

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 SOUTH FORK, PA., ON
MARCH 5, 1929.

June 23, 1933.

To the Commission:

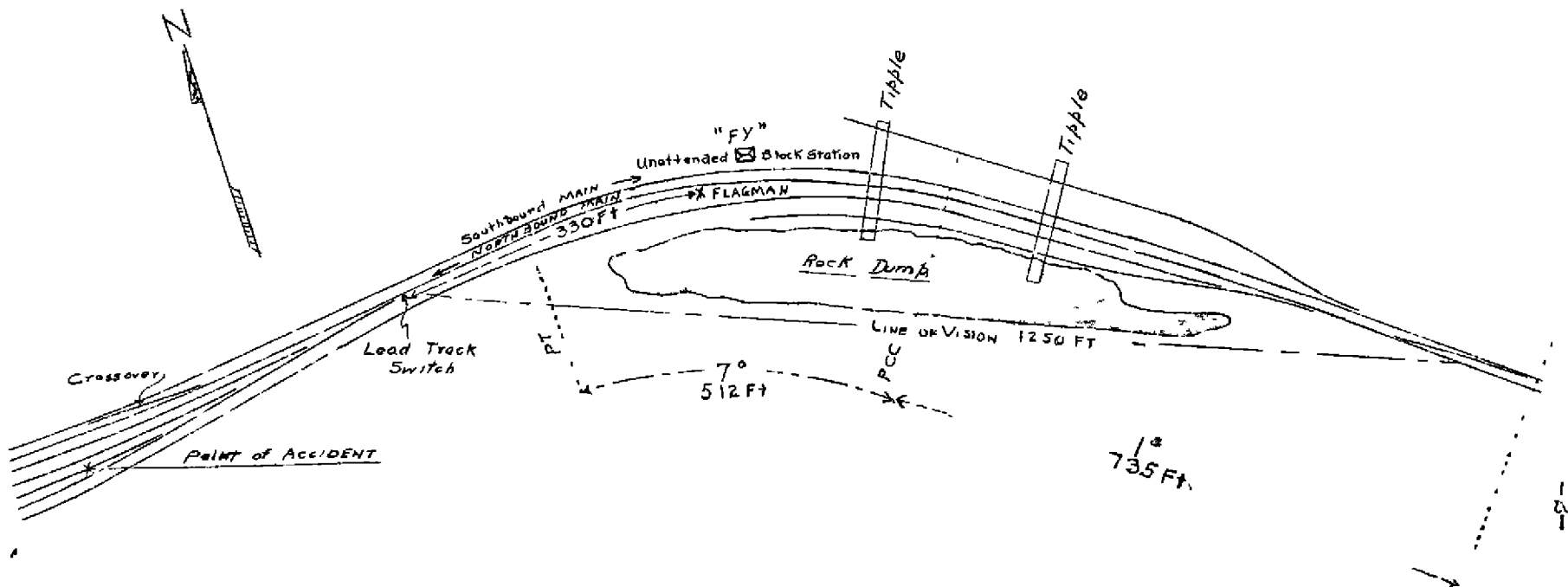
On March 5, 1929, there was a collision between a freight train and a helper engine on the Pennsylvania Railroad at South Fork, Pa., resulting in the death of one employee.

Location and method of operation

This accident occurred on the South Fork Branch of the Pittsburgh Division, extending southward from South Fork Branch Junction to Arrow, Pa., a distance of 23.3 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 a manual block-signal system, and the left-hand track is used by movements with the current of traffic. The accident occurred in the south end of South Fork yard, on yard track 7, at a point about 440 feet north of a facing-point switch that leads off the northbound main track to the left to a yard-lead track. Approaching this switch from the south there is a compound curve to the left 1,247 feet in length, the curvature being at its maximum, 7⁶, for the last 512 feet, then the track is tangent to the switch, a distance of about 125 feet, and for a considerable distance beyond that point. The grade for northbound trains is descending, being 0.75 per cent at the point of accident.

