INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN RE INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE CHICAGO & ERIE RAILROAD AT HUNTINGTON, IND., ON JULY 11, 1930.

August 22, 1930.

To the Commission:

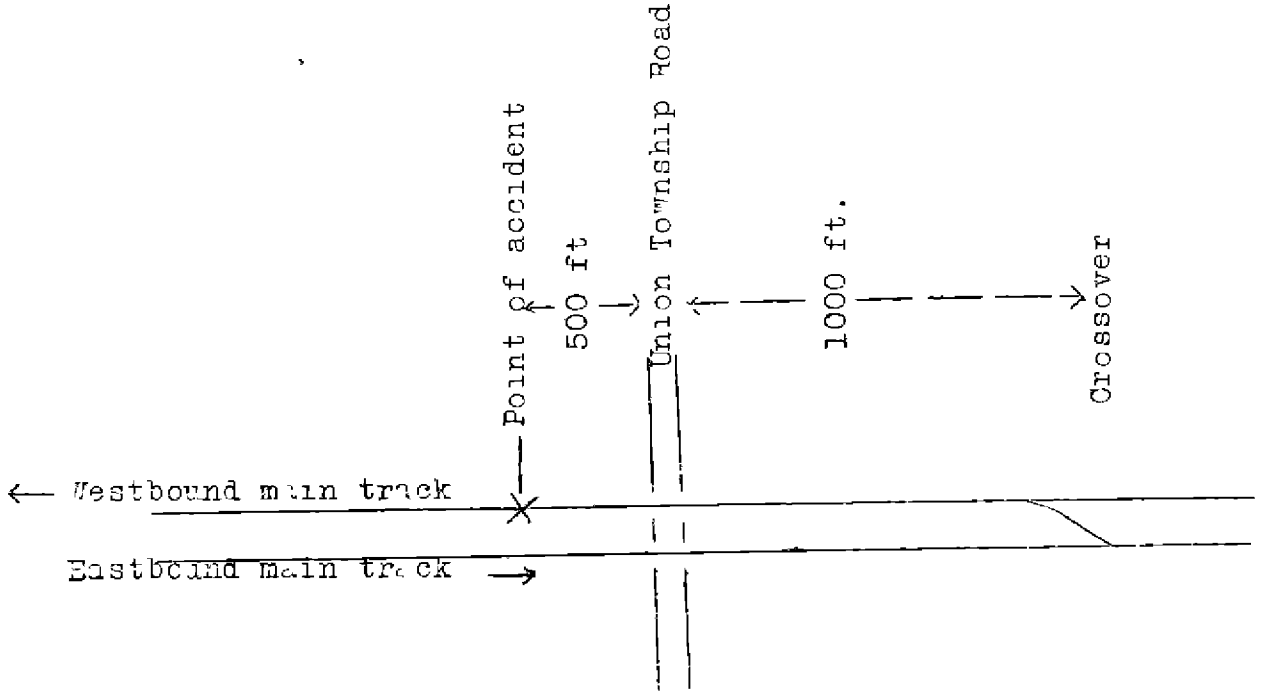
On July 11, 1930, there was a rear-end collision between a freight train and a helper engine on the Chicago & Erie Railroad at Huntington, Ind., resulting in the death of one employee. A representative of the Indiana Public Service Commission participated in the investigation of this accident.

Location and method of operation

This accident occurred on the First Subdivision of the Marion Division, extending between Marion, Ohio, and Huntington, Ind., a distance of 126.6 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 an automatic block-signal system. The accident occurred within yard limits at Huntington in what is known as yard "A", on the westbound main track, at a point about 500 feet west of Union Township Road, or about one-half mile west of the east yard-limit board; approaching the point of accident from the east the track is tangent for about 5,400 feet, this tangent continuing for a considerable distance beyond. The grade for westbound movements is 0.5 per cent descending.

Union Township Road crosses the tracks practically at right angles; at a point about 1,000 feet east of this roadway a crossover extending from northwest to southeast connects the two main tracks.

The weather was clear at the time of the accident, which occurred about 8.30 a.m.



Inv. 1650
Chicago & Erie R. R.,
Huntington, Ind.,
July 11, 1930.

