

## INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN RE INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE PENNSYLVANIA RAILROAD NEAR MARSH RUN, PA., ON MARCH 16, 1928.

April 11, 1928.

To the Commission:

On March 16, 1928, there was a compound collision, in which three freight trains and one passenger train were involved, on the Pennsylvania Railroad near Marsh Run, Pa., resulting in the death of 1 employee and the injury of 17 passengers and 4 employees.

#### Location and Method of Operation

This accident occurred on that part of the Philadelphia Division known as the York Haven Line, which extends between Wago Junction and DY Block Station, near Harrisburg, Pa., a distance of 19.1 miles. In the vicinity of the point of accident this is a four-track line, the tracks being numbered from north to south 4, 3, 2, and 1. Tracks 4 and 3 are designated as the westbound and the eastbound freight tracks, respectively, while tracks 2 and 1 are the westbound and eastbound passenger tracks, respectively. Movements of trains over the freight tracks are controlled by time-table, train orders and a manual block-signal system, while on the passenger tracks train movements are controlled by time-table, train orders, and automatic block-signals supplemented by a system of automatic train control. The primary collision occurred on track 4 at a point 2,265 feet west of Marsh Run station; approaching this point from the east the track is tangent for a distance of 3,865 feet, followed by a  $1^{\circ}40'$  curve to the right 4,365 feet in length, the accident occurring on this curve at a point 1,565 feet from its eastern end. The grade at the point of accident is practically level, and the view was good.

The weather was clear at the time of the accident which occurred at about 8:12 a. m.

#### Description

Westbound freight train No. P-9 running on track 4, consisted of 76 cars and a caboose, hauled by engines 3098 and 1498, and was in charge of Conductor Rote and Engineeron Everhart and Shaffer. This train passed Cly,

the last open office, 7.8 miles east of Marsh Run, at 7:50 a. m., under a permissive signal indication, and shortly after passing Marsh Run, while drifting at a speed of 10 or 15 miles per hour, it was brought to a stop due to the parting of the train between the 50th and 51st cars. Shortly after the train had been brought to a stop it was struck by westbound freight train second No. TH-1.

Westbound freight train second No. TH-1, also running on track 4, consisted of 32 cars and a caboose, hauled by engine 120, and was in charge of Conductor Davidson and Engineman Simers. This train passed Cly at 7:59 a. m., under a permissive signal indication, and collided with train No. P-9 while traveling at a speed variously estimated to have been from 25 to 50 miles per hour.

Eastbound freight train No. P-2-12-14, running on track 3, consisted of 69 cars and a caboose, hauled by engine 4626, and was in charge of Conductor Early and Engineman Diffenderfer. This train passed GS Block Station, 6.7 miles west of Marsh Run, at 8:01 a. m., and was side swiped by the wreckage of trains Nos. P-9 and second No. TH-1 while traveling at a speed of approximately 30 miles per hour.

Eastbound passenger train No. 992, running on track 1, consisted of one combination mail and express car and two coaches, hauled by engine 3333, and was in charge of Conductor Reichard and Engineman Norris. This train passed J. Block Station, 5.5 miles west of Marsh Run, at 8:05 a. m., and collided with the wreckage of train No. P-2-12-14 while traveling at a speed estimated to have been between 30 and 35 miles per hour.

The caboose and the four rear cars in train No. P-9 were destroyed. Engine 120, of train second No. TH-1, was derailed to the right and came to rest on its right side against the embankment while three cars in its train were badly damaged. The wreckage from this accident fouled track 3 and resulted in slight damage to the 22nd to 27th cars, inclusive, in train No. P-2-12-14, while the 28th to the 39th cars, inclusive, were derailed and more or less damaged. The wreckage from train No. P-2-12-14 fouled tracks 2 and 1 and was struck by train No. 992; the engine, its tender, the first car and the forward truck of the second car in that train were derailed, the engine coming to rest on its right side south of and nearly parallel with track 1; the tender and the first car were partly overturned. The wreckage caught fire immediately after the accident, resulting in more or less damage to equipment. The employee killed was the fireman of train second No. TH-1.

- 3 -  
Summary of Evidence

Engineer Everhart, of the leading engine of train No. P-9, stated that his train entered the block at Cly under a permissive signal indication and proceeded to Marsh Run at a speed of 15 or 20 miles per hour, the speed being gradually reduced beyond that point for the reason that he had shut off steam in order to increase the steam pressure. When the speed had been reduced to 8 or 10 miles per hour he noticed the air gauge drop from 70 to 50 pounds pressure, which resulted in bringing his train to a stop. He did not know at that time that his train had broken in two, nor did he feel any shock at the time of the collision, but upon looking back he saw flames, and realizing that something was wrong he sent his fireman back to the rear and then procured a flag and went forward to stop approaching trains. Engineer Everhart said that when his train came to a stop the eastbound freight train on track 3 had passed his engine, and that he did not see train No. 992 at any time.

