INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN RE INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE PENNSYLVANIA RAILROAD AT MONON, PA., ON NOVEMBER 21, 1931.

December 29, 1931.

To the Commission:

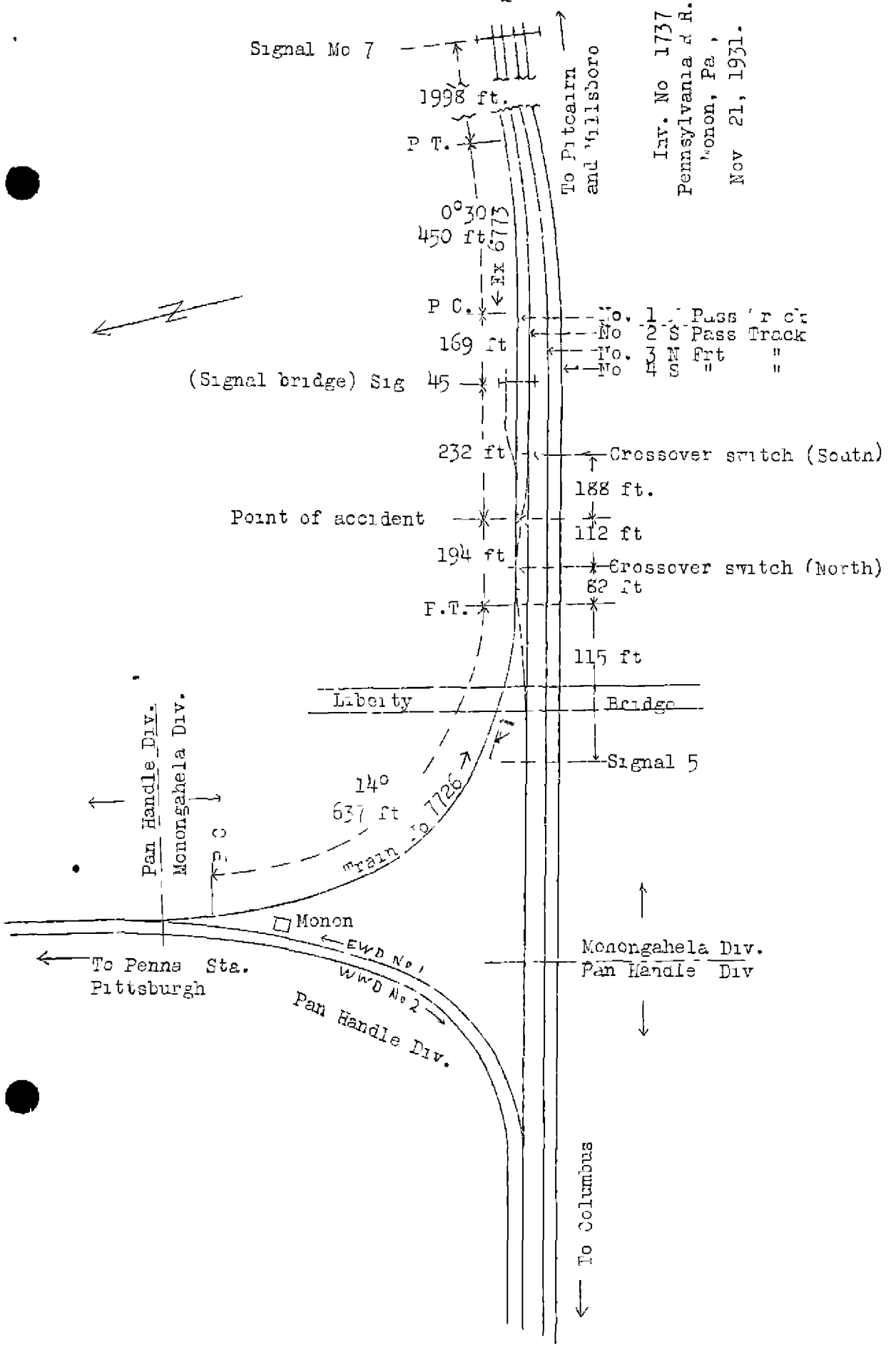
On November 21, 1931, there was a side collision between a passenger train and a freight train on the Pennsylvania Railroad at Monon, Pa., which resulted in the injury of 50 passengers and 1 employee.