Description

Westbound freight train extra 3087 consisted of 46 loaded and 85 empty cars, 5,379 tons, and caboose 03621, and was in charge of Conductor Bowman and Engineman Wahrer. This train stood on the westbound main track with its rear end about 1,500 feet west of the crossover, the air brakes being set on the entire train. It was intended to change cabooses at this point; helper engine 3106, of the 2-8-2 type, was to set out caboose 03621, attach caboose 03565, and then serve as a pusher in the movement of the train out of Huntington. Accordingly, helper engine 3106, headed west, in charge of Conductor-Flagman Creager and Engineman Ertzinger, with caboose 03565 coupled ahead of it, proceeded eastward on the eastbound main track to the crossover, then shoved the caboose through the crossover to the westbound main track and westward toward the rear end of extra 3087, in order to change cabooses. Instead of a proper coupling being made, however, caboose 03565 collided with caboose 03621 with such force that the caboose platforms were broken.

None of the equipment was derailed, however, both cabooses, which were of wooden underframe construction, were damaged to such an extent that their bodies were ordered destroyed. The employee killed was the conductor of extra 3087.

Summary of evidence

Engineman Ertzinger, of helper engine 3106, stated that he obtained the helper engine at about 8 a.m., at the shop lead track, and that he released the straight air brake and moved the engine off that track to a track in yard "C", located a considerable distance west of yard "A", where caboose 03565 was coupled ahead of the engine; the air brakes were not used at any time while making this coupling, the engine being permitted to drift slowly against the caboose. Helper engine 3106 then backed a short distance eastward with the caboose and a stop was made at the ice house, by use of the straight air brake, from a speed of about 3 or 4 miles per hour, to let Conductor Bowman and Flagman Guthier, of extra 3087, load ice in caboose 03565; in making this stop the brakes seemed to hold properly, although rate of speed was low and the track level. Helper engine 3106 then backed eastward with the caboose to yard "A", and on arrival at the crossover involved, on the eastbound main track, traveling at a low rate of speed on the ascending grade, he closed the throttle and permitted the engine to drift to a stop, after which the engine and caboose were moved a short distance east of the crossover at a very low rate of speed and the air brakes were used to make

the stop and they held properly at this rate of speed. Caboose 03565 was then shoved through the crossover to the westbound main track, continuing thereon. Engineman Ertzinger said that a speed of about 10 miles per hour was attained and that he closed the throttle before reaching Union Township Road, when a point about 200 feet from the rear end of extra 3087 was reached he applied the straight air brake, but it did not seem to hold on the descending grade, when about 150 feet away from extra 3087 he made a service application of the automatic brake and opened the sanders, then he moved the brake valve handle to the emergency position, but this did not seem to do any good. When about 75 feet away, he started to reverse the engine at which time he said the speed was about 4 or 5 miles per hour, but the caboose and engine drifted into the caboose of extra 3087. He said that he did not get the engine reversed completely, only a little by center, and that he did not use any steam. Engineman Ertzinger also stated that Flagman Guthier, who was riding on caboose 03565 with Conductor Bowman, gave violent stop signals before the collision occurred, but the engineman said he had already done everything he could to avert the accident. After the accident Engineman Ertzinger and Fireman Pegan examined the engine brakes and according to their statements the cut-out cock in the brake cylinder pipe was found to be closed; they then opened the cut-out cock and tested the brakes with the automatic and also the straight air brake valve and the brakes worked properly. Engineman Ertzinger further stated that when he obtained helper engine 3106 he backed it out of the shop lead track without trying out the brakes, instead of complying with the rules relative to the operation of the automatic and straight air brakes.

Fireman Pegan, of helper engine 3106, estimated the speed of his engine to have been about 12 miles per hour as caboose 03565 was shoved westward across Union Township Road. He said that the engineman closed the throttle when about 200 feet from extra 3087, but he did not notice when the engineman applied the straight air, although he did notice him open the sanders, apply the automatic brake in emergency and reverse the engine when about 50 feet from extra 3087. Fireman Pegan estimated the speed to have been reduced to about 5 or 6 miles per hour at the time of the impact. Shortly after the accident he noticed that the cut-out cock in the brake cylinder pipe was closed; after it was opened the engineman applied and released the brakes with both the straight and automatic air brake valves, and the brakes worked properly. Conductor-Flagman Creager was at the crossover at the time of the accident, having remained there to attend to the switches.

