

INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN RE
INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE
BALTIMORE & OHIO RAILROAD AT BRUNSWICK, MD., ON
JANUARY 18, 1930.

March 29, 1930

To the Commission.

On January 18, 1930, there was a rear-end collision between an express train and a freight train on the Baltimore & Ohio Railroad at Brunswick, Md., which resulted in the death of one employee.

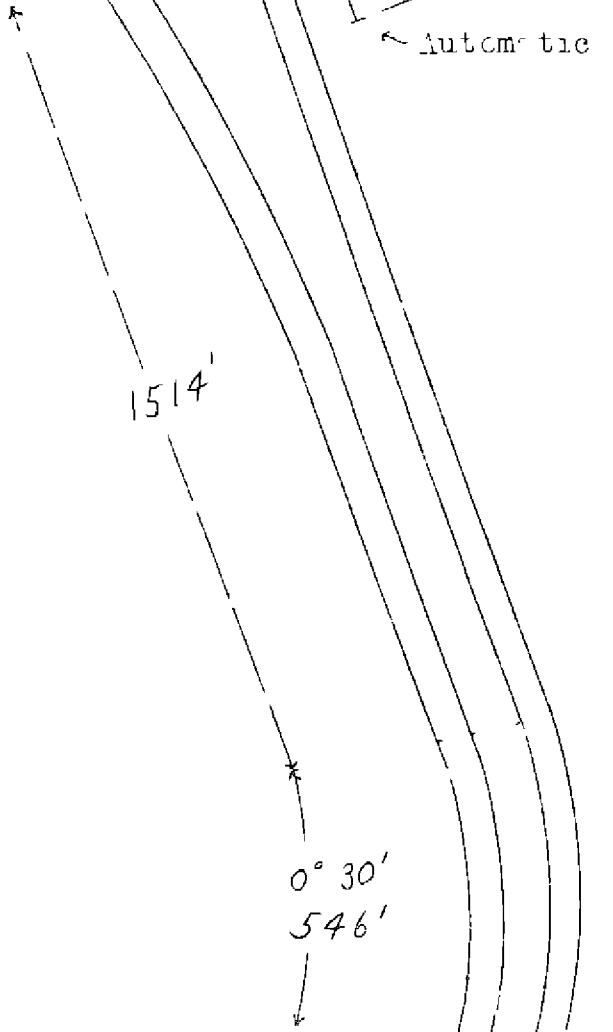
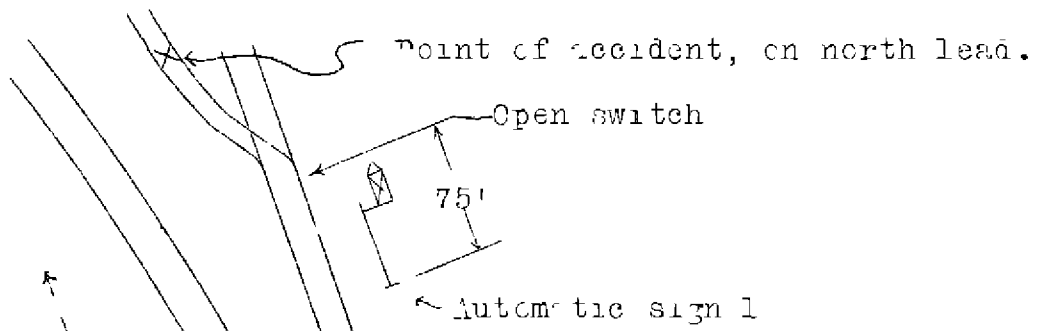
Location and method of operation

This accident occurred on that part of the Baltimore Division, West End, extending between Point of Rocks and Weverton, Md., a distance of 10 miles. This is a double-track line over which trains are operated by timetable, train orders, and an automatic block signal system. The accident occurred within yard limits 424 feet west of the switch at the eastern entrance to the yard, on a running track known as the north lead track, approaching this point from the east, the track is tangent for a distance of 1,583.3 feet, followed by a $0^{\circ} 50'$ curve to the left, 546.6 feet in length, and then tangent track for a distance of 1,514.4 feet to the facing-point switch of a No. 16 left hand turnout at the eastern entrance to Brunswick yard, this turnout leads from the westbound main track to the north lead track, and also to various tracks of Brunswick yard. The westbound main track and the north lead track are tangent, as well as being parallel and adjacent to each other, for more than one-fourth mile beyond the switch. In the vicinity of the point of accident the grade is level.

