7 feet 5 inches above the level of the street.

This carrier's operating rules read in part as follows

14. ENGINE HORN OR WHISTLE SIGNALS

NOTE.- The signals prescribed are illustrated by "o" for short sounds, "__" for longer sounds. * * *

Sound	Indication
* * *	
(1) ---- 0 ---	Approaching public crossings at grade. To be prolonged or repeated until crossing is covered.
* * *	

30. The engine bell must be rung * * * while approaching and passing public crossings at grade, * * *

103 When cars are pushed by an engine, * * * and when shifting over public crossings at grade not protected by a watchman, by gates, or by automatic signaling devices, the crossing must be protected by a member of the crew, and cars shall be shifted over such crossing only on his signal

Bulletin special instructions read in part as follows

* * *

In flagging street crossings and railroad crossings in Birmingham, flagman must precede engine or cars a reasonable distance on foot flagging traffic until engine or lead car has crossing entirely covered, using red flag by day and a lighted red fusee by night.

Stop must be made and crossing flagged from a ground position at the following locations.

* * *

Eighth Avenue North
Fifth Avenue North (Graymont)
Third Avenue North

* * *

Track No. 1 intersects Eighth Avenue North, Graymont Avenue, and Third Avenue North at points, respectively, 2,850 feet north, 1,850 feet north, and 760 feet south of Fourth Avenue North

Motor Vehicle Laws of the State of Alabama read in part as follows:

> Title 36, Section 72: * * * The director of public safety, with the approval of the governor, shall establish and promulgate reasonable rules and regulations not in conflict with the laws of this state concerning operation of motor vehicles and concerning the enforcement of the provisions of this article.

By the authority conferred by this section the Director of Public Safety has promulgated the following:

Rule No. 1

Certain Motor Vehicles Required to Stop at All Grade Crossings * * *

> Section 4. Every person operating * * * any motor vehicle carrying explosive substance or flammable or inflammable as a cargo or part of a cargo, on any public highway in this State, before crossing the grade of any track or tracks of any railroad * * * shall stop such vehicle not more than 50 feet and not less than 10 feet of the nearest rail of such railroad * * * and while so stopped shall listen and look in both directions along such track of railroad * * * for any approaching train * * * and for signals indicating the approach of train * * * and shall not proceed until he can do so safely. * * *

The maximum speed for trains moving over the crossing at Fourth Avenue North is restricted by city ordinance to 20 miles per hour.

Description of Accident

A south-bound St. Louis-San Francisco transfer train, en route from a yard of the St. Louis-San Francisco Railway to Elyton Yard via track No. 1, consisted of Diesel-electric unit 309 and 42 freight cars. While this train was moving on track No. 1 at a speed of between 5 and 10 miles per hour it struck a motor-truck at the rail-highway grade crossing at Fourth Avenue North.

The vehicle involved was a tractor and semi-trailer owned by the M & U Transport Company and leased to the Martin Truck Line, Incorporated, Birmingham, Ala. The driver, who was the sole occupant, held Alabama driver's license No. 0564299. The tractor was a 1952 model GMC. It bore Alabama license No. 1 H/3-944. The semi-trailer consisted of a 5,500-gallon tank mounted on tandem axles. It bore Alabama license No. 1 T/3-914. The rear wheels of the tractor and all wheels of the semi-trailer were equipped with dual tires. Both the tractor and the semi-trailer were equipped with air brakes. At the time of the accident the cargo consisted of 5,500 gallons of gasoline. It had been loaded at Duncan, Ala., and was to be delivered in Birmingham. The total weight of the vehicle and cargo was 56,873 pounds, and the total length was 45 feet. This vehicle was moving eastward on Fourth Avenue North at a low rate of speed when it entered upon the crossing and was struck by the train.

The tractor was forced to the right by the impact, and the left front corner of the semi-trailer was struck by the Diesel-electric unit. The tractor and the semi-trailer remained coupled and stopped with the left side of the tractor against the west side of the Diesel-electric unit and approximately 84 feet south of the point of collision. The train stopped with the front of the locomotive 93 feet south of the point of collision. No equipment of the train was derailed. Both the fuel tank of the tractor and the cargo tank of the semi-trailer were punctured. Escaping gasoline immediately became ignited, and the tractor and the Diesel-electric unit were badly damaged by fire.

The engineer, the fireman, and the yard conductor were injured.

The weather was clear at the time of the accident, which occurred at 8.05 a. m.

During the 30-day period preceding the day of the accident the average daily movement over the crossing was 13.8 trains and engines. During the 24-hour period beginning at 8 a. m., May 21, 1954, 9,176 automobiles, 1,864 trucks including 130 gasoline transport trucks, 45 buses, and 11 other vehicles passed over the crossing.

Discussion

As the train was approaching the point where the accident occurred the enginemen and the yard conductor were maintaining a lookout ahead from the control compartment of the locomotive, one yard brakeman was on the platform at the south end of the locomotive, and one yard brakeman was on the rear car. The locomotive, which was of the switcher type, was headed northward, and the control compartment was at the south end. The headlight was lighted. The brakes of the train had been tested and had functioned properly when used en route. Members of the crew said that the engineer sounded the grade-crossing whistle signal for a crossing located 145 feet north of Fourth Avenue North and continued to sound the horn as the train moved between that crossing and Fourth Avenue North. The bell was ringing during this time. The train approached Fourth Avenue North at a speed of between 5 and 10 miles per hour, as estimated by the crew. The fireman and the yard conductor said that when the front of the train reached a point between 100 and 150 feet north of the crossing they observed the motor-truck approaching from the west. They said it appeared to them that the truck was reducing speed and would stop short of the crossing. The engineer made a light application of the brakes of the locomotive but did not attempt to stop the train. When the locomotive reached a point immediately north of the crossing it became apparent to the members of the crew that the truck would not stop short of the crossing. The engineer then made an emergency application of the brakes. The collision occurred before the speed of the train had been materially reduced. The fireman and the yard conductor said they thought the truck was still in motion when the collision occurred. The engineer was so seriously injured in the accident that he was not questioned during this investigation.

The driver of the motor-truck said that he had traversed the route over the crossing many times and was thoroughly familiar with the location of the crossing. He said that on the day of the accident he approached the crossing at a speed of about 25 miles per hour. Both side windows of the cab were open, and there was no condition of the truck which impaired his vision to the front or to either side. Because of several van-type trailers which were parked in the northwest angle of the intersection of the street and the track, the driver could not see the approaching train until the truck

reached a point about 150 feet west of the crossing. When he saw the train he reduced the speed of the truck but did not attempt to stop short of the crossing. He said that he had previously observed members of train crews protecting crossings in the vicinity, and when he saw the approaching train he expected that it would stop and remain clear of the crossing until the crossing had been protected by a member of the crew. He said that he heard the bell of the locomotive but did not hear the sound of the pneumatic horn. When he saw that the train would not stop short of the crossing he attempted to stop the truck and also to turn it toward the south, but he was unable to stop short of the track. He thought the truck had stopped when the collision occurred and that the train was moving at a speed of about 20 miles per hour.

Cause

This accident was caused by a motor-truck occupying a rail-highway grade crossing immediately in front of an approaching train.

Dated at Washington, D. C., this twenty-fourth day of June, 1954.

By the Commission, Commissioner Clarke.

(SEAL)

GEORGE W. LAIRD,

Secretary.