

INTERSTATE COMMERCE COMMISSION
WASHINGTON

INVESTIGATION NO. 2931
WABASH RAILROAD COMPANY
REPORT IN RE ACCIDENT
AT MANHATTAN, ILL., ON
SEPTEMBER 15, 1945

SUMMARY

Railroad: Wabash

Date: September 15, 1945

Location: Manhattan, Ill.

Kind of accident: Collision

Equipment involved: Passenger train : Motor-truck

Train number: 18 :

Engine number: 661 :

Consist: 7 cars :

Estimated speed: 65 m. p. h. : 2 m. p. h.

Operation: Timetable, train orders and
automatic block-signal system

Track: Single; tangent; 0.31 percent
descending grade northward

Street: Tangent; crosses track at angle
of 46°08'; practically level

Weather: Clear

Time: 6:29 a. m.

Casualties: 3 killed; 7 injured

Cause: Motor-truck being driven upon
highway grade crossing imme-
diately in front of approaching
train

INTERSTATE COMMERCE COMMISSION

INVESTIGATION NO. 2931

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

WABASH RAILROAD COMPANY

October 24, 1945.

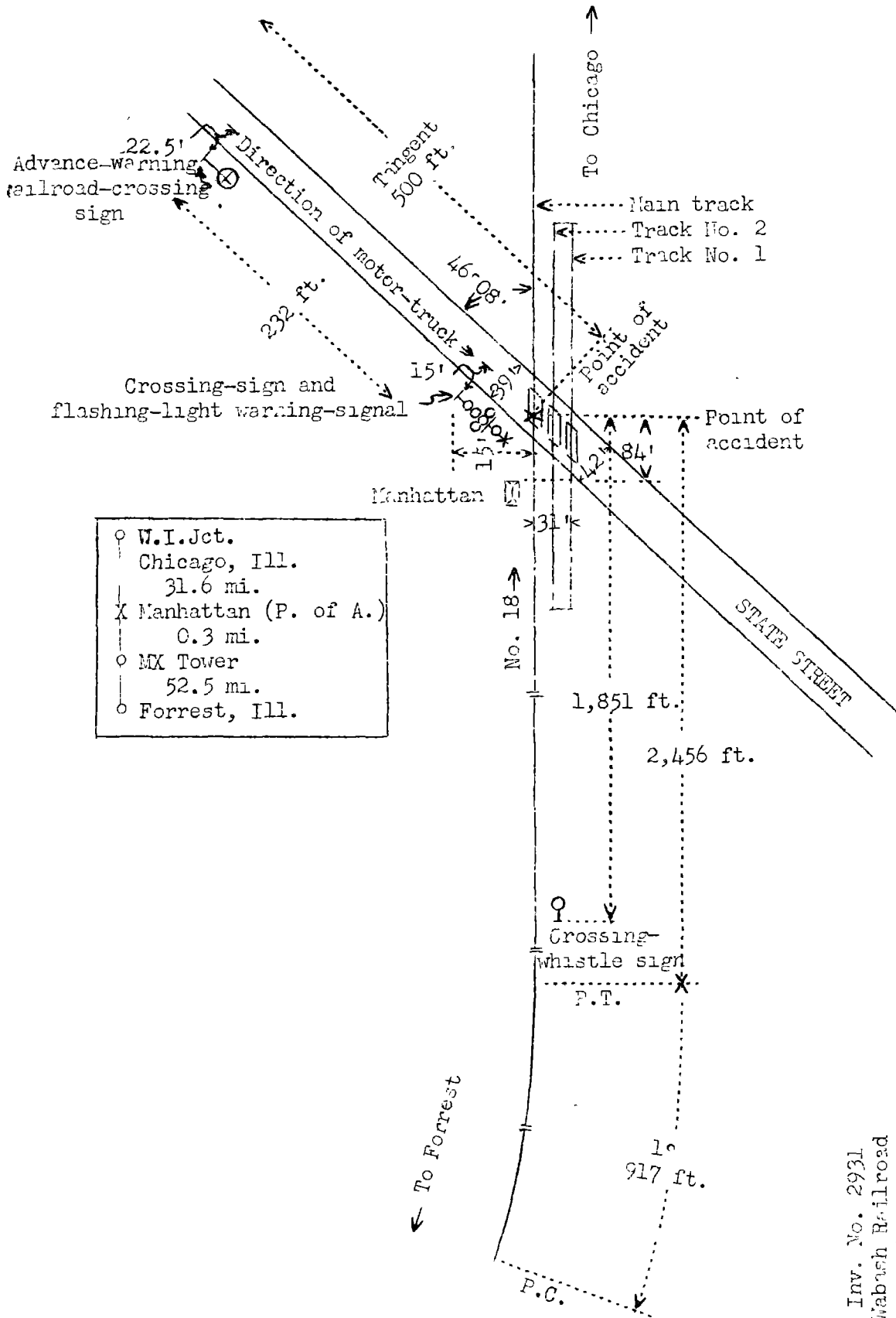
Accident at Manhattan, Ill., on September 15, 1945, caused
by a motor-truck being driven upon a highway grade
crossing immediately in front of an approaching train.