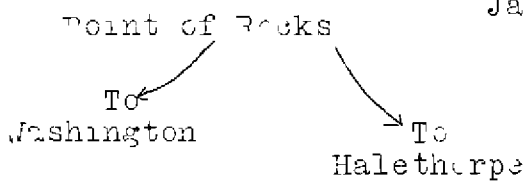
The only signal involved in this accident was an automatic block signal, of the three-position, upper-quadrant semaphore type, located 75 feet east of the switch at the entrance to the yard. The facing-point switch at the eastern entrance to Brunswick yard is equipped with a parallel ground-throw intermediate New Century switchstand, with an Anderson switch interlocker, and is pipe-connected to a Hayes derail, located on the north lead track near the clearance point thereof.

It was snowing at the time of the accident, which occurred about 7 28 a.m.

West



No. 1608
Baltimore & Ohio R.R.,
Brunswick, Md.
Jan. 18, 1930.



East

Description

Westbound freight train extra 4601, symbol "Philadelphia 97", was hauled by engine 4601 and was in charge of Conductor Baldwin and Engineman Hilton. This train, moving from Halethorpe via the West End, passed Point of Rocks, 4.6 miles east of the entrance to Brunswick yard, at 6.51 a.m., and arrived at Brunswick yard at 7 a.m. It pulled into the receiving yard, where the caboose was detached but when it stopped the caboose was fouling the main track so that the switch could not be closed. Engine 4601 then was cut off from its train, backed up on another track, coupled to the caboose, and moved it westward to clear the main track, the switch, however, was not closed, and shortly afterwards train No. 13 entered the open switch and collided with the caboose, which was being hauled eastward at a speed of about 10 miles per hour.

Westbound first-class express train No. 13 consisted of one express car, one baggage car, one express car, seven baggage cars, one express car, one baggage car, and one coach, in the order named, hauled by engine 5211, and was in charge of Conductor Hovermale and Engineman Robey. With the exception of the first, eleventh and last cars, the cars were of all-steel or steel-underframe construction. This train, moving from Washington, D.C., via the Metropolitan Sub-division to its junction with the West End at Point of Rocks, passed Point of Rocks at 7 19 a.m., 1 hour and 24 minutes late, and collided with the caboose of extra 4601 in Brunswick yard while traveling at a speed, which, according to the speed recorder tape taken from engine 5211, was about 50 miles per hour.

Engine 4601 came to rest about 800 feet west of the point of collision, the rear truck of the tender of this engine being derailed and the tender itself badly damaged, while the caboose was demolished. Neither engine 5211 nor any of the cars in train No. 13 were derailed, the engine, however, was considerably damaged, and the first car, which was of wooden construction, was telescoped and partly demolished, by the succeeding car, which was of steel construction. The employee killed was the brakeman of extra 4601, who was riding in the caboose.

Summary of evidence

Engineman Hilton, of extra 4601, said his train arrived at the east end of Brunswick yard at 7 a.m., and although it was snowing hard, the brakeman experienced no difficulty in operating the switch. He sounded the

whistle signal for the flagman to protect the train and about two minutes later his train headed into the yard, without recalling the flagman. The caboose had been uncoupled and left standing on the frog of the main track switch, but after pulling the train into the yard, Engineman Hilton returned with his engine, coupled to the caboose, and pulled it into clear on the north lead track, his flagman was back approximately two car-lengths from the caboose. After getting into clear, Engineman Hilton noticed something wrong in the vicinity of the switch, he saw the conductor try to close the switch and observed the block signal display green, then red, and when train No. 13 came in sight the signal was showing a green indication. With train No. 13 four or five car-lengths distant, the signal again showed red, and, realizing the impending danger, he opened up the engine and tried to escape, but the collision occurred almost immediately, while his train was moving at a speed of about 10 miles an hour. Engineman Hilton said he held no orders relating to train No. 13 and did not know when it was due at Brunswick yard, although he said the conductor, on his return from the telephone booth, had told him they were running on the time of that train. When questioned concerning the protection afforded his train, Engineman Hilton admitted the flagman should have been back farther than he was. The statements of Fireman Buckingham of extra 4601 added nothing additional of importance.

