## INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN REINVESTIGATION OF AN AUGIDENT WHICH OCCURRED ON THE WABASH RAILWAY NEAR CHICAGO RIDGE, ILL., ON MAY 6, 1931.

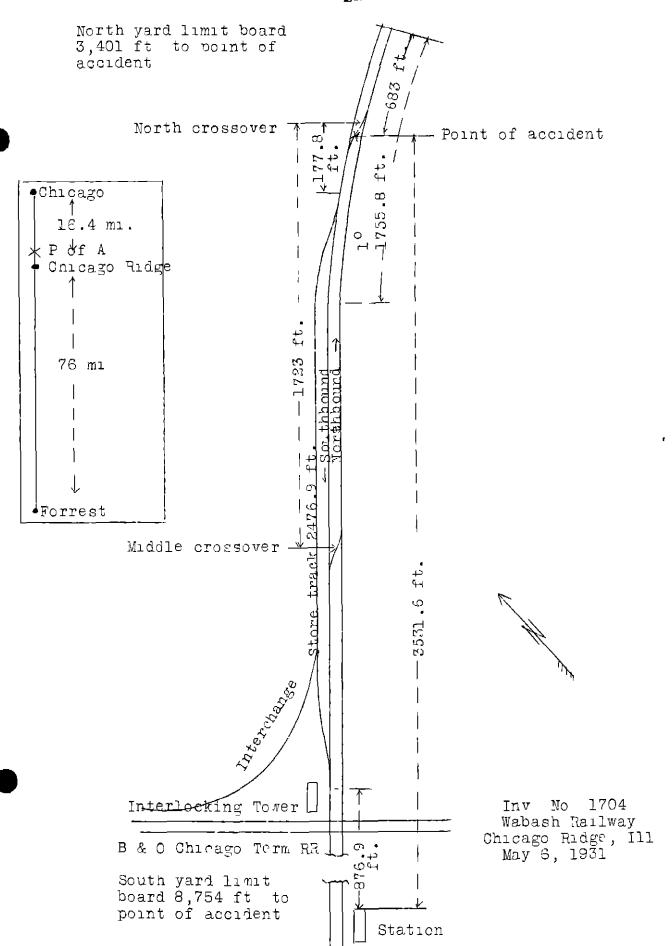
June 13, 1931.

To the Commission:

On May 6, 1931, there was a side collision between two freight trains on the Wabash Railway near Chicago Ridge, Ill., which resulted in the death of two employees. The investigation of this accident was made in conjunction with a representative of the Illinois Commerce Commission.

Location and method of operation

This accident occurred on that part of the Decatur Division extending between Chicago and Forrest, Ill., a distance of 92.4 miles, in the vicinity of the point of accident this is a double-track line over which trains are operated by time-table, train orders, and a manual block-signal system. The accident occurred within yard limits, at the fouling point of a trailing point crossover between the two main tracks, 3,531.6 feet north of the station at Chicago Ridge and 177.8 feet north of the north switch of a store track. Approaching this point from the south, the track is tangent for more than  $1\frac{1}{2}$ miles, followed by a 1° curve to the right 1,755.8 feet in length, the accident occurring on this curve approximately 683 feet from its northern end. The grade is level at the point of accident, and there was nothing to obstruct the view. The store track, 2,476.9 feet in length, parallels the main tracks on the west, the south switch being 876.9 feet north of the station. At a point about 25 feet south of this switch the main tracks are crossed at right angles by the Baltimore and Ohio Chicago Terminal Railroad, leased to and operated by the Indiana Harbor Belt Railway, an interchange road handling cars to and from the various railroads entering the city of Chicago. Cars from the Indiana Harbor Belt Railway are delivered to the Wabash over an interchange track which comes in from the west as a wye and connects with the Wabash store track near its southern end. An interlocking tower governing the crossing of the two roads is located in the northwest angle of the intersection.



The crossover involved is known as the north crossover and is 204 feet in length, another trailing-point crossover, known as the middle crossover, is located 1,723 feet south thereof. Yard-limit boards are located 3,401 feet north and 8,754 feet south of the point of accident. Time-table instructions restrict the speed of dead freight trains to 25 miles per hour, while rule D-93 provides in part that extra trains must move within yard limits prepared to stop unless the main track is seen or known to be clear.

It was raining at the time of the accident, which occurred about 2.56 p.m.

