

## INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY CONCERNING AN  
ACCIDENT AT THE INTERSECTION OF THE TRACKS OF THE ILLINOIS  
CENTRAL RAILROAD AND THE CHICAGO AND EASTERN ILLINOIS  
RAILWAY AT MARION, ILL., ON AUGUST 3, 1933.

December 6, 1933.

To the Commission:

On August 3, 1933, there was a side collision between a mixed train of the Illinois Central Railroad and a passenger train of the Chicago and Eastern Illinois Railway at Marion, Ill., which resulted in the injury of two employees.

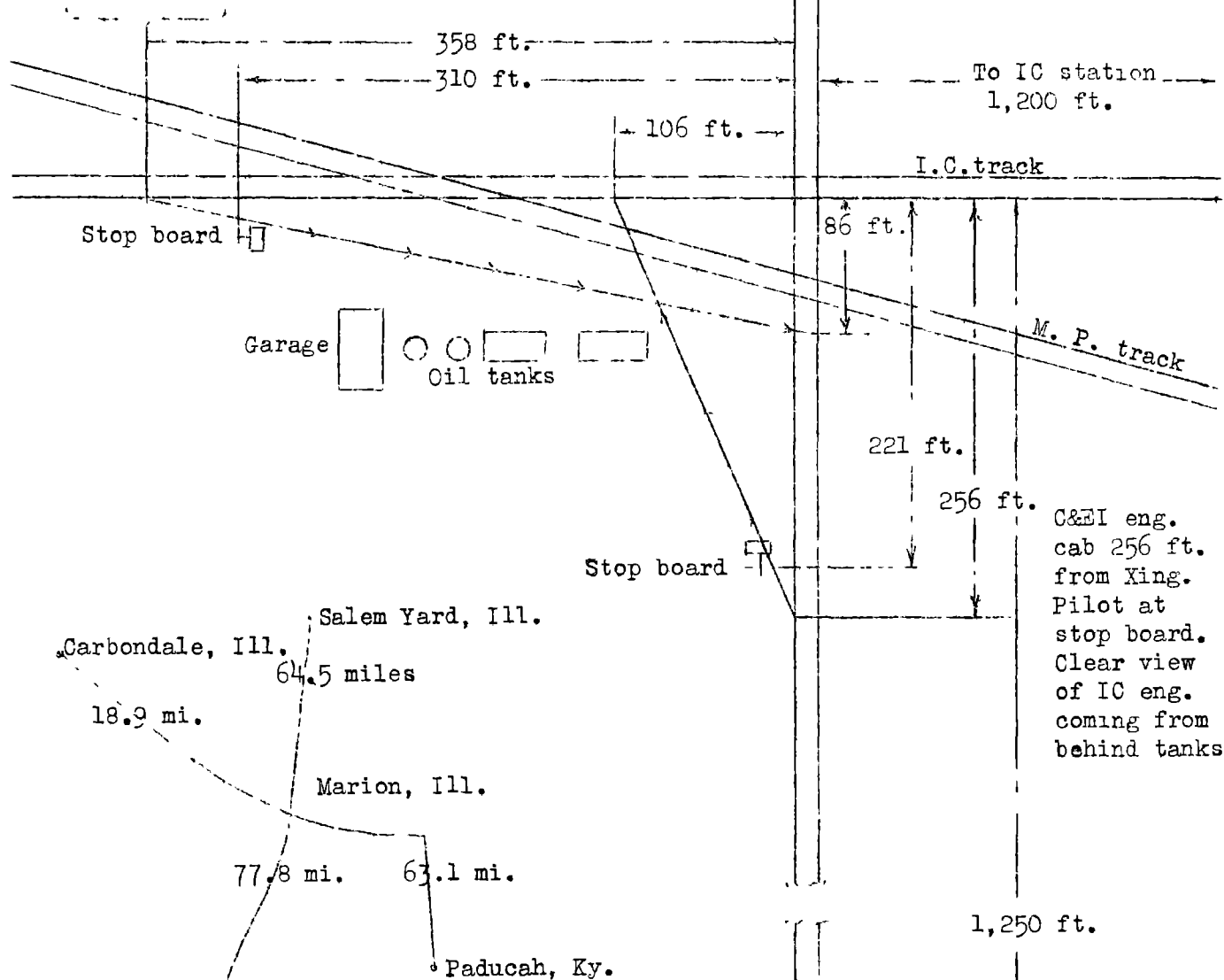
## Location and method of operation

This accident occurred at the intersection of the tracks of the Carbondale District of the St. Louis Division of the Illinois Central Railroad, hereinafter referred to as the IC, extending between Carbondale, Ill., and Paducah, Ky., a distance of 82 miles, and that part of the Salem District of the Illinois Division of the Chicago and Eastern Illinois Railway, hereinafter referred to as the C&EI, extending between Salem Yard, Ill., and Chaffee, Mo., a distance of 142.7 miles. Each railroad is a single-track line over which trains are operated by time table and train orders, no block-signal system being in use. Time-table directions on both lines are north and south, but at the intersection the IC tracks run east and west by compass directions while the C&EI tracks run north and south. These tracks cross at right angles at a point about 1,250 feet north of the C&EI station and 1,200 feet west of the IC station. Approaching the crossing from either direction on each railroad the tracks are tangent. Approaching the crossing from the west on the IC, the track is level for a distance of about 1,100 feet followed by an ascending grade of 0.2 percent for a distance of 800 feet to the point of accident; the grade for north-bound trains on the C&EI tracks is 0.65 percent ascending for a distance of 1,000 feet to the point of accident.

