INTERSTATE COMMERCE COMMISSION

WASHINGTON

INVESTIGATION NO. 2570

THE ILLINOIS CENTRAL RAILROAD COMPANY

REPORT IN RE ACCIDENT

NEAR PLATO CENTER, ILL., ON

FEBRUARY 18, 1942

SUMMARY

Railroad:	Illinois Central
Date:	February 18, 1942
Location:	Plato Center, Ill.
Kind of accident:	Collision at highway grade crossing
Equipment involved:	Passenger train : Motor truck
Train number:	56
Engine number:	Motor cars 140 and 141
Consist:	2 motor cars
Speed:	70 m. p. h. : 10-15 m. p. h.
Operation:	Timetable, train orders and automatic block-signal system
Track:	Single; tangent; 0.498 percent descending grade eastward
Highway:	Tangent; crosses track at angle of 61°08'; level
Weather:	Clear
Time:	About 11:23 a. m.
Casualties:	1 killed; 31 injured
Cause:	Accident caused by motor truck being driven upon highway grade crossing immediately in front of approaching train

INTERSTATE COMMERCE COMMISSION

INVESTIGATION NO. 2570

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

THE ILLINOIS CENTRAL RAILROAD COMPANY

March 31, 1942.

Accident near Plato Center, Ill., on February 18, 1942, caused by motor truck being driven upon highway grade crossing immediately in front of approaching train.

REPORT OF THE COMMISSION[1]

PATTERSON, Commissioner:

On February 18, 1942, there was a collision between a passenger train and a motor truck on the Illinois Central Railroad at a highway grade crossing near Plato Center, Ill., which resulted in the death of 1 employee, and the injury of 28 passengers, 1 person carried under contract and 2 dining car employees. This accident was investigated in conjunction with a representative of the Illinois Commerce Commission.

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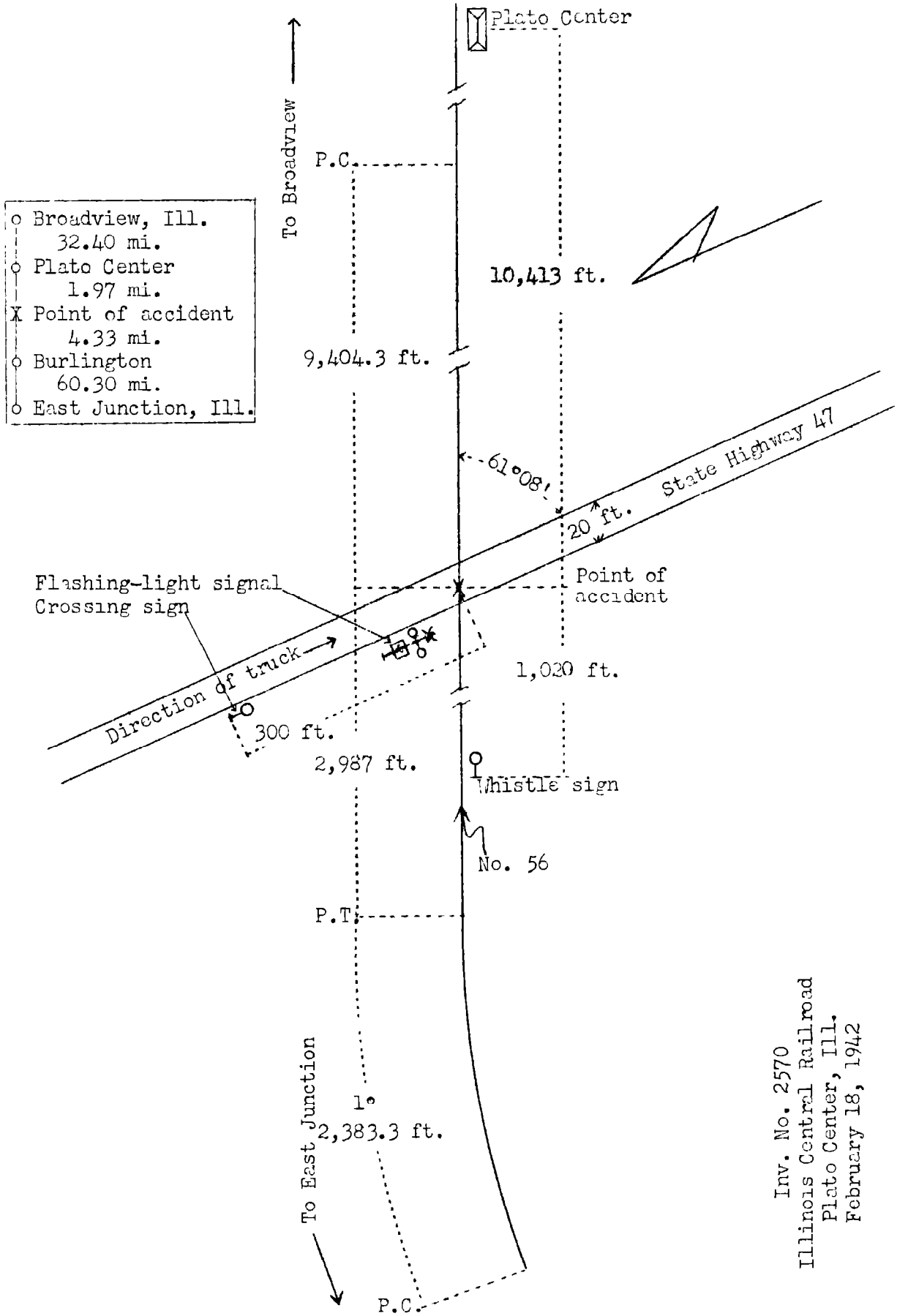
[1]Under authority of section 17 (2) of the Interstate Commerce Act the above-entitled proceeding was referred by the Commission to Commissioner Patterson for consideration and disposition.