## Description

Southbound freight trains which pick up cars from the store track stop the head end of their train clear of the north crossover, and the engine is then cut off and enters the north end of the store track. At times there are 35 or 40 cars on this track to switch, the cars to be picked up being switched to the southbound track and the other cars being put on the store track, and to perform this work the engine is backed through the north crossover to the northbound track, which is used as a switching lead. After the switching is done, the engine is run southward on the northbound track, through the middle crossover, and onto the southbound track ahead of the cars to be picked up, which are then backed and coupled to the head end of the train left standing on the southbound track clear of the north crossover, and the train departs.

Southbound freight train extra 2721 consisted of 12 empty cars and a caboose, hauled by engine 2721, and was in charge of Conductor Campbell and Engineman Righter. This train arrived at the north crossover at Chicago Ridge at 2.29 p.m., the engine was cut off, headed in on the store track and on through to the interchange track, where 32 cars were coupled. Engine 2721 pulled these cars back to the north end of the store track, out onto the southbound track, through the north crossover, and onto the northbound track. Several switches were made, the cars to be picked up being switched to the southbound track and the other cars back to the store track, and engine 2721 was standing coupled to the rear of 13 cars extending through the north crossover and onto the northbound track, when the sixth or seventh car was struck by northbound extra 2728.

Northbound dead freight train extra 2728 consisted of 42 loaded cars, 9 empty cars, and a caboose, hauled by engine 2728, and was in charge of Conductor Athey and Engineman O'Heir. This train passed Orland Park, Ill., 6.8 miles south of Chicago Ridge, at 2.45 p.m., according to the train sheet, and collided with the cut of cars which were standing on the north crossover at Chicago Ridge while traveling at a speed variously estimated to have been between 30 and 40 miles per hour.

Engine 2728 was derailed to the left and partly overturned, the tender, 17 cars in extra 2728, and 5 cars in extra 2721, were derailed and piled in a heap within a space of approximately 250 feet, 16 of these cars being demolished. Engine 2721 and two cars ahead of it were not derailed nor damaged. The employees killed were the engineman and fireman of extra 2728.

## Summary of evidence

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Enging Righter, of extra 2721, stated that upon the arrival of his train at the north crossover the engine was cut off, entered the store track, pulled back 32 cars, and was switching through the crossover when the fireman called his attention to the approaching train. Engineman Righter said he crossed over to the left side of the engine and saw the train about 75 car-lengths distant, traveling at a speed of 25 or 30 miles per hour. He had just brought his own engine to a stop and it was his opinion that it was driven back about a car-length by the collision, he thought the air brakes were applied on the engine, but said the air was not coupled on the cars. Engineman Righter stated that he had an order to meet extra 2728 on the double track between Ashburn and Orland Park, Chicago Ridge being located between those points. Engineman Righter further stated that his train operates daily, departing from Landers, 5.6 miles north of Chicago Ridge, at 2.30 p.m. and picks up cars en route, the switching performed at Chicago Ridge, in the same manner as on the day of the accident, being a daily practice. The statements of Fireman Maple brought out nothing additional of importance, except that he saw his head brakeman flagging the approaching train.

Head Brakeman Kruger, of extra 2721, stated that while switching the cars through the crossover he heard the whistle sounded on extra 2728; he called to the others that the extra was approaching and started down the track giving stop signals with his time-table, stating that when

he flagged the train he was about 25 or 30 car-lengths from the north crossover and the extra was about 47 or 50 car-lengths from the same crossover, and when the train came to a stop he was two car-lengths from its caboose. He estimated the speed of that train as it passed him to have been about 30 or 35 miles per hour, and could not say whether or not the air brakes were applied, although the engine was working steam up to that time. He thought he heard the engine reversed, but due to the rumble and roar of the train he was unable to state definitely whether this was the case. Head Brakeman Kruger further stated that when he flagged extra 2728 he was near the west rail of the northbound main track, and although there was nothing to prevent the engineman from seeing him, yet the engineman did not answer his flag, the misty rain which prevailed did not obscure his vision.

Conductor Campbell, of extra 2721, stated that he was about 300 feet south of the north crossover when he first saw extra 2728 as it was passing the tower, at which time it was working steam; as it passed him the air brakes were applied and he estimated the speed to have been 35 or 40 miles per hour at the time of the accident. The statements of Flagman Doren, of extra 2721, who was located near the north switch of the crossover just before the occurrence of the accident, added nothing of importance.