The statements of Fireman Kauffman, of the leading engine, and Engineer Shaffer and Fireman Uleau, of the second engine of train No. P-9, practically corroborated those of Engineer Everhart as to the movement of the train between Cly and the point of accident. Engineer Shaffer added that both the eastbound freight train and the eastbound passenger train passed at about the same time, the passenger train being opposite the caboose of the freight train; this was just before his own train came to a stop.

Conductor Rote, of train No. P-9, stated that when his train came to a stop the flagman started back immediately, and on getting off at the head end of the caboose the conductor saw the following train just east of the station at Marsh Run, and he remarked to the middle brakeman that if it was on their track an accident was going to occur. He continued to watch it and noticed that steam was not shut off until the engine was approximately eight car-lengths from his caboose. He also heard a whistle signal for brakes, sounded from the engine of the eastbound freight train on track 3 when the engine of that train passed the flagman. He did not know whether the flagman threw off a fusee before the train stopped. Conductor Rote further stated that he did not know what caused his train to come to a stop, and he was of the opinion that an attempt was made to start it again and that it was at this time that the train broke in two at the point where a broken coupler, due to a flaw, was afterwards found.

Flagman Shunk, of train No. P-9, stated that when his train passed Marsh Run it was traveling at a speed of about 20 miles per hour, but after passing that point the

speed was reduced somewhat and shortly afterwards he felt a lurch of the train as though the slack had run in and he threw off a lighted fusee at a point about eight or nine car-lengths east of a road crossing located just east of where the accident afterwards occurred. He said that the train continued to reduce speed and that he got off the caboose just east of the crossing, before the train came to a complete stop; he then heard the rear of an approaching train and started back as quickly as possible, passed the fusee, which was still burning, and reached a point about 15 or 20 car-lengths from his caboose when the following train came into view, about 20 car-lengths distant. He continued to go back, waving his flag, until the engine of the approaching train was only three or four car-lengths from him, then he stepped off the track into a ditch on the engineer's side, without having time in which to put down torpedoes. As the engine passed him, without his stop signals having been acknowledged, he noted that the cab window was closed and he said he did not see the engineer. Flagman Shunk expressed the opinion that steam was not shut off, nor the brakes applied, prior to the accident, which occurred while the train was traveling at a speed of about 40 miles per hour.

Brakeman Singer, of train No. P-9, who had been riding in the caboose, said the flagman got off before the train came to a full stop. Shortly after it had stopped Brakeman Singer got off and then noticed the flagman about 12 or 15 car-lengths from the caboose and still running eastward. When train second No. TH-1 was within about four car-lengths of his caboose he saw the engineer of that train with his hands over his head, apparently for the purpose of protection. Brakeman Singer estimated the speed of train second No. TH-1 at from 30 to 40 miles per hour at the time of the accident, and was of the opinion that the engine was still working steam when the accident occurred.

Conductor Davidson, of train second No. TH-1, stated that cars were set out and picked up at various points en route, but that proper air-brake test was made each time after the train had been recoupled. He rode on the engine from Columbia to Shocks Plug, the latter being the last stopping point prior to the occurrence of the accident, and he said that when approaching Shocks Plug two torpedoes were encountered and the train was also flagged by the flagman of train No. P-9, which signals were acknowledged by his engineer; Conductor Davidson then returned to the caboose. He observed that his train entered the block at Cly under a permissive signal and estimated the speed between that point and the point of accident at about 25 miles per hour, while the brakes were used at one point, a short distance east of Marsh Run, for the purpose of reducing speed on a curve. After passing Marsh Run station he felt an emergency application of the brakes, followed

by the impact of the collision after the train had moved an additional distance of only two car-lengths. Conductor Davidson further stated that during the time he was in the presence of the engineman and fireman of his train prior to the accident they appeared to be normal in every respect and that there had been nothing in connection with the handling of the train that would have indicated otherwise. After the occurrence of the accident he inquired of the engineman and fireman as to its cause, but the engineman failed to answer his question while the fireman, still conscious, replied that he did not know. At the time of this investigation the condition of Engineman Simers was such that he could not be interviewed.

The statements of Brakeman Campbell and Simon substantiated those of Conductor Davidson as to the brakes being applied in emergency just prior to the accident, and they estimated the speed of their train between Cly and the point of accident to have been between 25 and 30 miles per hour. Brakeman Simon added that after the accident he noticed a burning fusee about five pole-lengths east of the point where the engine of his train came to rest.

Engineman Diffenderfer, of eastbound train No. P-2-12-14, stated that his train was moving at a speed of 25 to 28 miles per hour around the curve on which the accident occurred when the fireman shouted to him to sound the whistle but before he could do so the fireman grabbed the whistle cord and signalled for brakes, the accident occurring shortly afterwards.

