

INTERSTATE COMMERCE COMMISSION

WASHINGTON

REPORT OF THE DIRECTOR

BUREAU OF SAFETY

ACCIDENT ON THE

PITTSBURGH & LAKE ERIE RAILROAD

WILK HAVEN, PA.

JANUARY 6, 1937

INVESTIGATION NO. 2134

SUMMARY

Inv-2134

Railroad: Pittsburgh and Lake Erie
Date: January 6, 1937
Location: Wick Haven, Pa.
Kind of accident: Head-end collision
Trains involved: Freight : Work
Train numbers: First 90 : Extra 9375
Engine numbers: 9580 : 9375
Consist 55 cars, caboose : Coach, 2 work cars, 5 gondolas, caboose
Speed: 20-25 m p.h. : Standing
Track: 4°26' curve; 0.12 percent ascending grade
Weather: Clear
Time: 8:30 a.m.
Casualties: 1 killed; 3 injured
Cause: Failure of flagman to provide protection for work extra occupying main track; excessive speed under caution signal indication

February 17, 1937

To the Commission:

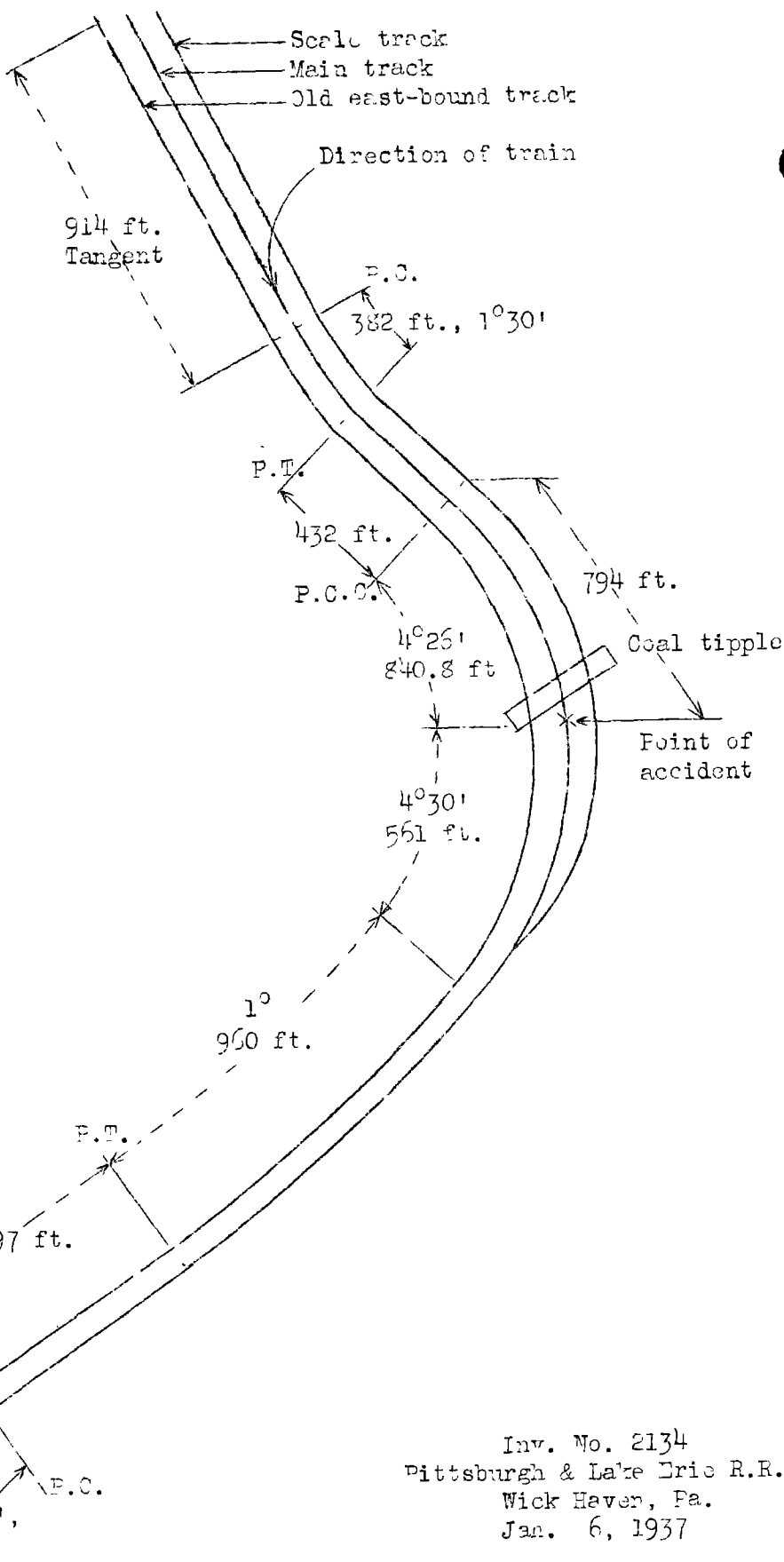
On January 6, 1937, there was a head-end collision between a freight train and a work train on the Pittsburgh & Lake Erie Railroad near Wick Haven, Pa., which resulted in the death of 1 employee and the injury of 3 employees.