Conductor Baldwin, of extra 4601, stated that when his train stopped preparatory to heading in, the flagman got off and put down one torpedo. The train soon started into the yard and the flagman got off again, this time at the switch, while the conductor cut off the caboose. The caboose did not move ahead far enough to clear the main track, however, and the conductor went to the telephone booth and told the operator he was not into clear, to which the operator replied that train No. 13 was by Boyd, a station about 18.3 miles east of the point of accident. His engine returned, coupled to the caboose, and pulled it ahead, clearing the switch, he reported his train clear of the main track at 7.25 a.m., and then saw the flagman trying to lock the switch for the main track. As he heard train No. 13 approach, he ran toward the flagman, and saw him light a fusee and start running toward the approaching train. The flagman was back about 10 car-lengths when Conductor Baldwin reached the switch, and the conductor called to the flagman to go back and then took a broom from a track man and endeavored to clear the snow and ice from the latch of the switch-stand. He pushed the lever down, and although the switch point fitted against the rail, the lock did not click, and when he did not succeed in locking it for the main track, he threw it for the north lead track and it latched. He stated he did not leave the switch set for the main track, unlatched, as he was afraid the points would open

and cause a derailment. Conductor Baldwin further stated that it is customary for the flagman to remain in the vicinity of the switch, or only a few car-lengths back from it, when a caboose is left standing on the north lead ^{at} the time a train arrives in the yard.

Flagman Carter, of extra 4601, said that when his train stopped at Brunswick Yard, a whistle signal was sounded for him to go back and flag, but when he had reached a point about two car-lengths east of the caboose, he heard a whistle signal but did not know positively whether it was a signal calling him in, in either event, however, he returned but before doing so, he left one torpedo and one five-minute fusee. The train roved forward a short distance, stopped, and then proceeded, and this time, Flagman Carter stated, he left another fusee, but no torpedo. The train then pulled into the yard and the conductor uncoupled the caboose, but it did not clear the main track, and flagman Carter said he went back three or four car-lengths, remaining until the engine returned and coupled to the caboose, pulling it into clear. He then tried to close the switch, but could not do so on account of an accumulation of snow. In the meantime, Conductor Baldwin, who had seen what was taking place, seized a broom from a track man, and ran toward the switch, calling to the flagman that train No. 13 had passed Point of Rocks. Hearing the train approaching, Flagman Carter said he lighted a fusee and started running back, but when he had reached a point about 10 car-lengths east of the switch, he heard the conductor call something to him which he could not understand, and observing at that time that the switch light and the block signal indication were green, he threw away the fusee, not however before the engineman of train No. 13 had seen it and shut off steam. As train No. 13 continued to approach, the conductor threw the switch for the siding, the train entering the north lead track and colliding with the caboose. Flagman Carter said that when flagging at this point, it was customary to stay back three or four car-lengths until the caboose had been pulled into clear and then go up and close the switch, and he further stated this was the first time, to his knowledge, that a caboose had not cleared this switch.

Engineman Robey, of train No. 13, said he encountered clear signals from Point of Rocks to Brunswick yard and that his train was moving at a speed of about 45 or 50 miles an hour when he observed the block signal at Brunswick yard in the clear position. He saw a flagman with a fusee about six or seven car-lengths east of the block signal, and although no torpedoes had been exploded, he reduced speed. The flagman, however, threw away the fusee and Engineman Robey, again noting that the block signal was in the clear position, then increased speed, continuing

to use steam until he reached the switch, which he saw was set against him, whereupon he shut off steam and applied the air brakes in emergency, there was little reduction in the speed of his train, however, before colliding with the caboose. Engineman Robey further stated that he observed no marker lights on the rear of the caboose.

