

## INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY  
IN RE INVESTIGATION OF AN ACCIDENT WHICH OCCURRED  
ON THE NEW YORK CENTRAL RAILROAD NEAR WATERLOO,  
IND , ON JANUARY 25, 1924.

March 31, 1924.

To the Commission:

On January 25, 1924, there was a rear-end collision between an express train and a freight train on the New York Central Railroad, near Waterloo, Ind., which resulted in the death of one employee, and the injury of five mail clerks and five employees.

Location and method of operation.

This accident occurred on the Toledo Division, which extends between Toledo, Ohio, and Elkhart, Ind., a distance of 133.1 miles, in the vicinity of the point of accident this is a double-track line over which trains are operated by time-table and an automatic block-signal system. Train orders are used only for movements against the current of traffic. The accident occurred at a point approximately  $3\frac{3}{4}$  miles east of Waterloo; approaching this point from either direction the track is tangent and practically level for several miles.

The automatic block signals are of the two-arm, two-position, lower-quadrant, semaphore type, displaying night indications of red and yellow, green and yellow, and double green, for stop, caution, and proceed, respectively. The signals involved in this accident are signals A72.1, located 4,500 feet west of WB interlocking tower at Butler, Ind., and signals A73.1, A74.1, and A76.1, located 1, 2, and 4 miles, respectively, west of signal A72.1. The accident occurred at a point approximately 275 feet west of signal A76.1.

The weather was clear at the time of the accident which occurred at 9.55 p.m.

Description.

Westbound local freight train symbol 61 consisted of 36 cars and a caboose, hauled by engine 5953, and was in charge of Conductor Huber and Engineman Potter. This train left Butler at about 9.20 p.m., and at a point approximately  $4\frac{1}{4}$  miles west of Butler, while traveling at a speed of about 15 or 20 miles an hour, the rear end was struck by train 2nd No. 43.

Westbound express train 2nd No. 43 consisted of one combination baggage and express car, one refrigerator car, three mail cars, one baggage car, and one Pullman club car, in the order named, all of all-steel construction with the exception of the second and third cars, which had steel underframes, hauled by engine 4870, and was in charge of Conductor Elliott and Engineman Bertch. This train arrived at WB tower at Butler at 9.44 p.m., where the operator, under direction of the dispatcher, had set the interlocking home signal at stop to afford train 61 additional time to clear at Waterloo; at 9.49 p.m., the signal was cleared and train 2nd No. 43 was permitted to proceed. It passed signal A72.1, which indicated a clear block, passed signals A73.1 and A74.1, which the evidence indicates were displaying caution and stop indications, respectively, and at a point approximately 275 feet west of signal A75.1, which signal was also displaying a stop indication, struck the rear of train 61 while traveling at a speed estimated to have been about 50 miles an hour.

The engine, tender, first car, and the forward trucks of the second car in train 2nd No. 43 were derailed, part of the derailed equipment swerving to the left and fouling the eastbound track, this equipment remained upright. The caboose of train 61 was demolished and the car ahead of it overturned. The employee killed was a brakeman of train 61.

#### Summary of evidence.

Conductor Huber, of train 61, said he called the dispatcher when his train was ready to leave Butler and was informed that train 2nd No. 43 was then near Bryant, a station 17 miles east of Butler, and told that if his train could be readily started it could proceed to Waterloo. The train was started without delay, departing from Butler at 9.20 p.m., according to the train sheet, and after leaving that point the members of the crew who were in the caboose prepared and ate their evening meal. Conductor Huber said he had walked to the rear of the caboose once without seeing anything, but on going to the rear a second time he saw the faint reflection of a headlight and remarked that it must be train No. 43. Very shortly afterwards train No. 22 passed on the adjoining track, and on going to the rear of the caboose to exchange signals with the crew of that train, Conductor Huber again noticed the headlight of the train which was following him and remarked that it appeared to be running the blocks. He obtained a fusee and had returned to the platform to light it when he saw that the headlight of the following train was turned on fully and he realized that it was but a few car-lengths distant, he called a warning to the brakeman in the caboose and jumped from his train without lighting the fusee. He estimated the speed of his train at the time of the collision to have been between 15 and 20 miles an hour.

Engineman Bertch, of train 2nd No. 43, said he brought his train to a stop at the interlocking home signal at WB tower at Butler on account of that signal being set against his train, and after waiting five minutes the signal cleared and his train left that point at 9.49 p. m. He saw and called the indication of the next block signal, signal A72.1, which he said was clear. Shortly afterwards the headlight of an eastbound train made it impossible for him to see the track or signals ahead, and after that train had passed, the smoke and steam blowing across the track, together with flying snow, obscured his view for several seconds. About this time he saw the whistling post near the state highway crossing and sounded the whistle signal, but did not realize he had passed two block signals without having observed their indications. He had previously dimmed the headlight on his engine and immediately after the eastbound train had passed he turned the headlight on fully, and as soon as the view had cleared he saw the markers of a caboose about 500 or 600 feet distant and applied the air brakes in emergency, but the speed of his train, which he estimated to have been about 50 miles an hour, was too great and the intervening space too small to reduce its speed materially before the collision occurred. He said there was nothing about the engine to distract his attention from a proper observance of signals, and could not account for his having missed the two succeeding signals after passing signal A72.1 near Butler. The statements of Fireman Siglow practically corroborated those of Engineman Bertch. He apparently was entirely engaged in keeping up steam after leaving Butler, due he said to the poor grade of coal, and did not observe any signal indications after passing signal A72.1; he also stated that Engineman Bertch did not call the indication of any signals after passing signal A72.1.

Examination and test made subsequent to the accident failed to disclose any irregular condition of the signal apparatus involved.

#### Conclusions.

This accident was caused by the failure of Engineman Bertch properly to observe and obey automatic block-signal indications.

All of the circumstances were in favor of the prevention of this accident, the signals involved were found to be in good working order, the track was tangent for several miles preceding the point of collision, weather conditions were favorable, and according to Engineman Bertch's own testimony the air brakes on his train were in good working order, yet he failed to observe and heed the indication of two automatic block signals, both of which would have given him ample warning of the train ahead.

Had an adequate automatic train-control device been in use on this line intervening to take control of the train when the engineman failed to observe and obey the signal indications, this accident undoubtedly would have been averted.

Engineman Bertch entered the service of this railroad in December, 1902, and was promoted to engineman in December 1906. At the time of the accident he had been on duty 3 hours and 40 minutes, after having been off duty 27 hours and 15 minutes. All of the other 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.