Location and method of operation

This accident occurred on the Youghiogheny Division, extending between McKees Rocks, Pa., and Connellsville, Pa., a distance of 61.8 miles. Between Boston, Pa., 22.8 miles west of Wick Haven, and Dickerson Run, Pa., 10.8 miles east of Wick Haven, this is a single-track line over which trains are operated by timetable, train orders, and a manual block-signal system; the normal position of the manual block signals at Boston and Dickerson Run is at proceed; special timetable instructions provide that the signal shall be placed in the caution position immediately after the passage of a train and kept in that position until the train for which it was displayed has cleared the block, but that it shall not be placed in that position for trains following work extras and yard engines, which are not relieved from strict compliance with rules 86 and 99. Rule 86 requires an inferior train to clear a superior train not less than 5 minutes, while rule 99 is the usual flagging rule requiring a flagman to go out a sufficient distance to insure full protection, using torpedoes, when recalled, if conditions require it. There are no intermediate block stations between Boston and Dickerson Run, a total distance of 33.6 miles, while the territory between Duncan, 18.6 miles west of Wick Haven, and Fuller, 2.5 miles east of Wick Haven, is within yard limits, within which territory the main track, under rule 93, may be used protecting against all trains.

The point of accident was 2,460 feet west of the station at Wick Haven; approaching this point from the west, the track is tangent for a distance of 432 feet, followed by a compound curve to the right 2,361 feet in length, which consists of a 4°26' curve for a distance of 840 feet, a 4°30' curve for a distance of 561 feet, and a 1° curve for a distance of 960 feet, including spirals, the accident occurring on the 4°26' curve at a point 794 feet from its western end. The grade at the point of accident is 0.12 percent ascending for east-bound trains.

o	McKees Rocks, Pa.
	19.1 mi.
o	Boston
	10.3 mi.
o	Douglas
	11.4 mi.
o	Jacobs Creek
X	Point of accident
	1.1 mi.
o	Wick Haven
	0.9 mi.
o	Whitsett Jct.
	1.6 mi.
o	Fuller
	8.3 mi.
o	Dickerson Run
	5.6 mi.
o	Connellsville, Pa.



Inv. No. 2134
 Pittsburgh & Lake Erie R.R.
 Wick Haven, Pa.
 Jan. 6, 1937

Wick Haven

The main track is paralleled on the south by a track known as the old east-bound main, and on the north by a scale track. A cross-over connecting the main track and the old east-bound main is located 322 feet west of Wick Haven station. The view approaching from the west is restricted to a distance of 450 feet by the curvature of the track and by the buildings of a coal tipple on each side of the tracks, a portion of the structure also spanning the tracks. The maximum authorized speed for freight trains is 25 miles per hour.

The weather was clear at the time of the accident, which occurred at 8:30 a.m.

Description

Work Extra 9375 consisted of engine 9375, headed west, 1 coach, 1 supply car, 1 locomotive crane, 1 tool car, 5 gondolas, and a caboose, in the order named, and was in charge of Conductor Gaal and Engineman Budd. This crew held an order to work from 7 a.m. until 7 p.m. between Dickerson Run and Jacobs Creek yard office, the first station west of Wick Haven, with right over yard engines until 9 a.m.; also an order to meet Train No. 92 at Kier, 4.1 miles east of Wick Haven, and an order that Train First No. 90 would wait for them at Fuller until 8:30 a.m. Train No. 92 was met at Kier and the work extra then proceeded to Fuller on the time order, crossed over to the old east-bound main, and at Whitsett Junction, 0.9 mile east of Wick Haven, Conductor Gaal telephoned the dispatcher, inquired about Train First No. 90, and obtained verbal permission to use the main track at Banning Mine. A flagman was sent out in each direction, the crane was placed on the old east-bound main opposite the mine, and the work train then proceeded through the Wick Haven cross-over to the main track, about 8:20 a.m., and stopped opposite the crane, where it was standing when struck by Train First No. 90.