Flagman Guthier, of extra 3087, who was riding on the north side of the west end of caboose 03565 as it was shoved toward the rear end of his own train by helper engine 3106, stated that after proceeding through the crossover the speed of the helper engine did not exceed 10 miles per hour. Just after passing Union Township Road he noticed that steam had been shutoff and that the engine was drifting. Flagman Guthier gave an "easy" signal to Engineman Ertzinger on nearing extra 3087 and a violent stop signal when about one car length away, then got off just prior to the impact, saying that the speed was reduced to about 5 miles per hour at that time. Flagman Guthier said that it was not customary to cut the air through from the helper engine to the caboose when changing cabooses on trains and that the air was not cut through in this instance. He further stated that Conductor Bowman was standing on the west platform of caboose 03565 with one hand on the brake wheel and the other on the ladder and that he shouted a warning of danger to the conductor immediately prior to the impact.

Engineman Wolverton stated that he arrived at Huntington July 10, in charge of engine 3106, it being the second engine of a double header train. Arriving at the east end of yard "A", the first engine was cut off and he handled the train of 70 loaded and 16 empty cars on to yard track No. 1, occasionally holding the train with the straight air brake, the duplex gauge showing about 45 pounds pressure on brake cylinder, and when the final stop was made he applied the autoratic air brakes. The engine was cut off and brought to the engine house, a stop being made at the station and at the blow off board, and the straight air brake was left applied at this point, at both of these places the brakes operated properly, and he thought the brake on the engine was an average brake for that type of engine.

Machinist Klump stated he was on duty at the engine house July 10 when engine 3106 arrived at the ash pit at 10:15 p.m., and after inspecting the engine for mechanical defects, he had applied the straight and automatic air brakes and inspected it for air leaks or other defects and found the piston travel for the driver brakes was about 5 inches and that of the tender about 7 inches. The duplex gauge registered a 50 pound pressure in the driver brake cylinder, he also inspected the brake shoes on the engine and tender and found them in good condition.

Hostlers Helvie and Beck, who handled this engine between the time it was set on the ash pit track and the outgo track stated that they experienced no trouble with the brake on this engine and considered it was an average brake.

On the morning of the day following the accident, Road Foreman of Engines Snyder had the same crew involved in the accident make some tests with helper engine 3106 in connection with the effectiveness of the brakes, going through practically the same movements as were made prior to and until the time of the accident. Engineman Ertzinger was instructed to pass over Union Township Road at the same speed that was made on the trip on which the accident occurred and operate the brakes and reverse gear in a similar manner; in making this test the helper engine did not get stopped until it was about 60 feet west of where the impact occurred, however, with Road Foreman of Engines Snyder duplicating this test with the exception of reversing the engine, the engine and caboose were brought to a stop approximately 50 feet east of where the accident occurred. In making these tests the driver brake on the engine was cut out. The cut-out valve on the driver brake cylinder pipe was not sufficiently loose in fit to become closed by vibration, the stop shoulder on same was bright where the handle of the valve came in contact with it when valve was open. The piston travel on the driver brake of helper engine 3106 measured 4¾ inches on the left side and 4-7/8 inches on the right side; the tender brake piston travel was 7 inches. The foundation brake gear on both the engine and tender were in good condition. Air pressures on the engine gauge registered 45 pounds brake cylinder pressure on the straight air;the brake-pipe pressure was 70 pounds and the main reservoir was 100 pounds.

Conclusions

This accident was caused by the failure of Engineman Ertzinger, of helper engine 3106, to have his engine under proper control when making a switching movement preparatory to changing cabooses.

Engineman Ertzinger stated that after the accident the cut-out cock in the brake cylinder pipe was found to be closed and he was supported in this contention by Fireman Pegan; however, this does not in any way relieve Engineman Ertzinger from responsibility, as he was in possession of a copy of the rules and instructions for operating the automatic and straight air brake and he should have known that the brakes on helper engine 3106 were in proper operating condition before starting out from the shop lead track.

Tests made the day following the accident conducted by Road Foreman of Engines Snyder and participated in by Engineman Ertzinger, disclosed that by proper manipulation even with the driver brake cut out on helper engine 3106, the engine and caboose could be stopped 50 feet east of where the accident occurred from a rate of speed the engineman estimated was being made at the time of the accident.

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.