INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN RE INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE CHESAPEAKE & OHIO RAILWAY AT VANCEBURG, KY., ON SEPTEMBER 15, 1925.

December 31, 1925.

To the Commission:

On September 15, 1925, there was rear-end collision between two freight trains on the Chesapeake & Ohio Railway at Vanceburg, Ky., resulting in the death of two employees.

Location and method of operation

This accident occurred on the Cincinnati Division, extending between Cincinnati, Ohio, and Russell, Ky., a distance of 141 miles, over which trains are operated by time-table, train orders, and an automatic block-signal system. The point of accident was within interlocking limits, about 435 feet west of the passenger station and 797 feet east of the interlocking tower, approaching this point from the east the track is tangent for a distance of 1,400 feet followed by a 1° 15' curve to the right 900 feet in length, and then 1,019 feet of tangent to the point of accident, this tangent extending for a considerable distance beyond. The grade is practically level.

Bridge No. 5722, spanning Salt Lick Creek, is about 100 feet in length, and its western end is located about 175 feet east of the interlocking station; a gauntlet track, 1,429 feet in length, extends across this bridge. The westbound home interlocking signal, located 857 feet east of the interlocking station and 60 feet east of the point of accident, at the eastern end of the gauntlet track, is of the three-position, lower-quadrant, semiautomatic type. What is known as the hold-out signal, of the three-position, upper-quadrant, semiautomatic type, is located 3,724.5 feet east of and operates automatically in conjunction with, the westbound home interlocking signal; the normal indication of this signal is caution, and it automatically displays a stop indication when the westbound main track is occupied between the westbound home interlocking signal and the hold-out signal. The westbound home interlocking signal can be seen for a distance of 1,300 feet and the hold-out signal for a distance of 940 feet.

There was a light rain falling at the time of the accident, which occurred at 4.10 a.m.

Description

Westbound freight train extra 1222 consisted of 55 cars, 1 service caboose and 1 deadhead caboose, hauled by engine 1222, and was in charge of Conductor Costello and Engineman Goshorn. This train passed extra 1218, which was setting out three cars with hot boxes, at GN Cabin, 16.4 miles east of Vanceburg, leaving that point at 2.49 a.m., after which it was delayed at Garrison, 7.3 miles beyond. It departed from Garrison, entered upon the gauntlet track at Vanceburg, and as the engine passed the interlocking tower the head brakeman failed to catch an order the operator attempted to hand on by hoop. The train was brought to a stop at about 4.05 a.m., in order to allow the head brakeman to return to the tower and secure the order, with the rear end of the caboose just west of the westbound home interlocking signal, and shortly afterwards, about the time the train started to move ahead, it was struck by extra 1218.

Westbound freight train extra 1218 consisted of 54 cars and a caboose, hauled by engine 1218, and was in charge of Conductor White and Engineman Walker. This train followed extra 1222 from GN Cabin departing from that point at 2.59 a.m. and on approaching Vanceburg passed the hold-out signal, which was displaying a caution indication, passed the westbound home interlocking signal, which was displaying a stop indication, and on reaching a point 60 feet beyond collided with extra 1222 while traveling at a speed estimated by the employees to have been between 5 and 6 miles an hour.

The rear caboose of extra 1222 was demolished, while the second caboose was derailed and had both platforms broken off. Three cars and one pair of wheels of a fourth car were derailed, one of these cars being demolished and two overturned. The engine truck of engine 1218 was derailed and the head end of the engine was considerably damaged. The employees killed were an engineman and a fireman who were off duty and asleep in the rear caboose of extra 1222.

Summary of evidence

Extra 1222 had been brought to a stop with the engine about 25 or 30 car-lengths beyond the office, and Head Brakeman Eckman then went back and

net Operator Feurer, who in the meantime had proceeded toward the engine, obtained the order, started toward the engine, and gave a proceed signal, whereupon Engineman Goshorn recalled the flagman and had about taken the slack in the train when the accident occurred. When extra 1222 made the unexpected stop at this point Conductor Costello sent Flagman Maloney ahead to look for a possible defective car, the flagman having previously said that he saw fire flying from under the train as it approached Vanceburg, and the conductor assumed the duties of flagman, going back about 435 feet from the rear of his train and taking a position about opposite the passenger station. Shortly afterwards the engine whistle on his train was sounded, recalling him, but he did not return immediately as he heard the following train approaching and saw the reflection of the headlight on the rails as that train rounded the curve. When extra 1218 came into view he began giving stop signals, which were acknowledged, and he then started walking toward his caboose. Extra 1218 continued to approach, however, so Conductor Costello again gave stop signals, which were also answered, and then he ran toward the caboose to warn the engineman and fireman, who were asleep therein, but on reaching a point two or three car-lengths from the caboose the engine of extra 1218 passed him, in back motion, and collided with the caboose while moving at a speed he estimated to have been about 6 miles an hour.

