# INTERSTATE COMMERCE COMMISSION WASHINGTON

REPORT NO. 3577

CHICAGO, AURORA & ELGIN RAILROAD COMPANY

IN RE ACCIDENT

AT FOREST PARK, ILL., ON

JUNE 17, 1954

# SUMMARY

Late June 17, 1954

Railroad Chicago, Aurora & Elgin

Iocation Forest Park, Ill.

Kind of accident Collision

Equipment involved Passenger equipment Passenger train

train

Train number , 317

Consists.

6 electrically 5 electrically propelled passen- propelled passenger-

units

Estimated speeds Standing 5 to 7 m. p h.

Operation: Timetable and train orders, yard

limits

Tracks Double, 13° curve; 0 2 percent

deacending grade westward

Weather Clear

Time: 10 16 a.m.

Casualties 9 injured

Cause Open switch

### INTERSTATE COMMERCE COMMISSION

### REPORT NO. 3577

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

CHICAGO, AURORA & ELGIN RAILROAD COMPANY

July 20, 1954

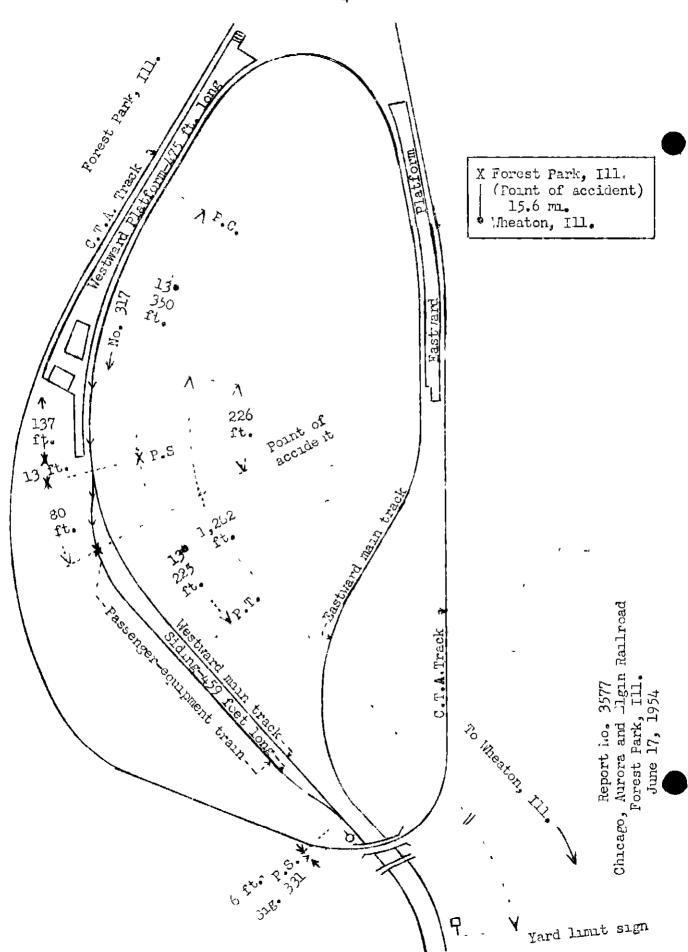
Accident at Forest Park, Ill., on June 17, 1954, caused by an open switch.

REPORT OF THE COMMISSION

# CLARKE, Commissioner:

On June 17, 1954, there was a collision between a passenger train and a passenger-equipment train on the Chicago, Aurora & Elgin Railroad at Forest Park, Ill., which resulted in the injury of six passengers and three train-service employees. This accident was investigated in conjunction with a representative of the Illinois Commerce Commission.

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.



# Location of Accident and Method of Operation

This accident occurred on that part of the railroad extending between Forest Park and Wheaton, Ill., 15.6 miles, a double-track line, over which trains moving with the current of traffic are operated by timetable, train orders, and an automatic block-signal system. A power rail is provided for the electric propulsion of trains. The station at Forest Park from which west bound trains depart is located on the north side of a loop which connects the two main tracks. A platform for passenger traffic is provided at this point. It is 475 feet in length and is reafed. The top of the platform is 3 feet 6 inches above the level of the tops of the rails. A waiting room and facilities for passengers are provided in the stattor, which is located rear the center of the platform. West of the station a signer 459 feet in length parallels the westword main track on the north. The east siding-syntch is 13 feat wast of the end of the station platform. The first automatic signal governing departing west-bound movements on the westword main track is located 6 feet west of the west sidirg switch. There is no block system in as between the station and this signal. The accident occurred within yard limits on the slding, at a point 226 feet west of the station and 80 feet west of the east siding-switch. the east on the westward main track there is a 13° curve to the left which extends 350 feet to the east siding-switch and approximately 225 fect westward. The grade for west-bound trains is 0.2 percent descending at the point of accident.

The switch stand of the cast siding-switch is of the low-stand ground-throw type. It is located on the north side of the track and is equipped with both a red and a white target. When the switch is lined for movement on the main track an oval white target is displayed at right angles to the track. When the switch is lined for entry to the siding an arrow-shape red target is displayed at right angles to the track. The centers of the targets are 1 foot 2 inches above the level of the tops of the ties. The switch stand is also provided with an oil-burning switch lamp. The centers of the lenses are 2 feet 6 incres above the level of the tops of the ties.

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

92. # # #

All trains must move within yard limits prepared to stop unless the main track is seen or known to be clear.