Location and method of operation

This accident occurred on that part of the Monongahela Division extending between Monon, in Pittsburgh, and Ten Mile Run Junction, Pa., a distance of 61.9 miles, in the vicinity of the point of accident this is a four-track line over which trains are operated by time-table, train orders, and an automatic block-signal system. The tracks are numbered from east to west, 1, 2, 3, and 4, and the accident occurred at a crossover connecting tracks 1 and 2, which are, respectively, the north and southbound passenger tracks, the crossover is a trailing-point crossover 300 feet in length, and is located just south of the wye switch, this wye being formed by the tracks of the Monongahela and the Pan-handle Divisions Approaching the point of accident from the north, around the south leg of the wye, there is a 14° curve to the left 637 feet in length, following which the track is tangent a distance of 82 feet to the north switch of the crossover, this tangent extending for a distance of 213 feet beyond the south switch of the crossover, the accident occurred at the fouling point of the crossover with track 1, at a point 112 feet south of the north switch Approaching from the south on track 1, beginning at the approach or distant signal, namely, signal MO 7, there are 1,988 feet of tangent, a 0° 30' curve to the right 400 feet in length, and then 401 feet of tangent to the point of accident, this tangent extending for a distance of 194 feet beyond and joining with the south leg of the wye. The grade for southbound trains around the south leg of the wye and to and beyond the point of accident varies from 1.09 to 1.61 per cent ascending, being at its minimum at the point of collision.

There is an interlocking plant at Monon, the tower being located between the north and south legs of the wye and near their junction, the machine is a 48-lever machine, electrically operated, route locking being used The signals involved

Inv. No 1737
Pennsylvania R.R.,
Monon, Pa.,
Nov 21, 1931.



are of the position-light type, home signal 5, governing southbound movements off the south leg of the wye and through the crossover, is located 197 feet north of the north switch of the crossover, while approach or distant signal MO 7 and home signal 45, governing movements over track 1, are located 3,961 feet and 344 feet, respectively, south of the north switch of the crossover.

Engine 6773 was equipped with cab signals and automatic train stop devices, approaching from the south on track 1 the automatic train-stop cut-in section for the Panhandle Division is located at the distant signal.

The weather was cloudy and misty at the time of the accident, which occurred about 1 31 p m.

Description

Northbound freight train extra 6773, enroute from Pitcairn, Pa , via the Monongahela and Panhandle Divisions to Columbus, Ohio, consisted of two cabin cars, hauled by engine 6773, and was in charge of Conductor Williams and Engineman Furney. This train left Pitcairn at 12.35 p m , entered upon the Monongahela Division at WG Block Station, passed OB Block Station, the last reporting office, 2.9 miles from Monon, at 1 25 p m., according to the train sheet, traveling on track 1, passed approach signal MO 7, which was displaying an approach indication, passed home signal 45, which was displaying a stop indication, and was brought to a stop, or nearly so, with the engine fouling the crossover between tracks 1 and 2, where it was struck by train No. 7726.

Southbound passenger train No. 7726 consisted of three steel coaches, hauled by engine 2031, and was in charge of Conductor Moffitt and Engineman O'Neill. This train departed from Pittsburgh at 1 25 p.m , on time, entered upon the Monongahela Division at Monon and proceeded around the east leg of the wye, passed home signal 5, which was displaying a clear-restricting indication, and was moving through the crossover from track 1 to track 2 at a low rate of speed when it collided with extra 6773.

Engine 2031 was derailed but remained upright and was only slightly damaged, none of the other equipment in either train was derailed or materially damaged. The employee injured was the engineman of train No. 7726.