There are no signals at this crossing, the only protection afforded consisting of stop signs; the sign for south-bound IC trains is located on the south side of the track 310 feet west of the crossing, while the stop sign for north-bound C&EI trains is located on the west side of the track 221 feet south of the crossing. These stop signs also govern the crossing on each line of a Missouri Pacific track which cross at an angle from the northwest to the southeast. The stop board on the C&EI is black with white letters and has a lamp just above it, while the board on the IC line is unpainted, the letters being completely obliterated.

IC eng. cab 358 ft. from  
Xing. Pilot at stop  
board. Clear view  
of C&EI engine 86 ft.  
from crossing.

C. & E. I. track



C&EI eng.  
cab 256 ft.  
from Xing.  
Pilot at  
stop board.  
Clear view  
of IC eng.  
coming from  
behind tanks

Inv. No. 1841  
Illinois Central RR  
Chicago & Eastern Illinois Ry  
Marion, Ill.  
August 3, 1933.

Due to buildings and oil tanks of the Mid-Continent Oil Company being located in the southwest corner of the crossing, the views had by the engineman of a south-bound IC train and the fireman of a north-bound C&EI train are considerably restricted. When an engine of an IC train is at the stop board 310 feet from the crossing, the engineman is unable to see a north-bound C&EI train until that train reaches a point 86 feet south of the crossing; with the engine of a C&EI train at the stop board 221 feet from the crossing, the fireman is unable to see a south-bound IC train until it reaches a point 106 feet west of the crossing. As each train approaches the crossing the view of the other track gradually lengthens.

The weather was clear at the time of the accident, which occurred about 8:08 a.m.

#### Description

South-bound IC mixed train no. 341 consisted of 25 freight cars, 1 mail compartment car, and 1 combination baggage car and coach, hauled by engine 1806, and was in charge of Conductor Brownlee and Engineman Gourley. This train departed from Cartersville, 8.7 miles from Marion, at 7:47 a.m., according to the train sheet, 48 minutes late, stopped at the stop board 310 feet west of the crossing at Marion, and then proceeded at a speed estimated to have been between 5 and 10 miles per hour, but had practically stopped on the crossing when it was struck by C&EI train no. 122.

North-bound C&EI passenger train no. 122 consisted of 1 combination mail and baggage car and 1 combination smoking and chair car, hauled by engine 216, and was in charge of Conductor Cotton and Engineman Deffenbaugh. This train departed from Cypress, 28.7 miles from Marion, at 7:15 a.m., according to the train sheet, on time, stopped at the station at Marion, and then at the stop board at the crossing, and collided with IC train no. 341 while traveling at a speed variously estimated to have been between 4 and 17 miles per hour.

The C&EI engine struck the front end of the IC engine, shoving it northward off the track about 18 feet, and damaging the right cylinder and piston head of the IC engine; none of the other equipment in the IC train was derailed or damaged. The front end of the C&EI engine was derailed to the right, the engine track being knocked out from under the engine, but the trailer truck remained on the track. The employees injured were the engineman of the IC train and the conductor of the C&EI train.

### Summary of evidence

Engineman Gourley, of IC train no. 341, stated that when he stopped at the stop board the fireman called "all clear on the north"; the engineman's view was very much restricted on the south by the oil tanks but there was an opening between the buildings through which he could see the C&EI track and at that point the track was clear. He sounded two blasts on the whistle and had proceeded a distance of about 180 feet, and had attained a speed of 8 or 10 miles per hour, when he saw the smoke from the C&EI engine over the top of one of the oil tanks. As his engine passed the tanks he had a clear view and saw the C&EI train, which was then about 180 or 200 feet from the crossing, with the engine working steam, and from the sound of the exhaust he estimated its speed to have been 15 or 17 miles per hour. Seeing no one in the cab, he realized that that train was not going to stop and he immediately closed his throttle, applied the air brakes in emergency and slid off his seat, blowing the whistle to attract attention. He thought that his train either was traveling at a very low rate of speed or had practically stopped at the time of the accident, although he did not think that he got an emergency application of the brakes on the entire train as he felt a lunge which indicated that the rear of the train had surged against the front portion. Engineman Gourley did not at any time hear a whistle sounded by the other engine or the bell ringing. He was quite positive that at the time he left the stop board the C&EI track was clear between its stop board and the crossing, as had there been a train there it would have reached the crossing before he did, and also he would have seen the smoke rising above the buildings. When two trains arrive at the same time, it is the custom for the passenger train to be given preference over the crossing, and in the case of trains of the same class, the train which arrives first has the preference. The brakes on his train had been tested at Carbondale and three stops were made en route, the brakes working properly on each occasion.

