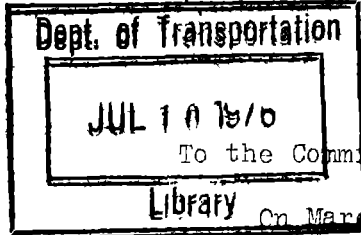


INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY CONCERNING AN
ACCIDENT ON THE PENNSYLVANIA RAILROAD NEAR COLUMBIA
CITY, IND., ON MARCH 8, 1934.



May 15, 1934.

To the Commission:

On March 8, 1934, there was a rear-end collision between a freight train and two light engines, coupled, on the Pennsylvania Railroad near Columbia City, Ind., which resulted in the injury of two employees. This accident was investigated in conjunction with the Public Service Commission of Indiana.

Location and method of operation

This accident occurred on that part of the Fort Wayne Division extending between Fort Wayne and Hobart, Ind., a distance of 114.1 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 an automatic block-signal system. The accident occurred on the west-bound main track at a point about 1 $\frac{1}{2}$ miles east of Columbia City; approaching this point from the east, the track is tangent for several miles, this tangent continuing beyond the point of accident for a considerable distance. The grade is 0.38 percent ascending for west-bound trains for 3,400 feet to the point of accident.

The automatic signals involved in this accident are signals 337.5 and 336.1, located 711 and 8,738 feet, respectively, east of the point of accident. Signal 337.5, a grade signal, is an automatic signal of the position-light type, while signal 336.1 is an automatic signal of the three-position, upper-quadrant semaphore type, approach-lighted; night indications of semaphore signals are red for stop, yellow for approach next signal prepared to stop, a train exceeding one half its maximum authorized speed at point involved being required to reduce at once to not exceeding that speed, and green for proceed. The view is unobstructed.

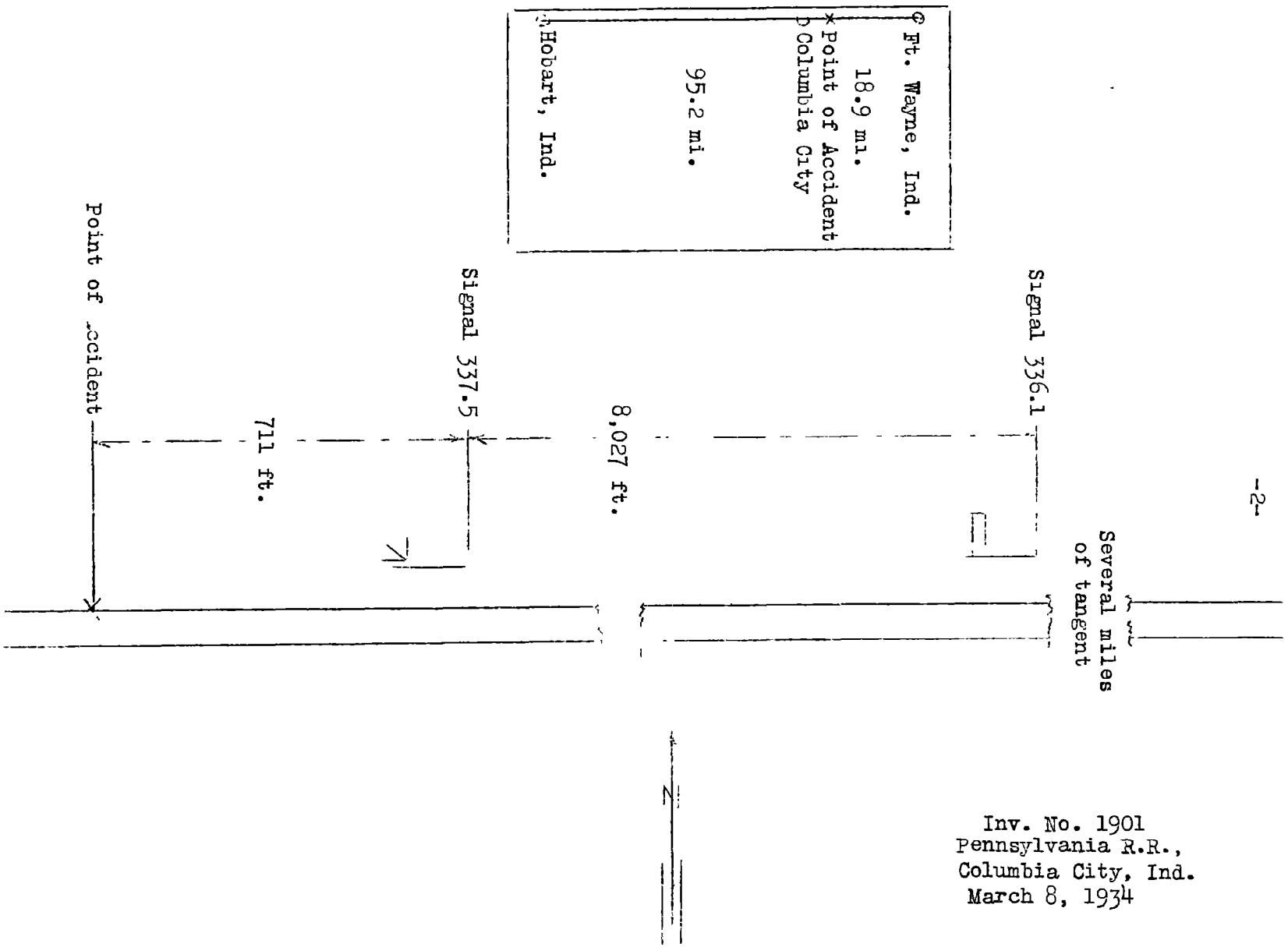
The weather was clear at the time of the accident, which occurred about 11:14 p.m.

