# INTERSTATE COMMERCE COMMISSION WASHINGTON

REPORT NO. 3596

THE NEW YORK, CHICAGO AND ST. LOUIS RAILROAD COMPANY

IN RE ACCIDENT

AT GIPSON CITY, ILL., ON OCTOBER 14, 1954

#### SUMMARY

Date: October 14, 1954

Railroad: New York, Chicago and St. Louis

Location: Gibson City, Ill.

Kind of accident: Collision

Equipment involved: Freight train : Cut of cars

Train number: 66

Engine number: Diesel-electric :

units 551 and

541

Consists 56 cars, caboose : 5 cars, caboose

Speeds: 48 m, p, h. : Standing

Operation: Timetable, train orders, and manual-

block system for following move-

ments

Track: Single; tangent; level

Weather. Clear

Time: 11:50 p. m.

Cause: Open switch

## INTERSTATE COMMERCE COMMISSION

### REPORT NO. 3596

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

THE NEW YORK. CHICAGO AND ST. LOUIS RAILROAD COMPANY

# December 2, 1954

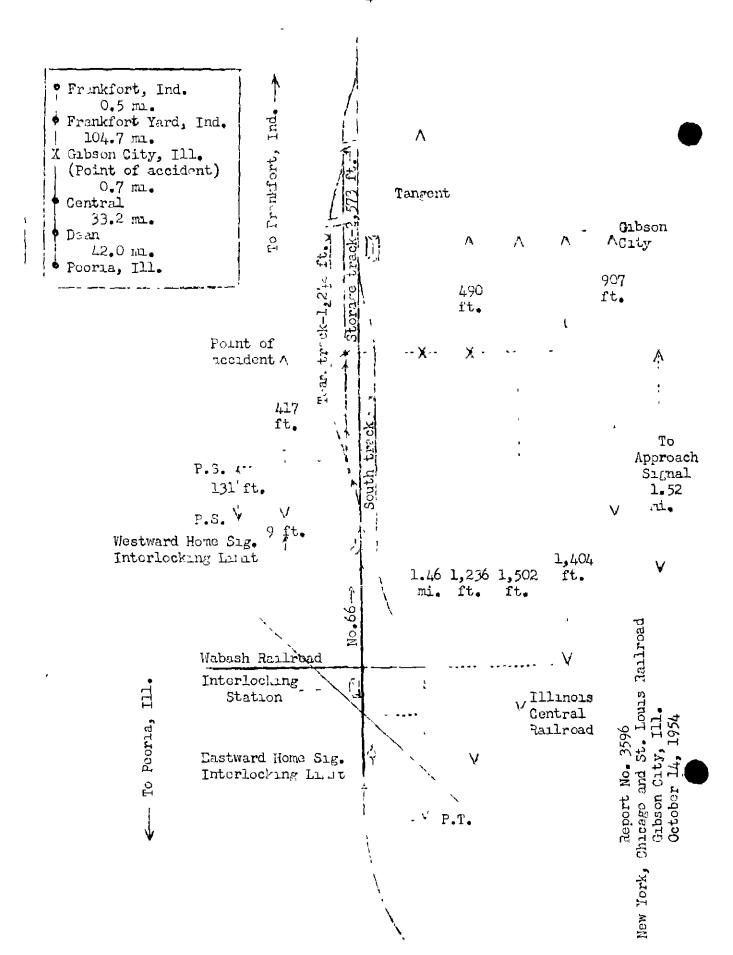
Accident at Gibson City, Ill., on October 14, 1954, caused by an open switch.

# REPORT OF THE COMMISSION

# CLARKE, Commissioner:

On October 14, 1954, there was a collision between a freight train and a cut of cars on the New York, Chicago and St. Louis Railroad at Gibson City, Ill., which resulted in property damage of approximately \$240,000.00. This accident was investigated in conjunction with a representativ 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 Peoria Division extending between Peoria, Ill., and Frankfort, Ind., 181.1 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 a manual-block system for following movements. At Gibson City, 75.9 riles east of Peoria, two auxiliary tracks, designated from south to north as the storage track and the team track, parallel the main track on the north. These tracks are, respectively, 2,573 feet and 1,242 feet in length. west switch of the storage track is located in the main track at a point 907 feet west of the station. It is facing-point for east-bound movements. The west switch of the team track is located in the storage track 151 fect cost of the west switch of that track. In this vicinity an auxiliary track designated as the south track parallels the main track on the south. Intersecting lines of the Illinois Central Railroad and the Wabash Railroad cross the main track at grade at points, respectively, 1,502 feat and 1,404 feet west of the station. These crossings are protected by interlocking signals which are controlled from an interlocking station located between the intersecting lines, on the north side of the main track and adjacent to it. The accident occurred on the storage track at a point 417 feet east of the west switch and 490 feet west of the station. The main track is tangent throughout a distance of 1.46 miles immediately west of the wast switch of the storage track and a considerable distance castward. The turnout at the west end of the storage track is provided with a No. 11 frog. The grade on the main track is practically level at the west switch of the storage track.