The statements of Fireman Northcraft, of train No. 13, were substantially the same as those of Engineman Robey, except with respect to the speed of the train at the time of the accident, which Fireman Northcraft estimated to have been between 35 and 38 miles per hour. He also said that he observed no marker lights on the caboose until just prior to the collision, when he saw one red marker.

Conductor Hovermale, of train No. 13, said an air-brake test was made of his train before leaving Baltimore, its initial terminal on this trip, and that the brakes worked properly en route. Approaching Brunswick yard, he was riding in the last car in the train, when about 40 car-lengths east of the point of accident, at which time he estimated the speed to have been between 45 and 50 miles an hour, he felt the slack being taken in, but speed was then increased, and about the time the engine entered the switch, an emergency application of the brakes was made. The train continued about 15 or 16 car-lengths and stopped with the rear car near the switch, at which time Conductor Hovermale said he looked at his watch and it was 7.28 a.m. The statements of Brakeman Emmart of train No. 13, corroborated generally the statements of Conductor Hovermale concerning speed, weather, and the time of accident.

Operator Shewbridge, stationed at Brunswick, stated he was called about 7.10 a.m., by Conductor Baldwin, who reported his train had pulled into the yard, but that the caboose was blocking the main track. Operator Shewbridge said he warned Conductor Baldwin that train No. 13 had passed Boyd, and at 7.25 a.m. Conductor Baldwin again called him and reported his train into clear.

Trackman Selby, said he was cleaning snow from the switches when the engine and caboose of extra 4601 pulled into clear on the north lead track, and as he approached the switch, Conductor Baldwin took his broom and started toward the switch. Trackman Selby said the flagman started back, waving a lighted fusee, and had reached a point about four rail-lengths east of the switch when Conductor Baldwin called "Ground him", the flagman immediately throwing the fusee into the snow. Trackman Selby said he saw the conductor throw the switch back and forth a couple of times, trying to lock it, and the next thing he observed

was train N. 13 entering the switch and colliding with the caboose of extra 4601.

Signal Supervisor Perrell arrived at the scene of the accident about 10.30 a.m. In company with the signal maintainer, he made a detailed inspection of the block-signal mechanism, and found nothing in connection therewith which might have caused the accident. Tests made on the following day indicated that the block signals, switch, and switch interlocker, worked properly, and that it would take a large accumulation of ice to interfere with the operation of the interlocking mechanism.

Conclusions

This accident was caused by an open switch, for which Conductor Baldwin, of extra 4601, was primarily responsible.

According to the evidence, extra 4601 arrived at Brunswick yard at 7 a.m., and the accident did not occur until 7.23 a.m. During this interval of 23 minutes, practically no protection was afforded to the rear of the train, the flagman at all times being close to the caboose, in the caboose, or at the switch leading from the main track into the yard, although the weather was stormy and train No. 13 was already overdue. It was not until 7.25 a.m., when difficulty was encountered by the flagman in closing and locking the switch, that Conductor Baldwin began to show signs of interest in looking out for the rear of his train, and started for the switch himself, while the flagman started back with a lighted fusee. Even at this late time, however, it is probable that the fusee was seen by the fireman of train No. 13 in time to stop, but the conductor called something to the flagman, which the latter did not understand, and after seeing the automatic signal in the clear position and a green indication displayed by the switch lamp, the flagman threw away the fusee and the engineer of train N. 13 then began to work steam, and it was not until the train was close to the switch that the conductor again opened the switch and caused the train to be diverted from the main track. There is nothing in the rules relieving crews from the duty of protecting their trains by flag when making such stops as may be necessary preparatory to heading in at Brunswick yard, and no excuse can be offered for the failure of the conductor and flagman of extra 4601 to take energetic measures to this end, particularly when it was ascertained that the caboose did not clear the main track after having been cut off from the train. Each of these employees said it was customary to do as they did on the day of the accident, if this is the case, then a situation exists which requires corrective steps on the part of supervising division officials.

All of 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.