The tracks of South Fork yard parallel the main tracks on the west and are numbered from east to west; they start with number 5. At a point about 260 feet north of the lead-track switch there is located the south switch of a facing-point crossover. The switch stand is of the ground-throw type, located on the west or fireman's side of the track, night indications are green when the switch is closed and red when it is open.

"JK" block station is located at the northern end of South Fork yard and a station known as St. Michael is located 2.5 miles south of "JK" block station. The block stations on this branch are unattended, being under the control of the train dispatcher at South Fork, in accordance with special instructions S23A and D2306,



Inv. No. 1506
 Pennsylvania R.R.
 South Fork, Pa.
 March 5, 1929.

Description

Extra 4355 was in charge of Conductor Raffensperger and Engineman Heacox, with Engineman McConnell in charge of helper engine 4359. This train entered the yard southbound, backing up on the southbound track, and stopped clear of the crossover. The rear portion of the train, which consisted from south to north of helper engine 4359, headed north, a caboose and three freight cars, then made a back-up movement through the crossover to the northbound track, and was brought to a stop just south of the switch leading to the yard-lead track. This switch was opened and the cars pushed into the yard against a string of 19 cars that stood on track 7, the crossover switches were closed following this movement but the crew did not close the lead-track switch, and while the caboose was being cut off from the cars on track 7 the rear end of the tender of engine 4359 was struck by extra 6334.

Northbound freight train extra 6334 consisted of 80 loaded coal cars and a caboose, hauled by engine 6334, and was in charge of Conductor Parkley and Engineman Turner. At about 10.10 p.m., permission was obtained at St. Michael to enter the block and proceed to "JK" block station, under a permissive signal. Extra 6334 departed from St. Michael, entered the open switch at the south end of South Fork yard, and collided with engine 4359 while traveling at a speed variously estimated to have been between 8 and 30 miles per hour.

Both engines and their tenders were derailed and considerably damaged, the engines remained upright. Numerous cars were derailed, damaged and scattered about the yard tracks, most of them remaining upright. The employee killed was the fireman of extra 6334.

Summary of evidence

Conductor Raffensperger, of extra 4355, stated that when his train came off the Summerhill Branch into South Fork the dispatcher told him to back down the southbound track, as he had a train en route from St. Michael, extra 6334, and did not want him to block the northbound track. The conductor told Brakeman Brode that they were to back up on the southbound track but not to occupy the northbound track until they got orders, on account of the train en route from St. Michael, the conductor said he then got on engine 4359 and gave Engineman McConnell similar information, after which he got on the caboose and instructed Flagman Nickol in a like manner. Con-

ductor Raffensperger and Prakeman Stine were with engine 4355 in the north end of the yard on track 6 until just before the accident occurred and knew nothing of the movement being made by engine 4359. Conductor Raffensperger said he fully expected that that engine would remain in the clear on the southbound track at the crossover until after the train en route from St. Michael had passed.

Engineman McConnell, of helper engine 4359, stated that after backing down the southbound track and stopping short of the crossover he watched Flagman Nickol go back with red and white lanterns until he was out of sight around the curve and then was given a back-up signal and crossed over to the northbound track with the rear portion of his train, shoving the cars in on track 7. The first intimation he had of anything wrong was on seeing the headlight of the approaching train, burning brightly and only a short distance from where the helper engine stood on track 7, and he shouted a warning of danger to the fireman and jumped. The headlight of the helper engine was not turned on as the front end of the engine was next to the caboose. Engineman McConnell said that he did not see the indication displayed by the lamp at the lead-track switch, as it was on the fireman's side, but that after the cars had been shoved into clear he asked the fireman about it and was informed that the switch lamp was out. Engineman McConnell said that while the switch should have been closed yet he did not know what instructions had been issued in connection with the crossover movement and he said that he made the movement in accordance with the hand signals which were given him. He maintained that he did not know there was a train approaching yet he acknowledged that the conductor had told him that there were a couple of trains at St. Michael, also that Flagman Nickol had cautioned him to hurry the movement at the time the flagman walked by the engine on his way back to flag, as a train had left St. Michael. Engineman McConnell further stated that when making a movement similar to the one in question, provided the engine is going to remain in the clear in the south end of the yard, he usually arranges for the closing of the switch and whistles in the flagman; on the other hand, the flagman is whistled out farther when the switch is going to be used in making up a train. In this instance he did not whistle in the flagman, he knew that his engine would have to go through the yard to take on water after placing the cars on track 7, and then return, possibly with a portion of a train, which would necessitate moving out upon the main track again, and such a movement is frequently made without the switch

being restored to normal position as the flagman affords protection while the movement is in progress.

