

INTERSTATE COMMERCE COMMISSION
WASHINGTON

REPORT OF THE DIRECTOR
BUREAU OF SAFETY

ACCIDENT ON THE
PITTSBURGH & LAKE ERIE RAILROAD

SOUTH HEIGHTS, PA.

NOVEMBER 22, 1936

INVESTIGATION NO. 2120

SUMMARY

Inv- 2120

Railroad: Pittsburgh & Lake Erie
Date: November 22, 1936.
Location: South Heights, Pa.
Kind of accident: Derailment
Train involved: Yard engine
Engine number: 9552
Consist: Light engine
Speed: 2-6 m.p.h.
Track: Practically level; tangent; flue
dust track; removed from service
March 2, 1933, to temporarily cur-
tail maintenance costs; last
repairs made to track August 23,
1920.
Weather: Clear
Casualties: 2 killed; 2 injured
Cause: Portion of fill gave way under
weight of engine on siding, due
to poor track conditions.

January 19, 1937

To the Commission:

On November 22, 1936, there was a derailment of a yard engine on the Pittsburgh & Lake Erie Railroad near South Heights, Pa., which resulted in the death of 2 employees and the injury of 2 employees.

Location and method of operation

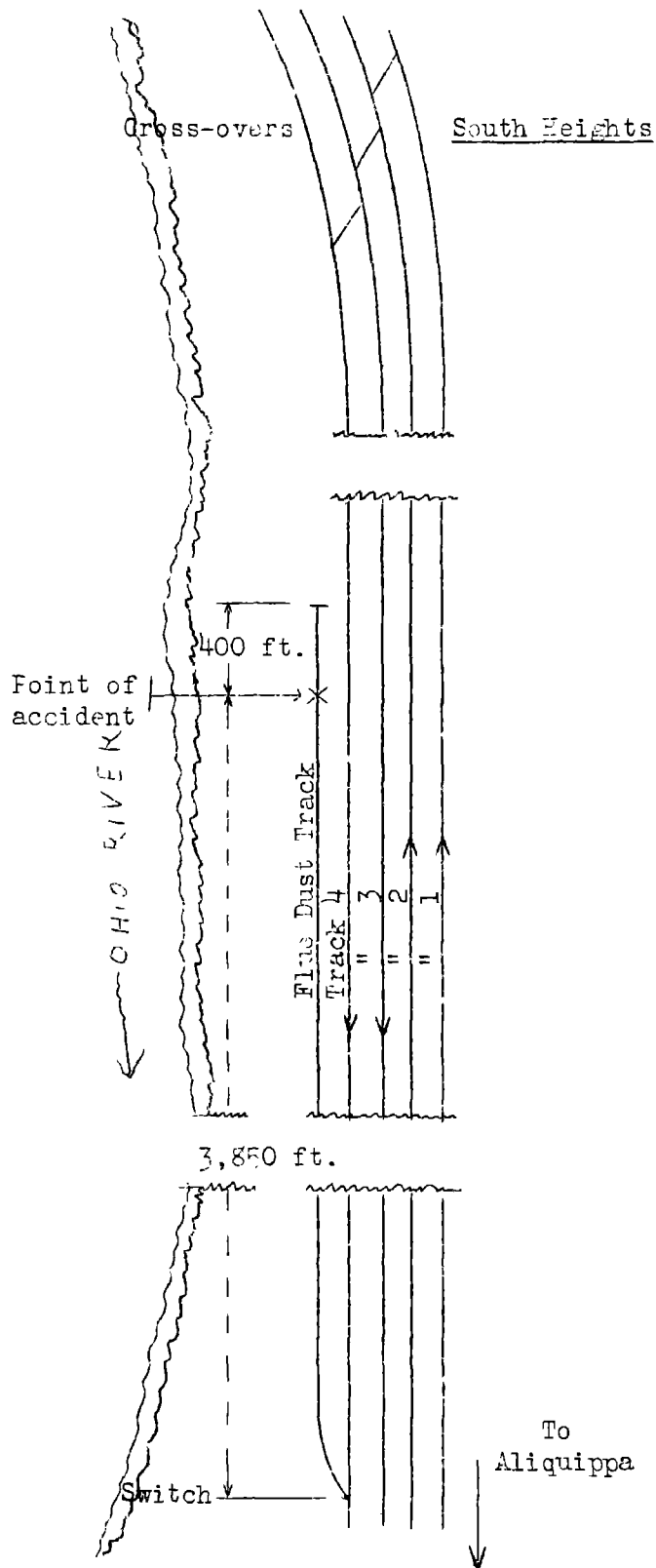
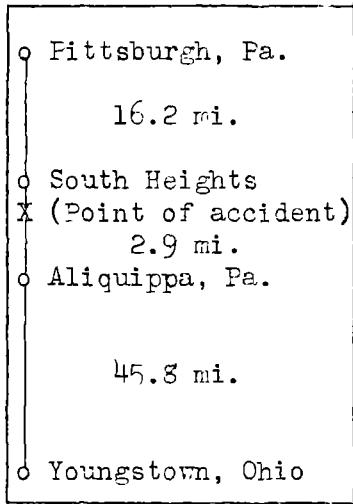
This accident occurred on that part of the railroad extending between Pittsburgh, Pa., and Youngstown, Ohio, a distance of 64.9 miles; in the vicinity of the point of accident this is a 4-track line over which trains are operated by timetable, train orders, and an automatic block-signal and train-stop system. The accident occurred on a yard track, known as track 5 or the flue dust track, at a point about 400 feet from its eastern end; this track is tangent and level except at its eastern end, where it descends toward the east on a 0.50 percent grade for a distance of 425 feet.