Train First No. 90, an east-bound second-class freight train, consisted of 55 cars and a caboose, hauled by engine 9580 and was in charge of Conductor Cooley and Engineman Goldsboro. The crew of this train did not have a copy of the work order, but did have the order to wait for the work extra at Fuller until 8:30 a.m. This train left Boston at 7:45 a.m., 2 hours late, under a caution block-signal indication and in possession of a clearance card showing that the block was occupied. The train passed Douglas, the last open office, 12.5 miles west of Wick Haven, at 8:07 a.m., according to the train sheet, and collided with Work Extra 9375 near Wick Haven while traveling at a speed estimated to have been from 20 to 25 miles per hour.

Both engines were derailed but remained upright; their front ends were locked together and badly damaged; the pony truck of engine 9375 was demolished and the tender derailed and damaged. The work train was knocked backward a distance of 355 feet and the coach demolished and two other cars derailed and damaged, while the two head cars of Train First No. 90 also were derailed. The employee killed was a maintenance of way employee working near by, while the employees injured were the engineman, fireman, and the head brakeman of Train First No. 90.

Summary of evidence

Conductor Gaal, of Work Extra 9375, stated that it was about 7:45 or 7:50 a.m. when he obtained the verbal permission to work on the main track, and at that time the dispatcher told him that Train No. 90 had left Boston at 7:45 a.m. He then told his trainmen to protect them between Wick Haven and Jacobs Creek, and he further admonished Brakeman Crawford to flag everything but the passenger train, an east-bound train due at Wick Haven at 9:39 a.m. Brakeman Crawford appeared to be in normal condition, acknowledged the flagging instructions, and the conductor observed him going westward with the proper flagging equipment between 8:05 and 8:10 a.m. The work train was standing about 25 car lengths west of Wick Haven cross-over when suddenly he saw an engine coming around the curve and then the collision occurred. Afterward he talked with Engineman Goldsboro, of Train First No. 90, who told him he had not been flagged. Later he inquired of Brakeman Crawford why he failed to flag as instructed and Crawford replied that something told him not to flag, and Conductor Gaal said that when he reminded Crawford that he had been instructed to flag everything except the passenger train, the brakeman acknowledged that that was the case.

Engineman Budd, of Work Extra 9375, said he heard Conductor Gaal tell Brakeman Crawford to protect all eastward movements and he saw the brakeman go westward immediately with the proper flagging equipment; he had left the engine temporarily in charge of the fireman while the work was being done at the mine and was not present when the collision occurred, which he said was nearly 30 minutes after the flagman had departed.

Fireman McCracken gave Brakeman Crawford some torpedoes, after which he saw him go westward with flag and fuses. While working at the mine he noticed something coming and thought it was a yard engine, but on looking out of the gangway he saw a train, moving too fast to stop, and jumped from his engine just before the collision occurred.

Brakeman Crawford, of Work Extra 9375, said he had seen their orders prior to leaving Dickerson Run and that the conductor had explained the movements they would make and told him to flag everything but the passenger train. He procured the necessary flagging equipment, started toward Jacobs Creek, and was walking opposite the scale office at that point when he saw Train No. 90, and then heard its whistle when about 20 car lengths distant. Brakeman Crawford said he knew he should flag the train and wanted to do so, but that something seemed to tell him not to and he could not do it; when the engine passed, however, he threw up his flag, his statement indicating that he intended that the engineman should look out ahead. He said he had not put down any torpedoes or fusees, that the weather was clear, and that he had a clear view westward for about 1 mile. It further appeared from the statements of Brakeman Crawford that he was a promoted road flagman and yard foreman prior to being furloughed in 1930, and that he was given a physical examination when recalled in October, 1936, but was not examined on the operating rules; he had, however, performed flagging duties at various times and understood the rules governing such work.

Engineman Goldsboro, of Train First No. 90, stated that at Boston he received the clearance card which showed the block was occupied, while the block signal was displaying a caution indication, which he said required him to proceed at medium speed, or 20 miles per hour; orders also were received, but they did not include the work order. He ascertained, however, that the train preceding him in the block, Train No. 92, had received orders at Jacobs Creek, 1.1 miles west of Wick Haven, relative to meeting the work extra east of that point, consequently he assumed responsibility for operating at 25 miles per hour up to Jacobs Creek. Approaching Jacobs Creek he saw Brakeman Crawford walking along the south side of the track with a flag under his arm, but the flagman gave no signal of any kind nor were any fusees or torpedoes encountered, and his train was approaching Banning Mine at a speed of about 25 miles per hour when he saw engine 9375 about 10 car lengths distant. He immediately closed the throttle and applied the air brakes in emergency, and he said the brakes applied in a satisfactory manner and reduced the speed of his train to about 20 miles per hour by the time it struck the work extra; had he been flagged when he passed the flagman, he could have avoided the collision. The statements of Fireman Stevens and Brakeman Heimbaugh added nothing of importance.