Engineman Walker, of extra 1218 stated that when approaching Vanceburg he saw the hold-out signal displaying a caution indication and before passing this signal he eased off on the throttle and bunched the slack in the train with the independent engine brake. On reaching the eastern end of the curve, approximately 1,900 feet east of the point of accident, traveling at a speed of about 20 miles an hour, he made a 10-pound brakepipe reduction, but the speed of the train did not appear to be materially reduced. About the time the engine reached the west end of this curve he saw the stop signals given by Conductor Costello, who was about 10 car-lengths from the caboose and also saw the stop indication of the westbound home interlocking signal, a view of which could be had by him for approximately 1,300 feet, and the red markers of the caboose, but he did not apply the air brakes in emergency until within about 25 or 30 car-lengths of the caboose. Later he reversed the engine and he estimated that the speed of his train had been reduced from 20 or 25 miles an hour to about 6 miles an hour at the time of the collision, the engine sliding into the caboose with

the driving wheels locked although he had opened the sanders. Engineman Walker attributed his inability to stop the train short of the westbound home interlocking signal to the wet and slippery condition of the rails.

Fireman Gaylor, of extra 1218, stated that the air brakes were applied in emergency on reaching a point about 20 car-lengths from the caboose, without the previous service application having been released, and that the engine was reversed when about 8 or 10 car-lengths from the caboose. Head Brakeman Weber, who was riding on the engine, said the speed had been reduced to about 8 or 10 miles an hour when Engineman Walker applied the automatic air brakes at a point about 25 car-lengths from the caboose of extra 1222, and that Conductor Costello was giving stop signals from a point about 2 or 3 car-lengths from the caboose when he first saw him; he also said that the air brakes worked properly.

Conductor White, of extra 1218, stated that the speed was about 25 miles an hour when he noticed that the slack was being bunched, apparently by means of the independent engine brake, when the engine was about 30 car-lengths beyond the hold-out signal. After it had traveled an additional distance of about 20 car-lengths he felt a gradual application of the air brakes and the train came to a stop without any severe shock; he estimated the speed to have been about 5 or 6 miles an hour at the time of the accident. Flagman Hill said he felt the slack being bunched when the caboose was about 15 or 20 car-lengths east of the hold-out signal, and that the air brakes did not apply on the rear end of the train until the caboose was opposite the hold-out signal, there being only one heavy and gradual application.

Conclusions

This accident was caused by the failure of Engineman Walker, of extra 1218, properly to obey signal indications.

Engineman Walker saw the caution indication displayed at the hold-out signal, about 3,700 feet from the home interlocking signal, but according to his statements he did not do anything more than to bunch the slack in the train by means of the independent brake until the engine had reached the eastern end of the curve, about 1,900 feet from the home signal; it was at this point,

he said, that he made a 10-pound brake-pipe reduction, which was still applied when he reached a point about 1,300 feet from the home signal, at which time he could see the stop indication of that signal, the rear end of the train ahead, and also the flagman who was protecting the rear end of that train. It appeared that he answered the stop signals of this flagman but apparently he delayed placing the brake valve in the emergency position until it was too late to prevent the occurrence of the accident and it is possible that on account of the previous service application of the brakes he failed to get an emergency effect from the subsequent brake application. Engineman Walker thought the accident was due to the slippery condition of the rails, but from the foregoing it would appear that it was due to his own failure to begin braking soon enough to make sure that his train could be stopped at the home interlocking signal. It also appeared that he did not observe the requirements of a local ordinance restricting the speed of trains to 12 miles an hour; violations of this ordinance, however, seem to have been of somewhat common occurrence.

The evidence indicates that Conductor Costello went back a distance of about 10 car-lengths and that this would have been sufficient had Engineman Walker properly obeyed the signal indications as well as the stop signals of the conductor.

Had an adequate automatic train stop or train control device been in use on this line, this accident would not have occurred.

All 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.