Inv. No. 2570
Illinois Central Railroad
Plato Center, Ill.
February 18, 1942

Location of Accident and Method of Operation

This accident occurred on that part of the Iowa Division designated as the Freeport District, which extends between East Junction and Broadview, Ill., a distance of 99 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. The accident occurred at a point 1.97 miles west of the station at Plato Center, at which point the railroad is crossed at grade by State Highway 47. As the point of accident is approached from the west on the railroad there is a 1° curve to the right 2,383.3 feet in length, which is followed by a tangent extending 2,987 feet to the point of accident and 9,404.3 feet beyond. At the point of accident the grade for east-bound trains is 0.498 percent descending. Between points 1,200 feet and 600 feet west of the crossing, the track is laid in a cut, the north bank of which varies between 3 feet and 8 feet in height. State Highway 47 crosses the track at an angle of 61°08'. As the point of accident is approached from the north on the highway, there is a tangent more than 1 mile to the crossing and a considerable distance beyond. The grade for south-bound vehicles on the highway is level throughout a distance of 330 feet to the crossing and 200 feet beyond. The highway is 20 feet in width and is surfaced with concrete. The crossing is about 36 feet in width, is surfaced with asphalt, and is well maintained.

The crossing is protected on each side of the track by flashing-light signals. The signal governing south-bound traffic is located in the northwest angle of the intersection. On the mast of this signal a cross-buck sign is mounted 11 feet 10 inches above the level of the pavement, and bears the words "RAILROAD CROSSING." A horizontal bar, to which a red light is attached at each end, is mounted on the mast 8 feet above the level of the pavement. Beneath the red lights a rectangular plate bears the words "STOP ON RED SIGNAL." The flashing-light signals are actuated when a west-bound train reaches a point 2,451 feet east of the crossing and when an east-bound train reaches a point 2,477 feet west of the crossing. At a point 300 feet north of the crossing on the west side of the highway there is an advance warning sign consisting of a 30-inch disc bearing the letters "RR."