Flagman Leasure, of Train First No. 90, said his train made an emergency stop and that he went back to flag; at a point about 4,000 feet west of the point of accident he met

Brakeman Crawford, of Work Extra 9375, who said he was on his way back to put down torpedoes when Train First No. 90 appeared, and his statements as quoted by Flagman Leasure indicated that he gave a signal with his flag which he intended as a steady signal and that he thought they would look out for the work train.

Assistant Superintendent Kelly stated that yard engines and work trains may make movements by verbal permission from train dispatchers without notice to opposing trains, under flag protection, the dispatchers making memoranda concerning such movements and the only official record being the operator's O.S. report showing the time at which trains enter the block; he also stated that the Form H work order contained in the book of rules of this railroad is used for work extras, but that example E of this form, authorizing a train to work upon the time of a regular train, is not used in view of rule 93 and that the regular train does not receive a copy of the work order. Mr. Kelly also stated that under the special timetable instructions, a train receiving a caution signal when entering the block at Boston or at Dickerson Run should run at restricted speed; when asked to define "restricted speed," Mr. Kelly referred to the definition appearing under the general timetable instructions governing the use of automatic block signals, to the effect that the train involved must proceed prepared to stop short of train ahead, obstruction, or switch not properly lined, and look out for broken rail, and he stated that he felt sure the employees on this division so understood it.

Discussion

The investigation in this case disclosed that the conductor of Work Extra 9375 had sent out flagmen in each direction and that Brakeman Crawford, who was sent out to protect against east-bound trains, had been told to flag all trains except a passenger train not involved in this accident. It further appeared that Brakeman Crawford started out 20 minutes or more prior to the occurrence of the accident and that he was back an ample distance to furnish adequate flag protection when he saw Train First No. 90 approaching, but that for some unknown reason he failed to take any action to flag that train or to warn the engineman that the track ahead was occupied, with the result that First No. 90 passed him without reducing speed and was moving too fast to stop in time to avert the accident when the work extra came into view.

Under the rules of this company, work extras are allowed to enter the main track within block limits under flag protection on the verbal authority of the dispatcher, no information

concerning such movements or a copy of the work order, being given to opposing trains. Train First No. 90 entered the block under a caution signal which was displayed on account of a preceding train, and under the rules should have proceeded at restricted speed. The crew of Train First No. 90 had no direct knowledge of the work extra other than that contained in the wait order received at Boston, and the information received at this point, to the effect that the train immediately ahead had received orders at Jacobs Creek to meet the work extra east of that point, apparently caused them to feel that it was safe to operate their train at least as far as Jacobs Creek at a speed higher than was authorized by the caution block-signal indication. The evidence indicated, however, that the speed was even higher than estimated by them, the train sheet showing that the average speed between Boston and Douglas, 10.3 miles, was more than 28 miles per hour, and more than 31 miles per hour between Douglas and the point of accident, a distance of approximately 12 miles. While the engineman of Train First No. 90 may have had reason to think there was nothing ahead of him between Boston and Jacobs Creek, he had no knowledge of conditions beyond that point and in view of the signal indication which he had received he should have been operating his train expecting to find the track occupied instead of operating at an average speed in excess of the speed limit.

Rule 86 of this railroad provides that an inferior train must clear the time of a superior train not less than 5 minutes; the rules also provide that train orders must be in the prescribed forms when applicable, while under the forms of train orders, example E of Form H, a form is provided for use in the case of a work extra which is to work on the time of a scheduled train. Work Extra 9375 had authority to work in the territory in question under an order in the prescribed form but this order did not authorize them to work on the time of a scheduled train nor was a copy furnished to the scheduled train involved in this accident, neither did the crew of the work extra make any attempt to clear the track as required by rule 86, although the timetable instructions provide that work extras shall comply strictly with this rule; it is apparent that rule 93, coupled with the provisions of flagging rule 99, is considered as sufficient authority for occupying the main track in the manner involved in this case. In view of the fact that the yard limits embrace a distance of more than 21 miles, that there are no block offices between Boston and Dickerson Run, a distance of 33.6 miles, that trains following work extras or yard engines do not receive a caution signal indication when entering the block, and the further fact that a work extra is allowed to enter on the main track between block offices and work on the

time of an overdue scheduled train on the verbal authority of the dispatcher without the opposing train having a copy of the work order, it is obvious that not only does the block system as operated in this territory add little if any protection to that afforded by the operating rules, but that the trains involved in this accident did not have the benefit of the protection that would have been provided had even the rules governing timetable and train operation been fully enforced. The practices followed could be materially improved from the standpoint of safety in train operation.

Conclusion

This accident was caused by failure of a flagman to provide protection for a work extra occupying the main track on the time of an overdue superior train; a contributing cause was the operation of Train First No. 90 at an excessive rate of speed after having received a caution block signal indication.

Respectfully submitted,

W. J. PATTERSON,

Director.