INTERSTATE COMMERCE COMMISSION.

REPORT OF THE CHIEF OF THE BUREAU OF SAFETY IN RE INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE PENNSYLVANIA RAILROAD NEAR SUNBURY, PA., ON OCTOBER 7, 1921.

November 1, 1921.

To the Commission:

On October 7, 1921, there was a rear-end collision between a freight train and two light engines on the Pennsylvania Railroad near Sunbury, Pa., which resulted in the death of 1 employee, and the injury of 2 employees.

Location and method of operation.

This accident occurred on the Williamsport Division, which extends between Harrisburg and Renovo, Pa., a distance of 145.7 miles. It is a double-track line over which trains are operated by time-table, train orders, and an automatic block-signal system. The accident occurred 3/4 mile west of Sunbury, within yard limits, on a track known as the middle siding. This siding extends between DY and P Block Stations, a distance of about 2,600 feet, the main tracks being parallel to it on each side. The accident occurred 973 feet east of the west switch, approaching from the west the track is tangent for 1,380 feet, followed by a curve to the right of 2 degrees, 2,140 feet in length; the accident occurred on this curve at a point about 500 feet from its eastern end; the grade is practically level.

An eastbound 2-arm home interlocking signal is located about 400 feet west of DY Block Station. The upper arm of this signal is fixed, while the lower arm in its 45-

degree position governs movements to all routes and in its 90-degree position gives a distant indication for an eastbound automatic signal located approximately 700 feet east of the block station, or 256 feet east of the west switch of the siding and to the right of the eastbound main track; this automatic signal is of the position-light type and governs eastbound train movements over the eastbound main track in the block extending to P Block Station; when this block is clear the signal displays a caution or permissive indication, but when occupied the indication is stop and proceed. Eastbound trains entering the middle siding receive no switch or signal indication other than the all-route home interlocking signal. The weather was very foggy at the time of the accident, which occurred at about 5.40 a.m.

Description.

Eastbound freight train extra 994 consisted of 51 cars and a caboose, hauled by engine 994, and was in charge of Conductor Malone and Engineman Fairchild. It passed DY Block Station at 5.22 a.m., entered the siding and stopped. While standing at this point its rear end was struck by light engines 1676 and 1097.

Eastbound light engines 1676 and 1097, coupled, both headed west and moving backwards, were in charge of Engineman Stroh and Fireman Harter, engine 1097 being towed. These engines left Northumberland, 1.9 miles from Sunbury, at 5.34 a.m., en route to the passenger station at Sunbury, passed

DY Block Station at 5.38 a.m., entered the siding, and while traveling at a speed estimated to have been between 10 and 12 miles an hour collided with the rear end of extra 994.

The caboose of the freight train was practically demolished and the rear car slightly damaged. The cistern of the tender of engine 1676 was torn from its frame, and after being forced against the boiler head came to rest on the eastbound track in an upright position; the rear driving wheels of the engine were derailed. The employee killed was the fireman of engine 1676.

Summary of evidence.

Conductor Malone, of extra 994, stated that during the trip he remarked about the dense fog and said it would be necessary to maintain a close watch. When the train stopped on the siding the markers on the caboose were burning brightly, but owing to the fog, his range of vision was limited to about 3 car-lengths. Conductor Malone opened the rear door of the caboose, and he and Flagman Bastress then began to eat their lunch. They heard the noise made by the approaching light engines, looked out to ascertain which track was being used, saw a white lantern on the tender of the leading engine, about 2 or 3 car-lengths distant, and jumped. Conductor Malone said that after the accident he noticed that the air-brake hose was not coupled between the two engines, but did not know whether the hose became uncoupled as a result of the accident. Conductor Malone realized that he could have used better judgment in protecting the train, but said he had never protected his train under

such circumstances. Rule 90A of the rules for the government of the transportation department, reads as follows:

> "On sidings used by trains in both directions, trains must run expecting to meet opposing trains."

It is provided in the time-table that this middle siding may be used by trains moving in either direction, and Conductor Malone said that in view of rule 90A, and also in view of the fact that his train was within yard limits and not on the main track, and that the markers and deck light were displayed, he had not thought it necessary to provide any flag protection, inasmuch as a train approaching in accordance with the requirements of rule 90A would have been able to stop in ample time to avert an accident.

The statements of Flagman Eastress practically corroborated those of Conductor Malone. With regard to flagging on a siding, he said that when the conditions warrant it, a close watch is maintained, and when a train is heard or known to be approaching the flagman places himself in position to give flag protection provided he sees it is necessary to do so. In this particular case, the light engines were heard approaching, and he said he was placing himself in position to see if they were on the siding, when the engines were seen, they were too close for him to provide flag protection.

Engineman Stroh, of engine 1676, said he brought the light engines to a stop just opposite the home interlocking signal at DY Block Station, which was displaying a caution indication, and while passing DY Block Station he sound-

ed the whistle. On approaching the automatic position-light signal the fireman called its indication and began to work on the fire. Soon afterwards the engineman remarked that he thought they were on the siding, and immediately shut off steam, the fireman assured him the signal was at caution, and Engineman Stroh said he then looked out to ascertain exactly which track the light engines were using, saw the yellow markers on the rear end of the caboose, a few feet distant, and immediately applied the air brakes in emergency and pulled the whistle cord. It was then too late to avert the collision, which, according to his estimate, occurred while the engines were traveling at a speed of between 10 and 12 miles an hour. He said that on account of the dense fog his range of vision was limited to about 6 car-lengths, and was of the opinion that the light engines could have been brought to a stop within 8 engine-lengths. Engineman Stroh said he had coupled the air hose and tested the air brakes before starting. He had been delivering engines over this route for a number of years and this was the second time he had used the siding, he realized he should have known which track he was using, and said his failure to do so was the primary cause of the accident.

Operator Gurtner, who was on duty at DY Block Station on the morning of the accident, lined the switch for the siding just before the arrival of the freight train. It was his duty to return the switch and signal to normal after the freight train entered the siding, instead of doing so, he was

occupied for a few minutes in telephoning, and although a period of 5 or 6 minutes ensued between the time he finished this duty and the arrival of the light engines, which afforded him ample opportunity to restore the switch to normal, he failed to do so, saying that he overlooked it.

Conclusions.

This accident was caused by Engineman Stroh, in charge of light engines 1676 and 1097, not knowing on what track the engines were moving, accepting the signal indication displayed for another track, and failing to operate his engine on the siding prepared to stop within his range of vision as required by the rules.

Engineman Stroh admitted that he should have known on what track the engines were moving, and that his failure to do so was responsible for the accident.

Had Operator Gurtner restored the west switch of the siding to its normal position after extra 994 had passed, as required by the rules, the accident would have been prevented. According to his own statement he had sufficient time in which to do so.

At the time of the accident the crew in charge of the light engines had been on duty about 7 hours, the crew of extra 994 less than 2 hours, and the operator nearly 7 hours; previous to going on duty, all of these employees had been off duty 16 hours or more.

Respectfully submitted,

Chief, Bureau of Safety.