Fireman Morrison, of engine 4359, stated that the engineman told him while crossing over to the southbound track that the movement would have to be hurried as a train had left St. Michael; to the best of his knowledge the lamp at the lead-track switch was either out or covered by snow at the time his engine passed it.

Flagman Nickol, of extra 4355, stated that when his train had backed down the southbound track and stopped short of the crossover he telephoned the train dispatcher and was told it was all right to make the crossover movement, but to hurry it, get into clear in the yard, close all switches and let the train go that had already left St. Michael. Flagman Nickol maintained that he then told Brakeman Brode, who was standing near the telephone and had heard his conversation with the dispatcher, "to throw all switches back" after the helper engine got into clear, after which he started back to flag and on passing the engine he told Engineman McConnell to hurry the movement and get into clear right away, as a train had left St. Michael. Flagman Nickol said that he went back to a point about 1,150 feet south of the lead-track switch, waited about four or five minutes, did not see anything of an approaching train and started back in, forgetting to put down any torpedoes. He said he then stopped at the coal tipple, about 540 feet from the switch, put down two torpedoes and remained there a few minutes. He was satisfied that the helper engine was in the clear, and as all of the switch lamps that he could see were displaying clear indications, he was of the opinion that Brakeman Brode had closed the switches as instructed, and he therefore started walking, without having been recalled, permitting extra 6334 to pass him at a point about 330 feet south of the switch without waving a signal of any kind, he estimated the speed of the train at that time to have been about 30 miles per hour. Flagman Nickol did not pay any attention to the lead-track switch lamp on his way back to flag, saying that he first noticed it after the accident and at that time the lamp was out. In his opinion had the switch lamp been burning properly at the time he looked north and saw the clear indications displayed by other lamps in the vicinity the accident would not have occurred. Flagman Nickol further stated that the reason he telephoned the dispatcher in regard to the crossover movement was because he did not hear the conductor instruct him not to block the northbound track. Flagman Nickol said that the movement

in question was one of common occurrence and that on prior occasions when acting as brakeman, he had always closed the switch. After the accident he asked Brakeman Brode why he did not close the switch, and he said the brakeman replied that it was his understanding the flagman would close it.

Brakeman Brode, of extra 4355, stated that Conductor Raffensperger instructed him to proceed on the southbound track to the crossover, but not to foul the northbound track without orders. On arrival at that point he accompanied Flagman Nickol to the telephone located in the car inspectors' shanty, he said that the flagman obtained permission to cross over, but was instructed to hurry the movement so as not to stop the train that was leaving St. Michael. Brakeman Brode also stated that Flagman Nickol said that when they got into clear they would close the switch and let the train proceed, but denied being instructed to close the switch. Brakeman Brode waited a short time until the flagman got back out of sight around the curve to protect, and then lined the crossover switches, and after engine 4359 had moved through the crossover he closed those switches and opened the switch leading to the yard and left it open. When the 3 cars had been shoved in against the 19 cars on the yard track the engine was fouling the northbound track, which made it necessary for him to walk about seven or eight car-lengths before he could ascertain whether there was room enough to shove the string ahead on track 7. He found that there was room enough, the cars were moved ahead, and he was about to make the cut between the caboose and cars when he saw Engineman McConnell jump and also saw the reflection of the headlight of the approaching train, just before the collision occurred. Brakeman Brode further stated that the switch lamp was not burning when he opened the switch and that he could not light it as the matches in his clothes were wet. It further appeared from his statements that Brakeman Brode intended to close the switch and then have the flagman whistled in after the cars were shoved into clear, but that he did not have time to do so. He depended on the flagman to protect until this was done.