Fireman Reeves, of IC train no. 341, stated that after his train had stopped at the stop board and then had reached a point about half way to the crossing, he heard the C&EI train whistle for the crossing and from the sound of the exhaust he thought that the train was just starting, assuming that it had stopped at the stop board, but on hearing the engine work steam he crossed over to the engineman's side of the cab and saw the C&EI train approaching just as his own train passed the oil tanks, his engineman apparently saw the train at the same time, as he was applying the air brakes in emergency.

Head Brakeman Miller, of IC train no. 341, stated that as his engine was passing over a highway crossing located about 50 feet east of the stop board he heard a proceed signal sounded

by a train on the C&EI track, which was nothing unusual; he was unable to state its location. He crossed to the engineman's side preparatory to getting off at Marion, saw smoke and heard an engine working steam, and as soon as he had a clear view of the C&EI track he saw the train approaching at a speed of about 8 or 9 miles per hour; the C&EI train then was about 100 feet from the crossing, and he did not think its speed was reduced prior to the time of the accident.

Engineman Deffenbaugh, of C&EI train no. 122, stated that leaving the station at Marion he was practically on time; he made the usual stop at the stop board, sounded two long blasts on the whistle, and proceeded. The fireman was on his seat box and told him that the way was clear on the left side. The engineman did not pay any attention to what the fireman was doing after that time and could not say when he left his seat box, but just as his engine reached the crossing he heard one blast of the whistle on the IC train and the fireman, who was then on the deck of the engine, called to him to stop; he immediately applied the air brakes in emergency, the accident occurring as he did so; he estimated the speed of his train to have been 6 or 8 miles per hour. Engineman Deffenbaugh stated that he did not hear the IC train whistle off nor did he hear its engine working steam, and at no time was he in position to see the train as he was looking ahead from his own side of the cat. Before leaving Cypress that morning the air brakes were tested, and a running test also was made on leaving that point; the brakes were working properly. While Engineman Deffenbaugh stated that he was an extra man at this time and was not familiar with the restricted view at the crossing at Marion, he had operated trains over this district on several occasions during the last two or three months, the last trip having been made about a week or 10 days before the occurrence of the accident.

Fireman Hatfield, of C&EI train no. 122, stated that very soon after leaving the stop board he got off his seat box to put in a fire and did not again look ahead to see if the track was clear, nor did he hear the IC train approaching until he heard its engine whistle just before the accident occurred, and he at once called to his engineman to stop. Fireman Hatfield stated that while he was an extra fireman, he was familiar with this territory and that had he remained on the seat box he no doubt would have seen the approaching IC train in time to have warned the engineman and thus have prevented the accident. He estimated the speed of his train at the time of the accident to have been 4 or 5 miles per hour.

Several other witnesses stated that the C&EI train stopped for the crossing, and there also were several others who said that the IC train made a similar stop.

## Conclusions

This accident was caused primarily by the failure of Fireman Hatfield, of C&EI train no. 122, to maintain a proper lookout while approaching a railroad crossing at grade; contributing causes were the failure of Engineman Deffenbaugh, of C&EI train no. 122, and Engineman Gourley, of IC train no. 341, to approach the crossing with their trains under full control.

The view is considerably obstructed when approaching this crossing on both of the intersecting tracks; no signal or interlocking protection is provided and safety of operation over the crossing depends upon engineman knowing that the track is clear. Had Fireman Hatfield maintained a constant look-out from his side of the cab after advising Engineman Deffenbaugh that the way was clear he could have discovered that the opposing train was approaching the crossing and have warned his engineman in time to avert the accident. Engineman Deffenbaugh should have seen to it that his fireman was maintaining a proper lookout. From the evidence, and the fact that neither train could stop before reaching the crossing, it is apparent that neither engineman was approaching the crossing under such control that he was prepared to stop unless the track was clear, as required by the rules and in accordance with the provision of the state law which requires that before proceeding an engineman must positively ascertain that the way is clear and that his train can safely resume its course.

The laws of the State of Illinois require all trains to stop before passing over railroad crossings at grade and the rules of each of the railroads here involved provide that where required by law, trains and engines must stop. The evidence indicates that each train made the required stop, but that the IC train was the first to stop and then proceed toward the crossing, for it is obvious that this 27-car train would take more time in traveling 310 feet from its stop board to the crossing than would be consumed by the C&EI 2-car train in moving 221 feet. The maintenance of a proper lookout by the fireman of the C&EI train undoubtedly would have prevented the accident, but at the same time it is believed that because of the obstructed view and the absence of signal protection a flagman should be sent ahead after the required stop has been made; such a procedure would not result in increased expense or delay, and should be adopted unless these railroads, together with the Missouri Pacific, install an interlocking plant for the purpose of protecting not only the crossing involved but also the crossings of the Missouri Pacific in the immediate vicinity.

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Respectfully submitted,  
W. P. BORLAND  
Director.