REPORT OF THE COMMISSION¹

PATTERSON, Commissioner:

On September 15, 1945, there was a collision between a passenger train on the Wabash Railroad and a motor-truck at a highway grade crossing at Manhattan, Ill., which resulted in the death of two train-service employees and the truck driver, and the injury of seven passengers.

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.



Inv. No. 2931
Wabash Railroad
Manhattan, Ill.
September 15, 1945

Location of Accident and Method of Operation

This accident occurred on that part of the Decatur Division which extends between Forrest and W.I. Jct., Chicago, Ill., 84.4 miles, a single-track line in the vicinity of the point of accident, over which trains are operated by timetable, train orders and an automatic block-signal system. The accident occurred 52.8 miles north of Forrest, at a point 84 feet north of the station at Manhattan, where the railroad is crossed at grade by State Street. From the south on the railroad there is a 1° curve to the left 917 feet, which is followed by a tangent 2,456 feet to the point of accident and a considerable distance northward. The grade is 0.31 percent descending northward.

State Street intersects the railroad at an angle of 46°08'. From the west the street is tangent about 500 feet to the crossing and a considerable distance eastward. The grade is practically level. At the crossing two auxiliary tracks, hereinafter referred to from east to west as track No. 1 and track No. 2, parallel the main track on the east. West of the crossing, State Street is surfaced with concrete to a width of 18 feet. The crossing over the main track is 34 feet wide, and over tracks Nos. 1 and 2 it is 42 feet wide. The distance from the west rail of the main track to the east rail of track No. 1 is about 31 feet. The area between the rails of the main track and track No. 2 is surfaced with 1 plank inside each rail and asphaltum between the planks, and there is one plank outside each rail. The area between the rails of track No. 1 and 1 foot outside each rail is surfaced with scrap rails laid parallel to the rails of the track. The remainder of the surface of the crossing is paved with concrete.

An advance warning railroad-crossing sign is located 247 feet west of the main track and 22.5 feet south of the center-line of the street. This sign is a disc 2 feet in diameter, mounted on a mast 4 feet 6 inches above the level of the Street. It bears a horizontal line and a vertical line intersecting at right angles at its center, and bears the letters "R.R." in black and in colorless reflector buttons on a yellow background. A standard cross-buck railroad-crossing sign is located to the right of the direction of east-bound traffic, 15 feet south of the center-line of the street and 15 feet west of the center-line of the main track. This sign is mounted on a mast, 11.5 feet above the level of the street, and bears the words "RAILROAD CROSSING" in black letters and in colorless reflector buttons on a white background. Immediately below the cross-buck sign there are four hooded lamps attached to the mast in vertical position. The distance between the centers of the lenses is 1 foot 4 inches. A horizontal bar is mounted on the mast between the first and second vertical lamps, and a hooded lamp is attached to each end of this bar. The center of the lens of each lamp is 8 feet above the level of the street. When a north-bound train is occupying any portion of the main track within a distance of 2,929 feet south of the crossing, the word "STOP" in

red is continuously displayed by the vertical lamps, and the horizontal lamps flash red lights alternately. A crossing-whistle sign for north-bound trains is located 1,851 feet south of the crossing.

Operating rules read in part as follows:

14. Engine Whistle Signals.

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

Sound.	Indication.
* * *	
(l) ___ o ___	Approaching public crossings at grade. To be prolonged or repeated until crossing is occupied by engine or car. * * *
* * *	
(q) Succession of short sounds.	Alarm * * *
* * *	

Article XII, of the 1941 Revised Motor Vehicle Laws of Illinois, read in part as follows:

84. Certain Vehicles Must Stop at all Railroad Grade Crossings. --(a) The driver of any motor vehicle * * * carrying explosives or flammable liquids as a cargo or part of a cargo, before crossing at grade any track or tracks of a railroad, shall stop such vehicle within 50 feet but not less than 10 feet from the nearest rail of such railroad and while so stopped shall listen and look in both directions along such track for any approaching train, and for signals indicating the approach of a train, * * * and shall not proceed until he can do so safely.