Summary of evidence

Engineman Furney, of extra 6773, stated that on passing approach signal MO 7, which was displaying an approach indication, the speed of his train was about 20 miles per hour, and the engine throttle was just barely cracked open. At this point he made about a 5-pound brake-pipe reduction, to make sure that the brakes were working properly, and then released, following which steam was shut off and the train permitted to drift. When about 25 or 30 car-lengths from home signal 45, he saw that it was displaying a stop indication, and on reaching a point about 15 car-lengths from it, at which time the speed was about 15 miles per hour, he made a 5-pound application on the independent brake and left it applied, thinking that in view of his low speed he could make the stop with the independent brake. After traveling about three car-lengths with the independent brake applied, he instructed the fireman to put on the injector and then took his eyes off the track ahead in order to watch the fireman, the valve stuck and the engineman thought it would be necessary to use a wrench, but just as the engineman got up, the fireman got the injector on and then the engineman put his head out of the window and saw that he was only five car-lengths from home signal 45. He at once applied the independent brake and the wheels locked, and he also applied the automatic brake in emergency and reversed the engine, but the engine slid by the signal and came to a stop fouling the crossover, the accident occurring immediately afterwards. Engineman Furney stated that the engine was in first-class condition and that the brakes held, but that the rails were damp with mist and rain, he did not open the sanders. Engineman Furney further stated that the brakes and cab-signal apparatus were tested as required, at Pitcairn, and were in proper working order, but he did not know whether an approach indication was displayed on the cab light at distant signal MO 7, there was no doubt in his mind, however, but what he could have brought his engine to a stop without incident had he not temporarily taken his eyes off the track ahead.

Statements of Fireman Kimberly corroborated in substance those of Engineman Furney as to what transpired prior to the accident, Conductor Williams and Brakemen Matthews and Wilson were riding one of the cabin cars and they were unaware of anything wrong until the air brakes were applied in emergency, in the immediate vicinity of home signal 45, at which time they estimated the speed to have been about 12 or 15 miles per hour, and they thought their train had stopped prior to the occurrence of the collision.

Engineman O'Neill, of train No. 7726, stated that at Monon the fireman called the indication of home signal 5, clear--restricting, at which time the speed of his train was about 13 or 14 miles per hour, and after getting around the

curve on the east leg of the wye to where the engineman could see the signal, he also called its indication. Engineman O'Neill was unaware that extra 6773, approaching from the opposite direction, had passed home signal 45 until his own engine got around to the straight track, almost to the crossover, which was lined for a movement through it for his own train, he immediately applied the air brakes in emergency and said that his train almost had stopped when the collision occurred. The air brakes had been tested before departing from Pittsburgh and worked properly.

Statements of Fireman Baird were similar to those of Engineman O'Neill, while statements of Conductor Moffitt and Brakemen Zell and Rushton developed nothing additional of importance, they were unaware of anything wrong until the air brakes were applied in emergency.

Towerman Milar, at Monon, stated that he lined the route for train No. 7726 at 1 26 p. m., and that the train passed Monon at 1 30 p. m ; he thought the accident occurred about one-half minute later.

Conclusions

This accident was caused by the failure of Engineman Furney, of extra 6773, properly to obey signal indications.

The approach or distant signal, MO 7, and home signal 45 were displaying the proper indications, namely, an approach indication and a stop indication, respectively, as extra 6773 approached Monon, and Engineman Furney saw these indications He made a light brake application at signal MO 7, to make sure that the brakes were working properly, at which time the speed of his train was about 30 miles per hour, and when about 15 car-lengths from home signal 45 he made another light application by means of the independent brake. He then took his eyes off the track ahead in order to see whether the fireman could get the injector on without the valve sticking, and when he again looked ahead his engine had nearly reached home signal 45, which was displaying a stop indication, he immediately applied the brakes in emergency and reversed the engine, but it slid by the signal and stopped fouling the crossover, where it was struck by train No. 7726.

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.