

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 WILSMERE, DEL., ON
AUGUST 11, 1929.

November 22, 1929.

To the Commission:

On August 11, 1929, there was a side collision between a light engine and a cut of cars being handled by a switch engine on the Baltimore & Ohio Railroad at Wilsmere, Del., which resulted in the death of one employee.

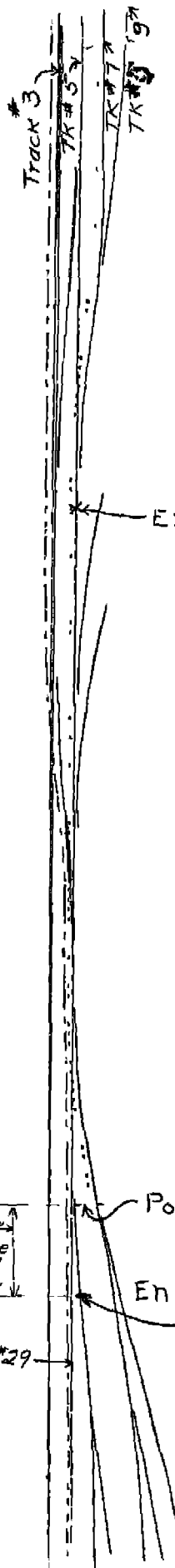
Location and Method of operation

This accident occurred on that part of the Baltimore Division extending between Baltimore, Md., and Philadelphia, Pa., a distance of 97.5 miles. At Wilsmere there are groups of yard tracks designated as receiving yards and departure yards; the accident occurred in the west receiving yard. The tracks in this yard extend east and west and are numbered, from south to north, 1, 3, 5, 7, etc. At the east end of this yard there is a track which continues eastward, known as track 29, and a track known as the fire-track lead extends toward the north from track 29, being used by engines en route to the round house; the accident occurred at the fouling point between these two tracks. The grade is level at the point of accident.

The weather was clear at the time of the accident, which occurred about 3 00 a.m.

Description

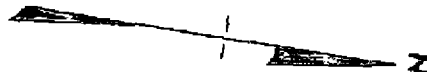
The light engine involved was engine 4623, which had arrived at Wilsmere, hauling westbound freight train first No. 97, and was in charge of Engineman Knudsen and Fireran Wojtowicz. After setting the train off on track 7 at the west end of the yard the engine remained at that point until another engine had coupled to the train and the train had departed. Engine 4623 then started a back-up movement towards the roundhouse over track 7 and track 29, and was about to enter the fire track lead, moving at a speed of about 2 miles per hour, when it was struck by a cut of cars being shoved by engine 1039.



..... Indicates Movement
of Engine #4623

- - - - - Indicates Movement
of Engine #1039

← Engine #4623 Moving Backwards



1 1/2 Car lengths - 23'
between Clearance
Point & West End
of Cars Handled by
Engine #1039

← Point of Accident

← End of Cars Handled by
Engine #1039

Track #29

No 1582
Baltimore & Ohio R R
Wilmere, Del.
Aug. 11, 1929.

Yard engine 1039, ~~Loaded~~ west, was coupled to the east end of 22 cars, and was in charge of Conductor Walsh and Engineman Schwinn. This cut of cars was pulled eastward from track 3 into track 29 and was brought to a stop clear of the fouling point of the fire track lead, in order to allow engine 4623 to use that track, but just about the time engine 4623 had reached the fouling point the cars were shoved ahead and collided with the side of that engine.

The leading car struck the engine on its left side at the gangway between the engine and tender, crushing the side of the engine cab. The forward truck of the leading car was derailed and the car damaged to some extent. The employee killed was the fireman of the light engine.

Summary of evidence

Engineman Knudsen, of engine 4623, stated that upon arrival at Wilsmere with train first No. 97 he was instructed by the yardmaster to return the engine to the roundhouse over track 7 after another engine had pulled the train from the yard. Soon afterwards the back-up movement was started; a stop was made to allow the brakeman to open the switch at the east end of track 7 and the engine then proceeded until it reached the fire track lead, as that switch was also closed. The brakeman started towards the switch but before he reached it some member of the yard crew opened it and the brakeman, from his position on the ground, gave Engineman Knudsen another back-up signal which he acted upon, the collision occurring a few moments later. He estimated the speed of his engine at the time of the accident at 2 miles per hour; he was using the drifting valve and said he did not stop the engine immediately when he heard the crash as he did not know what was occurring and was making an effort to prevent injury to himself. Engineman Knudsen further stated that the last signal he noticed was the back-up signal given by his brakeman, made at less than half arm's length, and involving a movement not more than 8 or 10 inches in circumference. While this signal was clear to him as a back-up signal, he thought it possible it could have been misconstrued by the engine crew of engine 1039 for a "kick" signal.

Brakeman Jowett, of engine 4623, stated that he rode on the steps of the tender on the right side while the engine backed through track 7 en route to the roundhouse. After opening the switch at the east end of track 7 he signalled the engineman to continue the back-up movement and while the engine was approaching the fire-track lead switch he noticed that it was not lined for a movement into that track. After the engine stopped he again got off and started towards the switch but a member of the yard crew opened it for him and

called to him to continue the back-up movement; there was no hand signal given by any member of that crew. He gave the engineman another back-up signal and remained on the ground to close the switch as soon as the engine got into clear. Brakeman Jowett did not know how there was any possibility for the crew of the yard engine mistaking his back-up signal for a proceed signal unless some obstruction hid part of the signal or unless when he got off the engine it caused a downward motion of his lantern which could have been taken for a proceed signal.