Interlocking limits extend between points located 1,236 feet and 426 feet west of the point of accident. The approach and home interlocking signals governing east-bound movements on the main track are located, respectively, 1.52 miles and 1,236 feet west of the point of accident. The pertinent night aspects and the corresponding indications and names are as follows:

<u>Signal</u>	Night Aspect	<u>Indication</u>	Name
Approach	Green	Proceed.	Clear.
Home	Green-over- red	Proceed.	Clear.

The controlling circuits are so arranged that track occupancy is indicated by these signals only when the main track within interlocking limits is occupied. The switch at the west end of the storage track is located 9 feet east of the interlocking limit at the westward home signal.

The switch stand at the west end of the storage track is of the low-stand ground-throw type. It is located 7 feet 2 inches north of the center-line of the track. equipped with both red and white targets of the flanged , collar type which are fitted around the red and the green lenses of the oil-burning switch lamp with which the stand is provided. The centers of the lenses are 12-1/2 inches above the level of the tops of the rails. When the switch is lined for entry to the storage track the red target and a red light are displayed in the direction of approaching trains, and when the switch is in position for movement on the main track the white target and a green light are similarly displayed. Keepers of the latch stand type, so designed that the latch may be released by pressure on a pedal, are provided. A padlock is provided for securing the latch of the keeper when the operating lever of the switch is in normal position.

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

### DEFINITIONS.

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

Note. -- The definition of a "Fixed Signal" covers such signals as switch \* \* \* or other means for displaying indications that govern movement of a train or engine.

27. A signal imperfectly displayed, or the absence of a signal at a place where a signal is usually shown, must be regarded as the most restrictive indication that can be given by that signal \* \* \*

Engine and train crews using a switch where the switch light is imperfectly displayed or absent, must, if practicable, correct or replace the light.

A signal imperfectly displayed or the absence of a signal at a place where a signal is usually shown must be promptly reported to the Chief Train Dispatcher.

104. Conductors are responsible for the position of switches used by them and their trainmen, except where switchtenders are stationed. Switches must be properly lined after having been used, and main track switches must also be locked.

\* \* \*

When practicable, the engineman must see that the switches near the engine are properly lined.

\* \* \*

The maximum authorized speed for freight trains in the vicinity of the point of accident is 49 miles per hour.

# Description of Accident

No. 66, an east-bound second-class freight train, consisted of Diesel-electric units 551 and 541, coupled in multiple-unit control, 56 cars, and a caboose. This train departed from Dean, 33.9 miles west of the point of accident and the last open office, at 11.05 p.m., 2 hours 35 minutes late, passed the eastward approach and the eastward home signals of the interlocking at Gibson City, each of which indicated Proceed, and while moving at a speed of 48 miles per hour the front end of the train entered the storage track and collided with a cut of cars which consisted of two freight cars, a caboose, and three freight cars, in the order named, at a point 417 feet cast of the west switch.

The Diesel-electric units and the first 26 cars of No. 66 were derailed. The first Diesel-electric unit stopped unright, off its tracks, with the front end on the main track and 250 feet east of the point of collision, and the mean end on the storage track. The second Diesel-electric unit stopped approximately in line with the storage track. It leaned toward the north at an angle of approximately 25 degrees. Both Diesel-electric units were badly damaged. The derailed cars stopped in various positions on or near the storage track and the adjacent tracks. The first to the fifth cars and the seventh to the eleventh cars, inclusive, were destroyed, and the other derailed cars of this train were somewhat damaged. The two westerly cars and the caboose in the cut of cars on the storage track were demolished. Six cars on the south track were derailed and damaged, and a Diesel-electric unit and two cars on the team track were struck and damaged by derailed equipment of No. 66.

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The weather was clear at the time of the accident, which occurred about 11.50 p. m.