- 102. Switches must be left in proper position after having been used. \* \* \*
- 330. Motormen are required to observe the position of all switches and must know that such switches are right before passing over them.

\* \* \*

The maximum authorized speeds for passenger trains are 10 miles per hour on the loop at Forest Park and 25 miles per hour on the main track west of the loop.

# Description of Accident

About 9:35 a.m. a passenger-equipment train, consisting of six electrically propelled passenger units of all-steel construction, was assembled on the siding at Forest Park. The rear end of the rear unit was 80 feet west of the east siding-switch. Approximately 40 minutes after the train was assembled, the rear end was struck by No. 317.

No. 317, a west-bound passenger train, consisted of three electrically propelled passenger units in multiple operation. All units were of all-steel construction. The first and third were power units, and the second unit was a trailer. It was being operated from the control compartment at the front of unit 415, the first unit of the train. This train departed from the station at Forest Park at 10.15 a.m., on time, was diverted to the siding at the east siding-switch, and while moving at an estimated speed of less than 10 miles per hour it struck the rear end of the passenger-equipment train.

The passenger-equipment train was moved westward a distance of approximately 20 feet by the force of the impact. Both trucks of the rear unit and one truck of the second unit from the rear were derailed. The rear unit and the fourth unit from the rear were somewhat damaged, and all other units except the first were slightly damaged. The first unit of No. 317 was derailed. The first and second units were somewhat damaged, and the rear unit was slightly damaged.

- 7 - 35**7**7

The motorman and two conductors of No 317 were injured.

The weather was clear at the 'ime of the accident, which occurred about  $\pm 0.16$  a, m.

The units involved are equipped with AMU type brake equipment. A safety-control feature which operates in conjunction with the controller is provided. If downward pressure against spring-tension on the controller handle is released, the handle returns automatically to "Off" position and power to 'the traction motors will be cut off.

# Discussion

At Forest Park the equipment of an arriving east-bound passenger train is turned on the loop track immediately after the passengers are discharged. It is then moved to the vicinity of the station for west-bound trains. The siding immediately west of this station is used, when necessary, for the storage of equipment and for the making up of trains. The movement of passenger equipment at the station and the operation of the siding switches in connection with station switching movements are performed at times by a member of the mechanical force who also inspects equipment and performs maintenance service at this point. This employee is designated as an inspector-switchman,

On the day of the accident five units of a passengerequipment train were assembled on the siding at Forest Park prior to 9 a, m. The inspector-switchman on duty at the station was instructed to detach the rear unit of a passenger train due to leave Forest Park at 9 25 a, m, and to add 1t to the equipment on the siding He detached the rear unit while the train was standing at the station. After the train departed he moved the detached unit westward to the east siding-switch and lined the switch for entry to the siding. He then moved the unit to the siding and coupled it to the rear of the equipment previously placed there. He said that after he observed that the rear end was clear of the main track he proceeded through the units to the front end. At the front end he arranged the destination cigns of the first unit and applied the brakes and then alighted from the unit. He said that while he was making a visual inspection of the running gear of the units he observed the arrival of an eastbound passenger train. He was required to prepare the equipment of this train for westward movement in No. 317, so he immediately returned to the platform of the station. In doing so he overlooked the position of the east siding-switch, which had not been restored to normal position. When he reached the station the equipment of No. 317 had been turned on the loop track by the crew. The inspector-switchman loaded bundles of newspapers, destined for distribution en route, in the front vestibule of the first unit, then, about 10:10 a.m., moved the equipment westward and stopped it in position to load passengers. The front end of the first unit was opposite the station and 186 feet east of the east siding-switch. He said that he then cleaned the window in front of the motorman's position in the control compartment of the first unit. Before departure time of the train he ascertained that there were no additional connections to be made with trains of an adjacent elevated railway line and that all passengers had boarded the train. At departure time he gave a proceed signal to members of the crew. He said that he had returned to the dispatcher's office when the collision occurred.

No. 317 departed from the station at Forest Park at 10:15 a. m., on time. The crew consisted of a motorman and two conductors. The motorman was alone in the control compartment at the front of the first unit, and a conductor was in each of the first two units. The brakes of this equipment had been tested by the motorman before departure from Wheaton on the east-bound trip and had functioned properly when used en route. The motorman said that he was seated on a stool in the control compartment when the train departed from the station and that he had moved the controller two points. He said that as the train moved westward he glanced at the newspapers stacked in the vestibule to ascertain whether they were arranged properly for distribution en route. He estimated that the speed was between 5 and 7 miles per hour. He said that he did not observed the position of the east siding-switch. When the train entered the turnout of the siding he was dislodged from his position, and the collision occurred while the controls were out of his reach.

The rules of this carrier provide that switches must be left in proper position after having been used. Motormen are required to observe the position of all switches and must know that they are properly lined before passing over them. In the instant case, the inspector-switchman overlooked the position of the east siding-switch, which he previously had opened, and its position was not observed by the motorman of No. 317 before his train entered the turnout of the siding. A high target on the stand of the east siding-switch would be

**-9-** 3577

more readily visible from the control compartment of an approaching train, and to employees on the station platform, than the target now in use at that switch, which is displayed at a point below the level of the platform and in close proximity to it.

## Cause

This accident was caused by an open switch.

Dated at Washington, D. C., this twentieth day of July, 1954.

By the Commission, Commissioner Clarke.

(SEAL)

GEORGE W. LAIRD,

Secretary.