Description

West-bound freight train Extra 6819, symbol PF-9, consisted of 77 cars and a caboose, hauled by engine 6819, and was in

Several miles
of tangent

Inv. No. 1901
Pennsylvania R.R.,
Columbia City, Ind.
March 8, 1934



⊙ Ft. Wayne, Ind.

18.9 mi.

* Point of Accident
⊙ Columbia City

95.2 mi.

⊙ Hobart, Ind.

Signal 336.1

8,027 ft.

Signal 337.5

711 ft.

Point of Accident



charge of Conductor Bennett and Engineman Elliott. This train left Fort Wayne, 18.9 miles east of Columbia City, at 10:30 p.m., according to the train sheet, and stopped at Columbia City about 11:09 p.m., with the caboose 711 feet west of signal 337.5. The rear portion of the train had been standing at this point a few minutes when it was struck by Extra 5364.

West-bound Extra 5364 consisted of light engines 5364 and 5354, coupled, en route from Fort Wayne to Chicago, with Engineman Young on the lead engine and Engineman Herber on the second engine. Extra 5364 left Fort Wayne at 10:51 p.m., according to the train sheet, passed signal 336.1, which was displaying an approach indication, passed the flagman of Extra 5364, passed signal 337.5, which was displaying a stop indication, and collided with the rear of Extra 6819 while traveling at a speed estimated to have been between 10 and 25 miles per hour.

The steel-underframe caboose of Extra 6819 was telescoped practically its entire length and the first three cars ahead of it were derailed; the caboose and rear car caught fire and were destroyed, while the next car was considerably damaged by the fire. Neither of the light engines was derailed, but the front end of engine 5364 was damaged. The employees injured were the firemen of the light engines.

Summary of evidence

Flagman Sivits, of Extra 6819, the only member of his crew at the rear of his train when it stopped, stated that he immediately started back to flag, carrying full equipment, and that the markers on his caboose were burning properly and displaying red to the rear. As he came out on the platform he saw a headlight about 2 miles away, and as he passed signal 337.5 it was displaying a stop indication. On reaching a point about 14 or 15 car lengths from the rear of his caboose he placed a torpedo on the north rail, and then a second one. He flagged the approaching engines but received no answer to his signals and then lighted a red fusee and gave stop signals on the engineman's side, and as the engines passed him, at a point about 10 car lengths east of signal 337.5, traveling about 30 or 35 miles per hour, he shouted, but to no avail. He heard only one torpedo explode. Flagman Sivits said that both of his lighted lanterns were extinguished in his efforts to flag the engines, as a result of striking them against something which he thought was the front end of the lead engine. At no time did he receive any response to his flagging signals although smoke blowing down over the engines indicated that steam had been shut off. None of the other members of the crew of Extra 6819 was aware of anything wrong prior to the accident; Head Brakeman Shaughnessy stated that while the engine was taking water after setting out a car he saw a fusee in the

vicinity of the rear end, on the north side of the track, and he assumed it was the fusee used by the flagman in flagging the light engines.

Engineman Young, of lead engine 5364, stated that he did not see the indication displayed by signal 336.1, owing to a strong southwest wind blowing down steam and smoke on his side of the engine and obscuring his view, but that Fireman Adams called the indication of that signal as clear, after which the engineman looked over and inquired "clear" and the fireman repeated "clear". The speed was about 50 miles per hour, and when closely approaching signal 337.5 the fireman jumped off the seat box and called the indication of the signal as stop, whereupon the engineman closed the throttle, opened the sanders and applied the air brakes in emergency, and when the smoke cleared he got a good view of signal 337.5 before passing it and saw that it displayed a stop indication; the speed had been reduced considerably before the accident occurred. Engineman Young did not see the stop signals of the flagman, or a fusee, and in the excitement he did not recall having heard a torpedo exploded, but he said that he saw the markers on the cabooses of extra 6819 immediately after passing signal 337.5, and shortly after the accident he saw the flagman in the immediate vicinity of signal 337.5 walking westward toward the light engines.

