

## 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 NEAR HARVEY, DEL., ON  
FEBRUARY 8, 1926.

March 22, 1926.

To the Commission

On February 8, 1926, there was a rear-end collision between a freight train and a light engine on the Baltimore & Ohio Railroad near Harvey, Del., resulting in the death of two employees.

Location and method of operation

This accident occurred on the Baltimore Division, East End, extending between Camden Station, Baltimore, Md., and Park Junction, Pa., a distance of 97.5 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 at a point 3,583 feet east of the station at Harvey; approaching this point from the east the track is tangent for more than 1 mile, while the grade is generally ascending for westbound trains, being 0.31 per cent at the point of collision. The view is entirely unobstructed.

The automatic signals involved are signals 801, 791, and 771, located 3,165.6, 10,627, and 17,293.4 feet, respectively, east of the point of accident. Signals 801 and 791 are of the one-arm, three-position, upper-quadrant type, while signal 771 is a tonnage signal with two blades, the top blade being the automatic signal, and the bottom blade the permissive signal applying only to freight trains of 2,200 tons or more.

The weather was clear at the time of the accident, which occurred at about 12.25 a.m.

Description

Westbound Philadelphia & Reading freight train extra 1642 consisted of 68 cars and a caboose, hauled by engine 1642, and was in charge of Conductor Bretz and Engineman Horning. This train passed Holmes, the last open office, approximately 11.5 miles east of Harvey, at 11.36 p.m., and on reaching a point a short distance east of

Carpenter, located about 1.3 miles east of Harvey, signals were received from a flagman to close upon the preceding freight train, extra 1702, which had stalled. Extra 1642 coupled to the rear of that train and assisted it up the hill to a point west of Carpenter, then cut off while traveling at a speed of about 10 or 12 miles an hour, reduced speed slightly, and shortly afterwards, while traveling at a speed estimated to have been about 8 miles an hour, the rear end of extra 1642 was struck by Baltimore and Ohio engine 4602.

Westbound Baltimore & Ohio engine 4602, running light and backing up, was in charge of Engineman Denver and Fireman Sutton. It passed signal 801, which was displaying a caution indication, obeyed the stop indications of signals 791 and 771, and shortly afterwards, while traveling at a speed estimated to have been about 10 or 15 miles an hour, collided with the rear end of extra 1642.

The caboose of extra 1642 was practically demolished by the force of the impact, caught fire and was consumed, the car ahead of the caboose was badly damaged, and two other cars were slightly damaged. The rear end of the tender of engine 4602 was only slightly damaged. The employees killed were the conductor and flagman of extra 1642, who were in the caboose at the time of the accident.

#### Summary of evidence

Engineman Horning, of extra 1642, said that after cutting off from the rear of extra 1702 while moving at a speed of 10 or 12 miles an hour he reduced the speed of his own train slightly in order to give extra 1702 time to clear the signal at Harvey, and while traveling at this reduced speed, about 8 miles an hour, the air brakes went on in emergency as a result of the collision; ~~and~~ on looking back he saw a fire at the rear end of his train. Engineman Horning said that at Holmes and Boothwyn, these stations being located 10.3 and 1.7 miles respectively, east of Carpenter, he had looked back and while he did not get a hand signal from the rear end of his train he had been able to see the marker light on the right side of the caboose, he did not observe any member of his crew at the rear of the train either when approaching Carpenter hill or at the time he coupled to the rear of extra 1702. He also said that he had talked with the conductor at Jersey City and that the latter appeared to be in normal condition. The statements of Fireman Lincoln and Brakeman Martin corroborated in substance those of Engineman Horning, they also said that the weather conditions were very good and that they had experienced no trouble whatever in observing

signal indications, the flagman of extra 1702, or the markers on the caboose of that train. These employees also said that they looked back and saw the left marker on the rear of their own caboose at Feltonville, 4.1 miles east of Carpenter, and at this time it was burning properly.