The flue-dust track is a stub-end track extending eastward off track 4 for a distance of about 4,250 feet, and parallels the main tracks on the north, being laid on the south bank of the Ohio River. At the point of accident it is on a fill of about 37 feet high which extends across a ravine about 330 feet wide. It is laid with 90-pound rails, 30 feet in length, with 15 to 17 ties to the rail length, and ballasted with cinders to a depth of from 12 to 18 inches.

General Order No. 3507, issued at Pittsburgh on March 2, 1933, specified that effective March 3, 1933, certain tracks and switches were temporarily out of service and could not be used; these various tracks were listed and the flue-dust track was one of them. The general order also contained instructions that should it become necessary to use any of these tracks, or to remove cars that were stored on them, arrangements would have to be made with the engineering department to remove spikes from switches and then to respike the switches after they had been used.

Prior to the accident a cut of 22 empty freight cars stood on the flue-dust track near its western end, and there was another empty freight car that had been shoved partly off the track at its eastern end.

The weather was clear at the time of the accident, which occurred about 9:10 a.m.



Inv. No. 2120
 Pittsburgh & Lake Erie R.R.
 South Heights, Pa.
 Nov. 22, 1936

Description

Yard engine 9552, headed east, was in charge of Yard Foremen Rowland and Engineman Meskiel, accompanied by General Yard Master Mason, and was en route to reraill the car at the east end of the flue-dust track. It headed in at the switch leading to that track, pulled back the 22 cars and placed them on track 4, and again headed into the flue-dust track, reaching a point about 400 feet from its eastern end when it was derailed while traveling at a speed estimated to have been between 2 and 6 miles per hour.

The engine and its tender toppled over on their left sides and slid down the fill about 25 feet. The employees killed were the fireman and a yard helper, and the employees injured were the engineman and a yard helper.

Summary of evidence

Yard Foreman Rowland said the engine was moving at a speed of about 2 or 3 miles per hour when suddenly it toppled over to the left and slid down the fill. After the accident he looked the track over and saw that the rails had been broken off, these being fresh breaks, and that the weight of the engine had carried the entire track structure along with it. There were no marks of derailment west of the point where the engine toppled over, and he thought that the bank slid out from under the track. Yard Foreman Rowland knew about General Order No. 3507 but did not definitely recall its contents and he did not remember that it included the flue-dust track; he said that so far as he knew there was no restriction on the track and that it looked safe with respect to ties and rails; however, he had not previously performed any switching on it at the eastern end with an engine, using the engine only on the western end. He had used this track on two previous occasions within a period of a few weeks, the last time being a week prior to the accident, and the switch had not been spiked, neither was it spiked on the day of the accident.

Engineman Meskiel stated that he talked with Section Foreman Tombesi, who was riding on the engine while en route to the eastern end of the flue-dust track, and the section foreman volunteered information about track conditions and said that there was a little slant in the track near the east end and that the ties were in pretty bad shape, but outside of that the track was in fair condition; the section foreman also told him the track was in pretty fair shape at the point where the engine afterwards was derailed, and placed the location of the bad condition as being about halfway between the point where the derailment occurred and the eastern end of the track. At no time did the section foreman request the engineman to stop so that the track could be examined. Engineman Meskiel was aware that General Order No. 3507 had been issued, but he did not recall that it prohibited the use of the flue-dust track

saying that the switch was not spiked, that General Yard Master Mason had used the track on the previous day, and that Yard Foreman Rowland instructed him to proceed through the track with the light engine. Engineman Meskiel had not previously moved an engine over this track as far as on this occasion, and he said there was no question in his mind but that it was safe, although his own judgment told him to proceed carefully, which he was doing, estimating the speed to have been from 4 to 6 miles per hour when the engine toppled over; he saw the engine leaning to the left toward the river bank, prior to its actual derailment, and when it derailed it slid down over the fill.

Yard Helper Chaney was standing at the east end of the flue-dust track with General Yard Master Mason as the engine approached, moving at a speed of about 2 or 3 miles per hour, and he said that the engine left the rails suddenly and turned over on its side, adding that he had seen engines go over before, but never as quickly as on this occasion. Prior to the accident he had only gone in and out of this track for the purpose of putting shop cars in there and taking them out, and had never been on it with an engine as far east as at this time.