Fireman Adams, of engine 5364, stated that signal 336.1 was displaying an approach indication and that he called it to the engineman, who repeated something, but the fireman was not certain what it was. The engines were traveling about 50 miles per hour and the engineman did not reduce speed after passing the signal displaying the approach indication; at this particular time the fireman did not take any specific action toward having the speed reduced, but on reaching a point about $\frac{3}{4}$ mile from signal 337.5, the fireman saw that it was displaying a stop indication and called it to the engineman, who failed to take any action; the fireman said he then got down off his seat box and went over to the engineman and told him to stop, and the engineman immediately applied the air brakes in emergency; the fireman went back to the left side of the engine and saw the flagman of the train ahead on the right side of the track, although he could not say how far back from the rear of his train; he jumped from the left side of his engine immediately prior to the collision, estimating the speed at the time of the accident to have been reduced to about 20 miles per hour. Fireman Adams did not hear a torpedo exploded nor see a fusee; he said that the engineman appeared normal and on the alert while en route on the trip.

Engineman Herber, of engine 5354, stated that on account of steam and smoke trailing down on his side of the cab and into the windows he did not see either signal involved. The headlight

was extinguished on his own engine and the air brakes were under the control of the lead engineman. He said that he was using a drifting throttle and estimated the speed to have been about 45 miles per hour when the air brakes were applied in emergency, at which time he immediately closed the throttle on his own engine, and he estimated that the speed had been reduced to about 10 or 15 miles per hour when the collision occurred, at about which time he saw that the marker on the right side of the caboose was burning properly. Engineman Herber did not see the flagman of the train ahead nor hear a torpedo exploded, and said that his fireman did not call signal indications en route on account of not being able to see them because of steam and smoke trailing down. A short time after the accident Engineman Herber saw the flagman's lanterns and the globes were broken. Fireman Jenkins corroborated the majority of the statements of Engineman Herber.

Supervisor of Telegraph and Signals Wallace arrived at the scene of the accident about $1\frac{1}{2}$ hours after its occurrence, and test made at that time of the signal apparatus involved disclosed it to be in proper working order.

Train Master Wisegarver inspected the track about $2\frac{1}{4}$ hours after the occurrence of the accident for torpedo marks, in company with Superintendent Cooper, Conductor Bennett and Flagman Sivits of Extra 6819, and the mark of an exploded torpedo was found on the north rail at a point about 50 feet east of signal 337.5; he did not find any evidence of a fusee east of signal 337.5.

Conclusions

This accident was caused by the failure of Engineman Young, of lead engine 5364, properly to observe and obey signal indications, and also the stop signals of a flagman.

Engineman Young said steam and smoke trailed down on his side of the engine and obscured his view and that he did not see the indication displayed by signal 336.1, but he claimed that his fireman called its indication as clear and did not call the stop indication of signal 337.5 until it was only a short distance away. The fireman, however, said signal 336.1 displayed an approach indication and that he called this indication to the engineman; also that on reaching a point about $\frac{1}{4}$ mile from signal 337.5 he observed it displaying a stop indication, called it to the engineman, who failed to take any action, and then got down off his seat box and went over to the engineman's side and told him to stop, whereupon the engineman applied the air brakes in emergency, but it was then too late to avert the accident. The engineman and fireman of the second engine did not see the indication displayed by either signal on account of exhaust steam and smoke trailing down, while none of these four employees

saw the flagman or a fusee, neither did they hear a torpedo explode. After the accident, however, the mark of an exploded torpedo was found on the north rail at a point about 50 feet east of signal 337.5, while at the time water was being taken the head brakeman of Extra 6819 had looked back and seen a burning fusee; it also appeared that very shortly after the accident Engineman Young saw the flagman in the vicinity of signal 337.5, the flagman at that time being on his way in toward his train. Under the rules Engineman Young should have taken action to bring the light engines under control when he was unable to see signal indications, and his fireman should have made certain that Engineman Young understood what was said when the fireman called the approach indication of signal 336.1. The rules required speed to be reduced immediately to one-half the maximum authorized speed, which is 50 miles per hour for light engines of the class involved, and the failure of the engineman to take any action toward complying with the rules should have prompted the fireman to make sure that the engineman knew what indication was displayed.

As was pointed out in the report covering the accident which occurred on this railroad at Pittsburgh, Pa., on February 26, 1934, automatic cab signals are in use on other portions of the road but no such protection has been provided on that portion extending between Pittsburgh and Chicago, which includes the territory in which the accident here under investigation occurred. Had a cab signal system been in use in this particular case it would have warned Engineman Young that he was passing a restrictive signal indication, in which event it is probable that the accident would not have occurred. The traffic density in this vicinity is considerable even under present conditions, averaging nearly 49 train movements daily in the 30-day period ending May 8, many of which are operated at high rates of speed, and the carrier should give consideration to the question of providing additional protection by installing either automatic cab signals or such other protective devices as may appear advisable.

Respectfully submitted,

W. J. PATTERSON,

Director.