Engineman Denver, of engine 4602, stated he left Holmes at about 11.55 p.m., with the engine backing up; there was a white lantern hanging on the rear end of the tender and a red one was placed on the pilot. Signal 801 was displaying a caution indication, while signals 791 and 771 were displaying stop indications. Just before reaching signal 771 he told Fireman Sutton that he thought he heard something dragging under the engine, the fireman replying in the affirmative, and on coming to a stop at the signal they got down on the ground with a torch and walked around the engine, after which the engineman looked westward but saw nothing of the rear end of extra 1642. He said he then boarded the engine, sounded two short blasts on the whistle and proceeded, and that he maintained a continuous lookout as he was moving under a stop-and-proceed signal indication and was expecting to find a train ahead. Shortly afterwards an eastbound train rounded the curve west of Harvey and the headlight shone in his face, impairing his vision to such an extent that he could hardly see the rear end of his tender; when about 60 feet from the rear of extra 1642 he saw a faint red marker light on the left side of the caboose, this being on his side with his engine backing up, and he applied the air brakes in emergency, at about the time the rear of the tender collided with the caboose. He estimated the speed of his engine to have been about 10 miles an hour at the time of the accident and said that extra 1642 was either standing or moving at an extremely low rate of speed. Engineman Denver further stated that he encountered no burning fusee or torpedoes just prior to the collision, and that the left marker light on the caboose was burning dimly while the other markers were not burning at all. The air brakes worked properly, while the weather conditions did not interfere with the view, and he said that while the glare from the headlight of the eastbound train affected his vision yet he felt confident that had the markers on the rear of the caboose been burning properly, or had the inside of the caboose been illuminated, he would have seen it in time to have prevented the accident.

Fireman Sutton, of engine 4602, stated that he was just closing the left injector overflow valve when the engineman shouted a warning of danger, and then the accident occurred. He did not see the glare from the headlight of the eastbound train nor the caboose of extra 1642 on any of the three occasions that he looked out after leaving Carpenter.

Operator Becker, stationed at Holmes, stated that when extra 1642 passed at 11.36 p.m. the markers on the rear of the caboose were in their proper place and burning brightly, displaying red to the rear. Examination of these markers after the accident showed that they were in good serviceable condition.

### Conclusions

This accident was caused by the failure of Engineman Denver, of engine 4602, properly to obey signal indications, and the failure of Conductor Bretz and Flagman Saunders, of extra 1642, properly to protect their train by flag.

Under the rules, when a train is stopped by a stop-and-proceed signal it may proceed at once at slow speed, expecting to find a train in the block. Engineman Denver said he was keeping a continuous lookout after passing signal 771, and was fully expecting to find a train stalled on the hill and also to encounter a fusee or torpedo. When the eastbound train rounded the curve west of Harvey, however, the glare from the headlight of that train impaired his vision to such an extent that he could barely see the rear end of his tender, and when he finally saw the caboose of extra 1642, shortly afterwards, it was too late to avert the accident. Engineman Denver stated, however, that he saw the left marker of the caboose when it was about 60 feet distant, and had he been operating his engine under proper control as required after entering an occupied block there is no reason why he should not have been able to reduce speed sufficiently to prevent the occurrence of the accident. He said all the caboose lights were not burning, and that the left marker was burning dimly; other evidence indicated that the markers were burning properly and it is believed that had the speed of engine 4602 been properly controlled, and had both engineman and fireman been keeping proper lookout, the accident would not have occurred.

While block signals govern the use of blocks, they do not dispense with the use of other signals whenever and wherever they may be required; here the rules require that when a train is moving under circumstances in which it may be overtaken by another train, the flagman will take such action as may be necessary to insure full protection; by night lighted fusees will be thrown off at proper intervals. Had Conductor Bretz seen to it that Flagman Saunders afforded proper protection, as required, the accident probably would not have occurred; why such protection was not afforded is not known, as the conductor and flagman were killed in 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.