* * *

The maximum authorized speed for the train involved was 80 miles per hour.

Description of Accident

No. 18, a north-bound first-class passenger train, consisted of engine 661, one refrigerator-express car, one express car, one baggage car, one passenger-baggage car, one coach, one chair car and one Pullman parlor car, in the order named. The first and second cars were of steel-underframe construction, and the remainder were of all-steel construction. This train passed MX Tower, 0.3 mile south of the point of accident and the last open office, at 6:28 a. m., 4 minutes late, and while moving at an estimated speed of 65 miles per hour it struck a motor-truck on a grade crossing 84 feet north of the station at Manhattan.

The motor-truck involved consisted of a tractor, a semi-trailer and a trailer, and was owned and operated by James A. Hannah, Inc., Chicago, Ill. The driver, who was the sole occupant, held Illinois chauffeur's license 38005. The tractor was a 1944 DC-100-T Autocar, equipped with a 6-cylinder Diesel motor, and bore Illinois license No. 8191. It weighed 6,500 pounds, and was equipped with dual tires on the rear wheels, and provided with an enclosed cab. The tractor was hauling a semi-trailer and a trailer, in the order named, each of which had dual tires on its wheels, and each was provided with a steel tank. The combined weight of the semi-trailer and the trailer was 13,500 pounds. The semi-trailer bore Illinois license No. J-8-291, and the trailer bore Illinois license Z-478. Each unit was equipped with air-operated brakes. The overall length of the three units was 43 feet. At the time of the accident the cargo of each tank consisted of 4,000 gallons of gasoline. This vehicle was moving eastward on State Street at an estimated speed of 2 miles per hour when it proceeded upon the crossing, and the trailer was struck by No. 18.

The trailer was torn loose from the semi-trailer. The tractor and the semi-trailer, remaining coupled, continued eastward a distance of about 180 feet. The trailer was demolished in the collision, the tank was punctured and escaping gasoline became ignited. No. 18 was not derailed, and it stopped with the front end of the engine 1,945 feet north of the crossing. The front end of the engine was damaged in the collision, and the engine and the cars were considerably damaged by fire.

It was clear at the time of the accident, which occurred about 6:29 a. m.

The engineer and the fireman were killed.

During the 30-day period preceding the day of the accident, the average daily movement over the crossing was 18.8 trains. During the 24-hour period beginning at 12:01 a. m., September 20, 1945, 1,173 automobiles, 293 trucks and 19 trains passed over the crossing.

Discussion

No. 18 was approaching the crossing at a speed of about 65 miles per hour in territory where the maximum authorized speed was 80 miles per hour. The members of the train crew were in various locations throughout the cars of the train. The first these employees were aware of anything being wrong was when the brakes were applied in emergency immediately prior to the collision. The brakes of this train had been tested and had functioned properly en route. It could not be determined when the enginemen first became aware that the motor-truck had entered upon the crossing, as they were fatally burned in the accident. Apparently, a lookout was being maintained as several residents in the vicinity of the crossing heard the whistle signal sounded for the crossing, and immediately afterward several short blasts of the whistle were sounded. Examination after the accident disclosed that the automatic brake valve was in emergency position, the throttle was closed, the bell ringer valve was open and the headlight switch was in position for bright illumination.

The driver of the motor-truck was fatally burned in the accident. He was an experienced driver and had made many trips over the crossing prior to the accident. A witness, who was about 200 feet west of the crossing when the accident occurred, said that the crossing signal was illuminated when the motor-truck entered upon the crossing without stopping. Another witness said that the motor-truck stopped short of the crossing, then immediately proceeded and entered upon the crossing. At that time, the crossing signal was illuminated and the engine whistle was being sounded. In tests after the accident the crossing signal functioned properly.

The laws of the state of Illinois governing the operation of motor vehicles require that a vehicle transporting explosives or inflammable liquids must stop before it proceeds upon a railroad track, and must not proceed unless it is safe to do so. Considering the speed of No. 18 and the length of the controlling circuit of the warning signal, the signal would be actuated about 30 seconds before the accident occurred. From this it is evident that the highway signal was displaying warning of the approach of a train before the front of the motor-truck passed the signal.

Cause

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

Dated at Washington, D. C., this twenty-fourth day of October, 1945.

By the Commission, Commissioner Patterson.

(SEAL)

W. P. BARTEL,
Secretary.