INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN RE INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE ERIE RAILROAD NEAR GOSHEN, N. Y., ON APRIL 6, 1925.

August 19, 1925.

To the Commission:

On April 6, 1925, there was a rear-end collision between two freight trains on the Erie Railroad near Goshen, N. Y., which resulted in the death of one employee.

Location and method of operation.

This accident occurred on the Second District of the New York Division which extends between Newburgh Junction and Sparrowbush, N. Y., a distance of 44.8 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 about 1¼ miles west of the station at Goshen, on the westbound main track, 198 feet west of the west switch of the westbound siding. Approaching this point from the east, beginning at GP Tower at Goshen, there are 300 feet of tangent, then a 3° 30' curve to the right 2,358 feet in length, 190 feet of tangent, then a 3° curve to the left 1,878 feet in length, followed by 690 feet of tangent to the point of accident. The grade for westbound trains is approximately one-half of one per cent descending.

At Goshen there is a long siding, paralleling the main tracks on the north. The tower is located 5,416 feet east of the point of accident; westbound dwarf signal No. 5 is located about 405 feet east of the tower, while automatic block signal 59-1 is located 5,429 feet west of the dwarf signal, or 194 feet east of the west switch of the siding, the accident occurring 392 feet west of signal 59-1. Under the rules, when making a movement to the main track under a dwarf or caution signal in the direction of traffic, enginemen are required to proceed under full control, prepared to stop short of any obstruction until arriving at the first automatic block signal; also, when from any cause a signal cannot be plainly seen, it must be approached cautiously so that it can be correctly interpreted. The view of signal 59-1 from the engineman's side of a westbound engine is restricted to 561 feet.

The weather was clear at the time of the accident which occurred at about 3.13 a.m.

Description.

Westbound freight train extra 3159, consisting of 29 cars and a caboose, in charge of Conductor Leavy and Engineman Balmes, was assembled at Goshen. It proceeded over the westbound siding to the west switch, where instructions were received by telephone to follow first class train No. 7. That train passed GP tower at 3.07 a.m., and after it cleared the west switch of the siding extra 3159 headed out upon the main track at a point 198 feet west of the switch, while traveling at a speed estimated to have been about 5 or 6 miles an hour, the caboose was struck by extra 3185.

Westbound freight train extra 3185, in charge of Conductor Ross and Engineman Harold and consisting of engine 3185, two cars and a caboose, backed out upon the westbound main track east of the tower after train No. 7 passed, received a caution indication at dwarf signal No. 5, proceeded westward, passed signal 59-1, which was displaying a stop indication, and collided with extra 3159 while traveling at a speed estimated to have been between 20 and 30 miles an hour.

The superstructure of the caboose of extra 3159 was torn off and thrown to the north of the tracks, while the steel underframe telescoped the second car ahead a distance of about 4 feet. The first car ahead of the caboose was thrown to the north of the tracks and turned over. Engine 3185 came to rest about 115 feet west of the initial point of collision. The employee killed was a brakeman, who was riding on the front platform of the caboose of extra 3159 at the time of the accident.

Summary of evidence.

Conductor Leavy, of extra 3159, stated that he went to the head end of his train while it was on the siding after telling the flagman to "look out for things," and after train No. 7 passed remained at the west switch while his train headed out on the main track. When the rear of his train cleared the switch, traveling at a speed of about 5 miles an hour, he closed the switch, and then saw the headlight of extra 3185. After boarding the caboose he noticed that the head light of extra 3185 was getting closer; he called a warning of danger, gave stop signals to the following train, and jumped. Conductor Leavy further stated that the markers and cupola light on his caboose were burning properly, and there was a red light on the rear platform; also, that automatic block signal 59-1 was displaying a stop indication.

Flagman Brown, of extra 3159, stated that in making a movement of this kind it is required that torpedoes or fuses be placed on the main track, and it is his practice to protect such movements in that manner, but he did not do so on this occasion as the train was short and he thought it would take but a minute or two to head out of the switch. He also stated that Conductor Leavy said something before he left for the head end of the train but he did not understand what this was.

Engineman Balmos, of extra 3159, stated he was looking back and saw the caboose clear the switch, the conductor closed the switch and gave a proceed signal, following which he heard several blasts sounded on the whistle of engine 3185, and then the air brakes were applied on his train as a result of the collision.