Diesel-electric units 551 and 541 are of the road-switcher type.

# Discussion

As No. 66 was approaching the point where the accident occurred the speed was about 48 miles per hour, as indicated by the tape of the speed-recording device. The enginemen were maintaining a lookout ahead from the control compartment of the first Diesel-electric unit. The front brakeman and the flagman were in the control compartment of the second Diesel-electric unit, and the conductor was in the caboose. The fireman, a qualified engineer, was operating the locomotive. The headlight was lighted brightly and the oscillating signal light was lighted. The brakes of this train had been tested and had functioned properly when used The eastward approach and home signals of the interlocking at Gibson City each indicated Proceed, and the indications were called by the enginemen. The engineer, who was seated in the fireman's position in the control compartment, said that he directed his attention to the interlocking station as the train closely approached it and he observed the operator give a proceed signal as the locomotive passed. The fireman said that as the locomotive approached the interlocking the switch lights which were visible from his position in the control compartment indicated that the switches were in normal position. He sounded the grade-crossing whistle signal for street crossings and momentarily reduced the throttle as the locomotive passed over the railroad crossings et the interlocking. The members of the crew on the locomotive did not observe the position of the switch at the west end of the storage track. When the front end of the locomotive entered the storage track the fireman immediately placed the brake valve in emergency position and closed the throttle. According to the tane of the speed-recording device, the collision occurred before the speed was appreciably reduced.

After the accident occurred it was found that the west switch of the storage track was lined for entry to that track. The switch padlock was unlocked and lay on the tie adjacent to the keeper which secures the operating lever when the switch is lined in normal position. The switch lamp was not lighted. When the lamp was examined a heavy deposit of carbon was found on the burner. When the burner was freed of this deposit and the switch lamp was lighted it burned properly. The section foreman in charge of this section said that the switch lamp was last filled and serviced October 8, 1954,

and that he had received no report that the light was extinguished. He said that it was the practice to service switch lamps on Friday of each week.

The investigation disclosed that the switch at the west end of the storage track was used by the crew of Extra 542 West about 5 hours 55 minutes before the accident occurred. This train departed from Frankfort Yard, Ind., 104.7 miles east of the point of accident, at 6:59 a. m., performed switching service at various points en route, and arrived at Gibson City, its western terminus, at 1:40 p.m. After the caboose and the rear two cars were placed on the storage track, the locomotive was detached and proceeded westward to perform switching service. Several hours later it returned from Central, 0.7 mile west of the noint of accident, with four cars of stock destined to Gibson City. The locomotive, which was headed westward and moving in backward motion. was coupled to the west end of the cut of cars. At Gibson City the locomotive was stopped while the front brakeman alighted from the east end of the cut of cars and lined the west switch for entry to the storage track, and it was stopped a second time while he lined the switch for entry to the team The cars were then placed for unloading on the team The front brakeman said that after the cars were placed track. the conductor detached the locomotive and instructed him that it was to be left on the team track. The brakeman said that he then restored the west switch of the team track to normal position, then proceeded to the west switch of the storage track and lined and locked it in position for movement on the main track. He said that the switch lamp appeared to be lighted and he observed that the switch points were in proper position after he lined the switch. The conductor said that after he detached the locomotive he observed the frort brakeman restore the west switch of the team track to normal position and proceed toward the west switch of the storage track. He observed later that the switch appeared to be lined for movement on the main track. The switch lamp was not lighted at that time, but he made no report of that condition and he did not attempt to light it. He said that when the members of the train crew returned to the caboose he inquired as to the position of this switch and the front brakeman informed him that it had been restored to normal position. The flagman said that he was not in the vicinity of the switch after the locomotive returned from Central and he did not observe the position of the switch. The engineer said that after the placement of the cars was completed he observed the front brakeman restore the team-track switch to normal position and proceed toward the west switch of the storage track.

He said that during the evening he twice passed this switch at a distance of approximately 15 feet and that the position of the target indicated to him that the switch was lined for movement on the main track. The members of the train crew and the fireman went off duty at 6 p. m. The engineer went off duty at 6:15 p. m. There were no movements over the switch between the time Diesel-electric unit 542 moved from the main track to the team track and the time No. 66 arrived.

# Cause

This accident was caused by an open switch.

Dated at Washington, D. C., this second day of December, 1954.

By the Commission, Commissioner Clarke.

(SEAL)

GEORGE W. LAIRD,

Secretary.