Engineman Turner of extra 6334, stated that one torpedo was exploded by his engine just after it passed the coal tipple. Approaching the open switch, which was on the fireman's side, the speed of the train was about 15 miles per hour, with the air brakes applied, and when almost upon the switch a warning of danger was shouted from the fireman's side. Engineman Turner immediately

applied the air brakes in emergency, shortly before the collision occurred, at which time he estimated the speed to have been about 8 or 10 miles per hour. The air brakes had been tested and worked properly. Conductor Barkley was riding on the engine and was unaware of anything wrong until the fireman shouted a warning of danger just as the engine entered the open switch. Conductor Barkley first noticed the switch lamp about 15 minutes after the accident and he said that at that time it was burning very dimly and that both roundels were covered with snow.

Dispatcher Ryan, on duty at South Fork, said that at 10.10 p.m. he gave Conductor Barkley of extra 6334, permission to enter the block from the yard at St. Michael, and at about 10.12 p.m. Flagman Nickol called on the telephone and asked for permission to cross over at the south end of the yard. This permission was given and at the same time he told Flagman Nickol to hurry because of the fact that extra 6334 was then on the way from St. Michael.

Trackwalker Scrofaní said he had been called out that evening to clean snow from the switches and when he reached the south end of the yard at about 8 p.m. he found that the lamp was not burning at the lead-track switch. He relighted it and said it was still burning when he last saw it about one hour afterwards.

Conclusions

This accident was caused by the failure of Flagman Nickol, of extra 4355, to afford proper flag protection.

It appeared from the testimony that Conductor Raffensperger issued instructions to Brakeman Brode, Engineman McConnell and Flagman Nickol not to foul the northbound track without orders, on account of extra 6334 having left St. Michael. Flagman Nickol said he did not understand that any such instructions had been given by the conductor and after his train had backed up as far as the crossover he telephoned to the dispatcher and was given permission to cross over with the rear portion of the train, being told to hurry the movement, get into clear in the yard, close all switches, and to let the train go that had already left St. Michael. Flagman Nickol then went out to protect against extra 6334 while the contemplated movements were being made, but after remaining out for a short time he started back in, of his own accord, without having been recalled. On his way back he stopped, noticed that engine

4359 was in the clear in the yard, and upon observing that green indications were displayed by all of the switch lamps that he could see he assumed that everything was all right and came all the way in, permitting the approaching train to pass him without giving a signal of any kind. Flagman Nickol was an experienced man, thoroughly familiar with the locality and it is difficult to understand his action in returning from flagging without having been recalled and without giving any kind of a signal to the approaching train when it passed him.

Flagman Nickol said he told Brakeman Brode to close all the switches, but in view of the fact that engine 4359 pushed the cars in on track 7 and then had to close up on the cars already on that track and push the entire cut of cars ahead a short distance, it does not appear that Brakeman Brode wasted any time in the performance of his work or that he had any opportunity to close the main line switch behind the engine, which he said he intended to do before having the flagman recalled.

The statements of the various witnesses were conflicting as to the condition of the switch lamp. The trackwalker said he relighted it at about 8 p.m. and that it was still burning at 9 p.m. Other witnesses said the lamp was not burning at the time of the accident, while the conductor of extra 6334 said it was burning dimly with the roundels covered with snow when he examined it about 15 minutes after the occurrence of the accident. If there was snow on the roundels at that time then the lamp either had not been burning at all or had not been burning brightly for any great length of time prior to his inspection, otherwise the snow would have melted from the roundels. The presence of a red indication at this switch undoubtedly would have been noted by Flagman Nickol when he had come in far enough for it to be within his range of vision, but the fact that he could see nothing but clear indications displayed by the various switch lamps in the vicinity did not relieve him in any way from his duty of protecting his train, instead of assuming that the way was clear and that it was all right for him to return.

All of the employees involved were experienced men and at the time of the accident none of them had been on duty contrary to any of the provisions of the hours of service law.

Respectfully submitted,
W. P. BORLAND,
Director.