Fireman Bickle, of train No. P-2-12-14, stated that when his train passed the caboose of train No. P-9 that train was still moving slowly while his own train was traveling at a speed of 25 or 30 miles per hour. About 15 or 20 seconds later he observed another train approaching on track 4, about 25 or 30 car-lengths distant, moving at a speed of probably 30 miles per hour and still working steam. He immediately looked back and saw a burning fusee and also the flagman of train No. P-9 a short distance east of the fusee, running towards the approaching train and waving his flag. Realizing that a collision was imminent he called to the engineman to sound the whistle, but before the engineman had time to act he crossed over and did so himself. He said he did not see any one in the engine cab of train second No. TH-1 as it passed, being on the engineman's side of his own engine at the time.

Engineman Norris, of train No. 992, stated that his train was running about 30 or 35 miles per hour on clear signal indications as it rounded the curve approaching

Marsh Run when his fireman notified him that a box car had rolled across track 1 from the train on track 3; he did not see it himself, on account of his position on the outside of the curve, but at once applied the brakes in emergency, his train colliding with the wreckage immediately afterwards.

Fireman Rembold, of train No. 992, stated that he was riding on his seat box looking ahead and shortly after his engine had passed the caboose of the train on track 3 he heard the brakes apply on that train and at about the same time noticed some cars lying on track 1 about five car-lengths distant, or as soon as they came into view around the curve; he immediately informed the engineman to that effect and the latter applied the air brakes in emergency.

The statements of members of the train crews of trains Nos. P-2-12-14 and 992 brought out no additional facts of importance.

Brakeman Wintermyer, off duty at the time of the accident, was in the yard at his home near Marsh Run station when the accident occurred. He stated that he saw train No. P-9 pass and about two or three minutes later he noticed another train approaching on track 4 at a rapid rate of speed. He then looked westward and observed train No. P-9, which he thought had come to a stop, and at once realized that an accident was unavoidable. After the occurrence of the accident Engineman Simmers and Fireman Williams, of second No. TH-1, were brought to his home and given first-aid treatment, during which time the engineman voluntarily exonerated the flagman of train No. P-9, saying that the engineman of the train on track 3 had whistled for brakes and that he then saw the flagman; Engineman Simmers did not think the flagman was at fault. Brakeman Wintermyer also quoted Engineman Simmers as saying that he made no attempt to stop and did not shut off steam or apply the brakes as he considered it was then too late, but that he did tell the fireman to jump and also took hold of him with the intention of pushing him off the engine. Brakeman Wintermyer estimated the speed of train second No. TH-1 at 50 miles per hour at the time it passed his home, with the engine working steam.

Operator Long, on duty at Cly at the time of the accident, verified the block record as to the times at which trains No. P-9 and second TH-1 passed that point. He stated that both trains entered the block under permissive signal indications, which statement was corroborated by Signal Maintainer Huston.

Road Foreman of Engines Humble stated that he made an inspection of engine 120 at the scene of the accident

and found the throttle closed, the brake valve in the emergency position and the reverse lever, which was of the screw type, in the reverse position.

### Conclusions

This accident was caused by the failure of Engineman Simmers, of train second No. TH-1, to operate his train under proper control after entering a block under a permissive signal indication.

Under the rules governing movements on track 4, it is provided that a train other than a passenger train may be permitted to follow a train other than a passenger train into a block under a permissive signal indication. It is also provided that when such a movement is made the following train must proceed with caution and be prepared to stop short of a train or obstruction. In addition to these rules governing the operation of train second No. TH-1, the investigation indicated that flagman Shunk throw off a fuse when train No. P-9, reduced speed just east of Marsh Run station, and that when his train had come practically to a stop near the road crossing this flagman got off and started back as quickly as possible, and that he reached a point approximately 14 car-lengths east of the crossing; this flagman, who could have been seen by Engineman Simmers a distance of about 1,800 feet, continued to give stop signals until the engine of train second No. TH-1 passed him still working steam and without acknowledging the stop signals. It further appeared that an emergency whistle signal to stop was sounded by the fireman of the eastbound train on track 3 and this also should have enabled Engineman Simmers to take some action toward reducing the speed of his train to a considerable extent. Notwithstanding the requirements of the rules, and the visible and audible signals to stop which the evidence indicates were given, it appears that Engineman Simmers was operating his train at a comparatively high rate of speed and that he made practically no effort to bring it to a stop; as a matter of fact, Brakeman Wintermyer quoted Engineman Simmers as saying that he did not try to stop, although this latter statement is not in line with the statements of the road foreman of engines that after the occurrence of the accident he found the throttle closed, the brake valve in the emergency position, and the screw reverse gear in the reverse position. In view of all the evidence, however, Engineman Simmers clearly is responsible for the occurrence of the accident, although the reason for his failure to operate under proper control in the occupied block and to bring his train to a stop in time to avert the accident could not be ascertained.

There was no possible way of preventing the accidents involving the other two trains; train P-2-12-14 was passing

on track 3 at the time, while train No. 992 had passed the caboose of train No. P-2-12-14, and apparently was within a very short distance of the wreckage from that train when it was thrown across tracks 2 and 1.

Had an adequate train stop or train control device been in use on track 4 this accident would not have occurred.

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.