A crossing whistle sign for east-bound trains is located 1,020 feet west of the crossing.

Operating rules read in part as follows:

14. Engine Whistle Signals.

* * *

(1) Approaching public crossings at grade and obscured curves. Begin sound one-fourth mile from crossing, prolonging or repeating until crossing is reached.

* * *

Article XII of the 1939 Revised Motor Vehicle Laws of Illinois reads in part as follows:

> 83. Obedience to Signal Indicating Approach of Train.-- (a) Whenever any person driving a vehicle approaches a railroad crossing and a clearly visible electric or mechanical signal device gives warning of the immediate approach of a train, the driver of such vehicle shall stop within fifty feet but not less than ten feet from the nearest track of such railroad and shall not proceed until he can do so safely.

In the vicinity of the point of accident the maximum authorized speed for the train involved is 80 miles per hour.

Description of Accident

No. 56, an east-bound first-class passenger train, consisted of motor cars 140 and 141, coupled. Both cars were of modern lightweight construction. After a terminal air-brake test was made this train departed from East Junction, 66.6 miles west of Plato Center, at 10:14 a. m., according to the dispatcher's record of movement of trains, 2 minutes late, departed from Burlington, 6.3 miles west of Plato Center and the last open office, at 11:18 a. m., 3 minutes late, and while moving at an estimated speed of 70 miles per hour it collided with a motor truck on a highway grade crossing at a point 1.97 miles west of the station at Plato Center.

The motor truck involved was a tractor and semi-trailer owned by the Mid-West Dairy Products Company, DuQuoin, Ill., and was being driven by a man, the sole occupant, who held Tennessee chauffeur's license No. 5516c for 1941. The tractor was a 1941 International, 6-cylinder, Model K8, and bore Tennessee license No. 7P5/0005 for 1942. Its weight was 6,400 pounds and its wheelbase was 11 feet 5 inches long. It was equipped with hydraulic brakes, a vacuum booster, and dual tires on each rear wheel, and was provided with

an enclosed steel cab. It was hauling a Fruehauf semi-trailer, 20 feet in length, which was provided with a van-type frameless body. The trailer was equipped with a vacuum booster brake controlled by a hand-operated valve located on the steering-wheel column. The weight of the trailer when empty was 6,600 pounds. The tractor and trailer had an overall length of 33 feet. At the time of the accident the vehicle was loaded with 675 cases of bottled ale, which weighed approximately 20,000 pounds. The vehicle, moving southward on State Highway 47, en route from Burleton, Wis., to Union City, Tenn., approached the crossing at an estimated speed of 35 or 40 miles per hour, reduced speed to about 15 miles per hour, according to the statement of the driver, passed an automobile which had stopped in compliance with the warning indication displayed by the flashing-light signal, then proceeded upon the track and the rear end of the semi-trailer was struck by No. 56.

There was no unusual condition about the enclosed cab that obscured the vision of the truck driver. From points on the highway 700 feet, 500 feet, 300 feet and 100 feet north of the crossing the driver of a vehicle can have an unobstructed view of a train approaching from the west at distances, respectively, of 540 feet, 630 feet, 730 feet and 1,200 feet.

No. 56 was not derailed and stopped 2,080 feet east of the point of accident. The front end of motor car 40, starting at a point about 18 inches to the left of the center-line and extending to the right side, was crushed inward a distance of 11 feet, and several seats were torn loose. The rear end of the semi-trailer of the motor vehicle was broken from the remainder of the body and the contents of the semi-trailer were destroyed.

It was clear at the time of the accident, which occurred about 11:23 a. m.

The employee killed was the engineer.

Data

During the 30-day period preceding the day of the accident, the average daily movement of trains over the crossing was 27.4. During the 24-hour period beginning at 12:01 a. m., February 23, 219 automobiles, 151 trucks, 2 horse-drawn vehicles, 12 passenger trains and 15 freight trains passed over the crossing.