Engineman Harold, of extra 3185, stated that while train No. 7 was passing GP tower his engine picked up two cars and coupled the air brakes, after which the route was lined for the westbound main track and caution indication displayed on dwarf signal No. 5; then he proceeded. He had no knowledge that there was a train in the siding or another crew working in the vicinity and assumed the track was clear for his train to follow train No. 7. The view of signal 59-1 from his side of the cab was restricted while rounding the curve and he leaned out of the cab to ascertain the indication displayed as soon as possible. He did not ask Fireman Allen about the indication of signal 59-1 while rounding the curve as the fireman was oiling or working on the stoker. About the time the signal came into view displaying a stop indication he saw the red markers on the rear of the caboose of extra 3159 and immediately applied the air brakes in emergency, as a result of which the wheels locked and slid on the frosty rails; then he opened the sanders and placed the engine in reverse, but the engine continued to slide. He sounded the engine whistle as a warning to any one in the caboose, and the accident occurred immediately afterwards. He estimated the speed of his train to have been 20 or 25 miles an hour when he applied the air brakes in emergency; he said that the headlight on his engine was burning brightly, that he was familiar with the location of signals in this vicinity, in his opinion the speed of his train was not excessive in this instance, and had the engine wheels not locked he could have brought the train to a stop in time to have averted the accident. He further stated that no torpedoes or fusee were placed on this occasion as required by the rules.

Fireman Allen, of extra 3185, stated that he was busy oiling the stoker and the first he knew of anything wrong was when the air brakes were applied in emergency; he did not observe the indication displayed by the dwarf signal and he did not see signal 59-1 in stop position until after the engineman had seen it and applied the brakes in emergency. He also estimated the speed of his train to have been between 30 and 35 miles an hour at the time the air brakes were applied in emergency.

The first intimation other members of the crew had of anything wrong was when the air brakes were applied just prior to the accident. Conductor Ross estimated the speed to have been between 25 or 30 miles an hour just before the air brakes were applied and not over 15 miles an hour at the time of the accident. He admitted that in his opinion 25 or 30 miles an hour was too high speed when running under the caution indication of a dwarf signal.

Operator Harold who was on duty at Goshen Tower stated that in conversation with Conductor Ross of extra 3185, he mentioned the fact that extra 3159 had picked all except two westbound cars and had just left that point. He said that the caution indication of the dwarf signal which he displayed for extra 3185 when it was ready to depart permitted that train to run to the next automatic signal under control expecting to find the main track obstructed.

Conclusions.

This accident was caused by the failure of Engineman Harold of extra 3185 to operate his train under control after receiving the caution indication of a dwarf signal, his failure to obey the stop indication of an automatic block signal, and the failure of Flagman Brown, of extra 3159, properly to protect his train.

Engineman Harold's statement indicates that he assumed the track was clear for his train after the departure of train No. 7, and he operated his train accordingly, notwithstanding the fact that he had received a caution indication of a dwarf signal, which required him to operate his train under control and prepared to stop short of any obstruction until arriving at signal 59-1. Consequently, when signal 59-1 came into view and he found that it was in stop position he was unable to stop. The distance his train ran after the brakes were applied in emergency, and the damage resulting from the collision, especially in view of the fact that extra 3159 was also moving, are conclusive evidence that Engineman Harold was operating his train at excessive speed and upon him rests the primary responsibility for this accident.

The special instructions in the rules of the operating department applicable to firemen require firemen to assist enginemen in keeping a lookout for signals. From the fireman's side of the cab there was a view of signal No. 59-1 for a distance of approximately 1650 feet, across the inside of the curve. Had Fireman Allen been watching for this signal, or had Engineman Harold asked him what indication it was displaying, this accident probably would not have occurred.

Rule 15 of the Rules Governing Automatic Block Signals, Interlocking and Telephone Operation, provides that before a train is pulled out of a siding that it must be protected in accordance with Rule 99. Flagman Brown admitted that it is required and customary in making a movement of this kind to place torpedoes or a fusee on the main track out that he did not do so in this instance, Had he complied with the rules or had Conductor Leavy, of extra 3159 definitely instructed Flagman Brown to protect the rear of the train before he departed for the head end of the train this accident probably would not have occurred.

This accident again directs attention to the necessity for the use of automatic train control devices which will intervene to stop a train whenever for any reason an engineman fails to observe or obey a stop signal indication. Had an adequate automatic train control device been in use on this line, this accident would have been prevented.

All of the employees involved were experienced men; 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.