Conductor Walsh, in charge of the yard crew, was several car-lengths west of the point of accident when the accident occurred. He stated that his engine pulled 23 cars from track 3 for the purpose of switching them. While the cars were being pulled out of this track he noticed engine 4623 backing up on track 7 and he instructed both of his switchmen to pull back into clear to permit this engine to enter the fire track. He observed that the cut of cars continued beyond the clearance point, and when engine 4623 passed him he told the brakeman, who was riding on the steps of the tender, that the switch crew was in the clear. Conductor Walsh said that he gave no signals whatever after his train pulled out of track 3 and the only signal he saw after that time was a stop signal given by one of his switchmen when the cars reached the clearance point, and a back-up signal given by the brakeman of engine 4623 from the right side of the tender after the engine left track 7. He described the latter signal as a short snappy back-up signal which was made parallel to the track and which might have been taken by his engine crew as a "kick" signal. There was no other crew in the vicinity whose signals could have been seen by the engine crew. At the time of the accident he did not know who was operating his engine but had seen the fireman operating it, and during this time all signals had been acted upon properly and satisfactorily.

Yard Helper McGowan, of engine 1039, stated that when the movement was started from track 3 the conductor instructed Helper Gregson and himself to pull back far enough to clear the fire-track lead switch. As soon as the cut of cars had cleared, he opened the fire-track lead switch to enable engine 4623 to enter that track. He was standing on the engineman's side of that engine when it started to back in at the fire-track lead and this obstructed his view of the cut of cars and consequently he did not see them move forward. The only signal he saw just before the accident occurred was a back-up signal given by the brakeman while he was still on the tender steps on the right side of the engine, after which the brakeman stepped to the ground; he did not know whether the brakeman gave another signal after getting off the engine. The signal he saw was made quickly at half arm's length and was almost parallel with the track, which he said would be the natural way for a signal to be given

from the side of the tender. It was his opinion that a signal given in this manner or practically in line with the vision of his engine crew, in view of the distance, would look to them like a proceed signal.

Yard Helper Gregson, of engine 1039, stated that he understood the cars were to be moved beyond the clearance point of the fire-track lead and upon reaching that point he gave a stop signal, bringing the cars to a stop about one and one-half car-lengths from the clearance point, and then joined Yard Helper McGowan on the other side of the fire track. He noticed that engine 4623 was then approaching, with the brakeman riding on the rear of the tender giving a back-up signal, and on returning to the fire-track lead switch he observed that it was open. At this time the brakeman was on the ground near that switch and gave another signal to back up. Yard Helper Gregson did not see the cut of cars start ahead and did not know they were moving until he heard the crash of the collision; he immediately gave a stop signal, which was acknowledged by a blast of his engine whistle, but by this time the cut of cars had stopped. He thought the cars moved a distance of about $1\frac{1}{2}$ car-lengths after the accident occurred, while engine 4623 continued a distance of about four car-lengths before it came to a stop. He said the reason he did not remain with the cut of cars, or move toward his engine so that he would be in a better position to relay signals, was because he wanted to get information as to the next switching movement to be made.

Fireman Blackson, of engine 1039, stated that he was handling the engine at the time of the accident, as he had been requested to do so by the engineman in order to relieve the engineman temporarily. Fireman Blackson said that when he pulled the cars from track 3 he continued back on track 29 until he received a stop signal from the rear end of the cut. Shortly afterwards he received a steady come-ahead signal from a point in the vicinity of the switch, which was made by one downward motion of the light and which he saw plainly. He started the cars ahead but after moving about two car-lengths he felt a slight jar and stopped them immediately. Shortly after starting ahead, the light used in giving him the proceed signal disappeared from view, but about the time the cars stopped he received an emergency stop signal, which he acknowledged by the engine whistle. Fireman Blackson further stated that when the cars were first stopped on track 29, he could see two lights near the switch which were very close together, but a little later another light appeared along the track beyond these lights. When he received the proceed signal, however, the three lights appeared to be at the switch, but he was not certain which one of these lights was used in giving him the signal to come ahead, although he thought it was one of the two which had previously been close together.

Engineman Schwinn, of engine 1039, stated that about 20 or 25 minutes prior to the accident it became necessary for him to leave the engine and he requested the fireman to operate it during his absence. He returned within 5 or 10 minutes and started fixing the fire instead of taking charge of the engine, and at the time of the accident he was between the engine and tender getting a drink of water. He saw none of the signals given just before the occurrence of the accident. Engineman Schwinn said he did not think the fireman was a promoted man, but considered it safe for him to operate the engine.

Conclusions

This accident was caused by a misunderstanding of hand signals.

According to the evidence, there were several back-up signals given from points in the vicinity of the switch leading to the fire-track lead. It did not appear that any of the men in that vicinity gave a proceed signal at any time, nor were there any other crews working in that locality who could have given the signal which was acted upon by Fireman Blackson, and it seems probable that the fireman, who was 25 or 26 car-lengths distant, mistook one of these signals and accepted it as a proceed signal.

Both of the helpers in the crew of engine 1039 crossed over to a point near the fire track lead switch. Yard Helper Gregson was with the cut of cars when they were brought to a stop and he should have remained with them until engine 4633 had cleared the switch. Had he done so it is possible he could have prevented the accident.

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.