Mechanical Data

Motor car 140 is 75 feet in length and has a loaded weight of about 100,000 pounds. It is designed to withstand a buffing stress of 200,000 pounds, in accordance with the Post Office Department specifications for lightweight cars. The frame and strength members are of low-alloy, high-tensile steel. The end posts and side posts are of U-shape, 14-gage cor-ten steel. The side frame is of girder construction. The center-sills are channel-shape and so constructed that buffing stress is dissipated through the bolster, the crossbearer and the side girders. The front end-sheets are 14-gage cor-ten steel and the side sheets are of aluminum. The front end is curved on a radius of 8 feet 3 inches and is provided with five windows so that the engineer has an unobstructed view ahead and to each side of the car. Defrosting devices are located in the window sills. The control station is on the right side of the front end. The brake equipment is SME. A safety control feature actuated by a foot diaphragm valve is provided.

Discussion

No. 56 was approaching the crossing at an estimated speed of 70 miles per hour, in territory where the maximum authorized speed was 80 miles per hour. The whistle signal was sounded for the crossing in compliance with the rules. It is not known when the engineer first saw the approaching motor truck, as he was killed in the accident. The motor truck approached from the left. The front end of motor car 140 is provided with five windows, which permitted the engineer to have an unobstructed view ahead and to each side. Several passengers who were seated immediately to the rear of the engineer saw the truck before it reached the crossing. According to the statement of one passenger, the whistle was still being sounded at the crossing. The evidence indicates that the brakes were not applied until after the collision. The train struck the trailer about midway and the rear axle assembly was carried on the front of the first car 2,080 feet to the point where No. 56 stopped. The tractor and the front portion of the trailer remained upright on the highway.

The driver of the motor truck involved was an experienced driver and, according to his statement, was familiar with the crossing involved. As his truck was approaching the crossing the speed was about 40 miles per hour and he

observed that the flashing-light signal was operating. As the truck neared the crossing he looked toward the right and observed no train approaching from that direction. The train involved then no doubt was hidden from view by the banks of the cut. He then looked toward the left, saw smoke from the engine of a freight train on the siding at Plato Center, about 1.9 miles to the east, and assumed that this train was actuating the crossing signal. He drove around an automobile which had stopped about 30 feet north of the crossing, and proceeded upon the crossing at a speed of about 10 or 15 miles per hour. The first the driver knew of the approaching train was when the front end of the truck was on the crossing. He tried to increase speed but was not able to get across the track in time to avert the collision. The driver of the automobile which had stopped north of the crossing said that when the truck involved passed to his left No. 56 was about 300 feet west of the crossing.

There were two warning signs for south-bound traffic on the highway immediately north of the crossing. The flashing-light signal was in operation and could be seen a considerable distance. The weather was clear. The driver had been off duty about 14 hours prior to the time he started on the trip involved, and at the time of the accident had been on duty only 2 hours 53 minutes. The windows of the enclosed cab were clean. Had the driver looked toward the west throughout a distance of 100 feet north of the crossing, he would have had an unobstructed view of the approaching east-bound train a distance of 1,200 feet. The laws of the state of Illinois require that when a visible electrical or mechanical device gives warning of the approach of a train, vehicles must stop within 50 feet but not less than 10 feet from a railroad track, until such time as it can proceed safely. If the driver involved had stopped within 50 feet of the crossing in compliance with the warning indication of the flashing-light signal he could have seen the approaching train, and undoubtedly this accident would have been averted.

Cause

It is found that this accident was caused by a motor truck being driven upon a highway grade crossing immediately in front of an approaching train.

Dated at Washington, D. C., this thirty-first

day of March, 1942.

By the Commission, Commissioner Patterson.

W. P. BARTEL,

(SEAL)

Secretary.