Head Brakeman Kilburn, of extra 2728, stated that he was standing by the window on the fireman's side of the engine cab as the train was approaching Chicago Pidge; he could see the interlocking signals in the clear position for a distance of about 1 mile and as they passed the interlocking tower he waved to the operator and when he turned around and faced the front of the engine he saw five or six cars standing on the southbound main track and a brakeman between these cars and the point of accident giving stop signals with a piece of paper, the train having reached a point about half way between the tower and the north crossover when he first saw the cars. He thought the brakeman was about 15 or 20 car-lengths south of the north cross-Brakeman Kilburn immediately called a flag and the fireman answered him; the engineman did not say a word, but immediately applied the air brakes in emergency, and Brakeman Kilourn thought he also shut off Brakeman Kilburn stated that the train was about 20 car-lengths from the north crossover when the air brakes were applied and he estimated the speed of his train to have been about 40 miles per hour and

did not think it had been materially reduced at the time of the collision. Brakeman Kilburn was of the opinion that the cars could have been seen by the engineman from a point opposite the tower but he did not think it could have been determined on which track the cars were standing.

Conductor Athey, of extra 2728, stated that he was riding in the caboose on the left side of the cupola; approaching Chicago Ridge he noticed a reduction in speed, although the air brakes had not been applied and he thought it could have been due to the ascending grade at that particular point, and he did not think the train regained its former speed after that. He estimated the speed at that time to have been 30 miles per hour. the caboose reached the station he saw by the gage that the air brakes had been applied in emergency and he thought possibly the train had broken in two. it was raining slightly, he was of the opinion that the engineman could have seen the cars on the southbound track before reaching the station, or at least at the station, a distance of about 75 car-lengths. Athey stated that Engineman O'Heir was a careful man and had made the southbound pickup movements with him on previous occasions and was familiar with the procedure at that point, and the only explanation he could give for the failure of the engineman to see the train was that possibly he thought the entire train was on the southbound track. Conductor Athey further stated that the car men had made a test of the air brakes at Decatur, their initial terminal; cars were set out and picked up en route and the brake's worked properly, the gage in the caboose showing 70 pounds pressure. It also appeared that his train was running ahead of train No. 24, which was due out of Orland Park, 6.8 miles south of Chicago Ridge, at 2.35 p.m., but was running 20 minutes late; he said his own train passed Orland Park at 2.44 p.m. and that Landers, 5.6 miles beyond Chicago Ridge, was the first point at which it could head in so as to clear train No. 24. The statements of Flagman Stollar practically corroborated those of Conductor Athey. He estimated the speed of his train, however, to have been 40 miles per hour, and also said that at different stops en route he had looked over the train as much as possible and none of the brakes were found sticking.

Car Foreman Buttz, at Decatur, Ill., made a statement that Inspector Anthony inspected extra 2728 before its departure from Decatur and all the cars in the train were found in good condition and the air brakes working properly.

## Conclusions

This accident was caused by the failure of Engineman O'Heir, of extra 2728, to operate his train under proper control within yard limits.

Rule D-93 provides that within yard limits the main tracks may be used protecting against first-class trains; second and third-class and extra trains must move within yard limits prepared to stop unless the main track is seen or known to be clear. Time-table instructions restrict the speed of dead freight trains to 25 miles per hour. The weight of evidence indicates that Engineman O'Heir was operating his train at a speed of 40 miles per hour and made no reduction in speed until he applied the air brakes in emergency at a point estimated to have been about 20 car-lengths from the point of accident. The north crossover at which this accident occurred was more than  $1\frac{1}{3}$  miles from the southern end of the yard and Engineman O'Heir, as well as every member of the crew of his train, was familiar with the switching movement being made by extra 2721, which was a daily run, having made that movement themselves on previous occasions. Extra 2728 was running ahead of train No. 24, the crew having received a train order to the effect that train No. 24 would run 20 minutes late from Orland Park to Landers, and taking this time order into consideration, extra 2728 had 21 minutes in which to reach Landers and clear train No. 24 by five minutes; the distance is 12.4 miles, including 2 miles of yard limits, and Landers was the first point at which extra 2728 could head in. It is believed that this accounts for the fact that Engineman O'Heir was operating his train at an excessive rate of speed within yard limits, and in violation of the speed restrictions for the type of train he was operating, but no definite reason can be offered for his failure to apply the brakes in time to stop, in view of the fact that his vision was unobscured from the station to the point of accident, a distance of 3,531.6 feet, and that nothing was developed to indicate that he was in any way incopacitated. It is possible he thought all the cars were on the southbound track, not realizing that the northbound track was blocked until the brakeman called his attention to the fact that he was being flagged, but as previously indicated, any attempt to asrigh a definite reason for what occurred is mere conjecture.

All of the employees involved were experienced men, and at the time of the accident none of them had been on duty in violation of any of the provisions of the hours of service law.

Respectfully submitted,

W. P. BORLAND, Director.