General Yard Master Mason stated that there was no doubt in his mind but that it was safe to operate an engine over the flue-dust track. He was familiar with General Order No. 3507, however, and understood that the track was out of commission, but was of the opinion that when it was removed from service it was not because it was unsafe, but merely to avoid maintenance, saying that all of the general yard masters had been called in and told to submit a list of all tracks under their jurisdiction that they could get along without. He did not take up with the engineering department the matter of removing the spikes from the switch on this occasion, saying he was positive that a year or two previously when the supervisor of track or a trainmaster wanted him to put some camp cars on that track, he requested Section Foreman Franklin, who then was in charge of the section, to pull the spikes, which was done, and to his knowledge the switch had not been re-spiked since that time. Cars had been set in and pulled out of that track frequently since that time, and he felt certain that the maintenance-of-way department was fully aware that the track was being used regularly and had not called the matter to their attention, saying that representatives of that department were over this section of track frequently and he thought they could see for themselves. No general order, however, had been issued restoring the flue-dust track to service, and he did not raise any question with the engineering department as to whether or not it was safe for operation. It also appeared from his statements that prior to the accident no engine had used the east end of this track. General Yard Master Mason said that the procedure he should have followed when he originally used the flue-dust track would have been to take the matter up with the maintenance-

of-way department; he had, however, taken up with Track Supervisor Forst the matter of shoveling away the dirt and cinders from the derailed car, and told him that he wanted to go back on that track with an engine in order to reraill it, although he did not tell him how he was going to do it.

Track Supervisor Forst was of the opinion that the accident was caused by the fill giving way, and then the ties, not being very good, allowed the engine to break the rail and topple over. He was aware that the switch was not being spiked and that cars were being placed upon this track, and said the general yard master had requested him to have the dirt and cinders shoveled away from the derailed car, but he did not raise any question as to how he was going to do it, nor did he contemplate that an engine was going to be moved over that track to its extreme eastern end. He was satisfied that the track was safe for the movement of cars, but not an engine, and had thought that the derailed car would be rerailed by means of a cut of cars being coupled to it and pulling it back on the track, and not moving the engine up to it.

Section Foreman Tombesi, whose territory included the flue-dust track but not the switch leading to it, stated that he thought somebody had been over the flue-dust track and inspected it, and said it had been used frequently for the purpose of storing cars. He thought the accident was caused by the fill being soft, and that the engine was not derailed before it started to slide over the bank; the ties at this point were very badly rotted and were broken into pieces when the track went out with the engine. Section Foreman O'Connor, whose territory included the switch leading to the flue-dust track, did not have any idea that the track was out of service, saying that it was used frequently, and that he thought the proper officials knew about it.

Superintendent Brown stated that the general order involved was issued primarily to curtail maintenance temporarily of unimportant tracks, with the understanding that the switches leading to such tracks would be spiked; in order to enter such tracks it was necessary to obtain proper authority, and provided any such tracks were to be restored to service it was necessary to issue a supplemental general order modifying the original general order. He did not know that the requirements of the original general order were not being obeyed.

Engineer Maintenance-of-Way Paisley stated that he never received any information that the provisions of the original general order were not being carried out; however, he did know that there was some laxity about removing spikes from switches and not replacing them, and said that while maintenance was being deferred, the flue-dust track was being used extensively for the

purpose of storing shop cars. In his opinion the accident was caused by two contributing factors of about equal weight; one factor was the failure of the embankment and the other was the failure of the ties, and he did not believe that the ties would have failed provided the fill had been stable, or that the fill would have given away if the ties had been sound.

According to the records, the last work of filling on the flue-dust track where the derailment occurred was performed on August 23, 1920, and no repairs had been made at that point with respect to grading or renewal of ties and rails since construction of that portion of the track was completed at that time. Inspection of the engine failed to disclose any condition which would have caused or contributed to the accident, but examination of the track at various points, after the removal of 2 or 3 inches of cinders, showed that the ties were badly rotted; in fact, the majority of those examined appeared to be of little use for any purpose. The fill, where not disturbed in the accident, appeared to be firm.

Discussion

The evidence shows that after removing some cars which were on the western end of the flue-dust track, engine 9552 was being moved toward the eastern end of the track at a low rate of speed when suddenly it turned over and slid down the embankment; there was no evidence of derailment prior to this time and it was apparent that the accident was due to the weakness of the fill and of the track structure which it supported.

This track had been taken out of service more than 3 years previously under the terms of a general order which stated that it was not to be used; this order also provided that if it became necessary for the track to be used, arrangements for the removal of spikes from the switch, and their replacement, would be made with the engineering department. The evidence indicates that knowledge of this order was possessed by the yard foreman and engineman in charge of the engine, by the section foreman in charge of the switch and also by the section foreman in charge of the track east of the switch, and by the general yardmaster and the track supervisor, and that no general order had been issued changing its requirements with respect to the track in question; it also appears that all of these employees knew that the track was being used more or less frequently and that it did not occur to them to raise any question about its use on the day of the accident. The terms of the general order were clear and explicit, and there is no excuse to be offered for the failure of supervising officials to prevent the development of the practice of using the track in violation of the order, neither is there any excuse for the apparent lack of individual interest displayed in this particular case, where practically none of

those involved showed any concern in disregarding the order in question.

Conclusion

This accident was due to a fill giving way under an engine, primarily as a result of bad track conditions.

Respectfully submitted,

W. J. PATTERSON,
Director.