INTERSTATE COMMERCE COMMISSION

REFORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN REINVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE BALTIMORE & OHIO RAILROAD AT HAMPTON, W. VA., ON OCTOBER 23, 1927.

December 10, 1927.

To the Commission:

On October 23, 1927, there was a headend collision between two freight trains on the Baltimore & Ohio Railroad at Hampton, W.Va., which resulted in the death of two employees.

Location and method of operation

This accident occurred on the Pickens Branch of the Charleston Division which extends between Pickens and Weston, W.Va., a distance of 50.9 miles, and is a single-track line over which trains are operated by time-table and train orders, no blocksignal being in use. The accident occurred at a point 123 feet east of Hampton station; approaching this point from the east, beginning at Hampton Junction switch, 2,288 feet west of the point of accident, there is a series of short curves and tangents, followed by a 3° curve to the left 1,426.4 feet in length, the accident occuring on this curve at a point approximately 35 feet from its leaving end. Approaching from the west there is a compound curve to the left 1,336.3 feet in length, the maximum curvature of which is 110, and then 721.7 feet of tangent, followed by the curve on which the accident occurred. The grade at the point of accident is 0.143 per cent descending for westbound trains.

A single-track line known as the Hampton out-off, approximately 2 miles in length, connects the Pickens Branch, at Hampton Junction, with the Elkins Sub-division at Adrian Junction. There is a tunnel on this cut-off 497.2 feet in length, the western portal of which is located 244.8 feet east of Hampton Junction switch.

The weather was clear at the time of the accident, which occurred at about 6.20 p.m.



Description

Westbound freight train extra 2815 consisted of 27 cars and a caboose, hauled by engine 2815, and was in charge of Conductor Fletcher and Engineman Tierney, This train originated on the Elkins Sub-division and was routed via the Hampton cut-off and the Pickens Branch. At Adrian, approximately 3½ mikes from Hampton, and 1 mile from Adrian Junction, the crew received a copy of train order No. 212, Form 19, reading as follows:

"Extra 2912 east pull in on Pickens line and meet extra 2815 west at Hampton Jct Eng 2815 run extra Adrian Jct to Buckhannon"

The movement contemplated by this order was that extra 2912, which was en route to the Elkins Sub-division, should pull by the junction switch at Hampton Junction, using the Pickens Branch for this purpose; this would allow extra 2815 to leave the Elkins Sub-division via the cut-off and enter on the Pickens Branch at Hampton Junction. After its departure extra 2912 then would back up, enter the junction switch and proceed in the opposite direction via the cut-off to the Elkins Sub-division. Extra 2815 departed from Adrian at 6.08 p.m., passed over the Hampton cut-off, entered on the Pickens Branch at Hampton Junction although extra 2912 had not yet arrived at that point, and collided with that train at Hampton while travelling at a speed estimated to have been about 8 miles per hour.

Eastbound freight train extra 2912 consisted of 37 cars and a caboose, hauled by engine 2912, and was in charge of Conductor Berry and Engineman Hoover. This train was received on the Pickens Branch at Buckhannon, 5.3 miles west of Hampton, where the crew received a copy of train order No. 212, Form 19, reading as follows:

"Extra 2912 east pull in on Pickens line and meet extra 2815 west at Hampton Jct Engine 2912 run extra Buckhannon to Adrian Jct"

Extra 2912 departed from Buckhannon at 6.01 p.m., and collided with extra 2818 at Hampton after having been brought almost to a stop.

Engine 2912 was not derailed or seriously damaged; engine 2815 was only partly derailed but was considerably damaged, part of this damage being due to the fact that the tender eistern was pushed forward against the beiler head. The first car in the train of extra 2815 was derailed, and the 17th and 18th cars in the train of extra 2912 were derailed and buckled to the right, suffering slight damage. The employees killed were the engineman and head brakeman of extra 2815.

Summary of evidence

Fireman Nutter, of extra 2815, stated that at the time his train approached Adrian he observed the train-order signal displaying a stop indication but the operator gave them a proceed signal and as the train passed the operator he handed Fireman Nutter the train orders and messages which he in turn handed to the engineman. The engineman read them and handed them back to the fireman who read them and in turn handed them to the head brakeman who also read them and returned them to the Fireman Nutter stated he understood that enginoman. extra 2912 was to pull by on the Pickens Branch at Hampton Junction to permit his train to pass although he did not mention this fact to the engineman; he did, however, discuss with the engineman two messages pertaining to movements to be made upon their arrival at Buckhannon, He did not recall hearing the engineman sound the meetingpoint whistle signal, nor did he hear any other whistle signal after leaving Adrian. In the meantime he had forgotten entirely about the neet order and when his train passed Hampton Junction he made no attempt to ascertain if extra 2912 had arrived, saying that as soon as the engine had passed through the tunnel on the Hampton cut-off he started putting in a fire and that his first knowledge of anything wrong was when the head brakeman shouted a warning and he heard the engineman apply the brakes, apparently in emergency. Upon observing the headlight of an approaching train about two engine-lengths distant he got off the engine and as he did so he noticed the engineman still had his hand on the brake valve. Fireman Nutter estimated the speed of the train at the time it left the tunnel at 10 or 13 miles per hour and noticed no appreciable change in speed until the brakes were applied just prior to the accident. Fireman Nutter further stated that this was his first round trip over this territory during the past year as he had been employed on another division, but he was familiar with the location of Hampton Junction and could give no reason why he overlooked the meeting point, nor could be account for the oversight of the engineman and head brakeman except that their discussion of the movements to be made after their arrival at Buckhannon might have caused them to forget

the meet order.

Conductor Fletcher, of extra 2815, stated that he received a copy of train order No. 212 at Adrian and that both he and the flagman read and understood it. While his train was passing over Hampton cut-off he heard what he thought war a meetingpoint whistle signal but he did not hear any other signals although one should have been sounded for the tunnel and another for the road crossing east of the point of accident. When the train had reached a point which would bring the engine in about the conter of the tunnel he felt a lurch of the train as though the engineman had opened the throttle and Conductor Fletcher then remarked to the flagman that extra 2912 must be in to clear; the speed of the train at this time was about Conductor Fletcher walked out on 10 miles per hour. the rear platform of the caboose before it reached the tunnel and estimated the speed in the tunnel to have been 12 or 15 miles per hour. He remained on the caboose platform until it had reached a point three or four carlengths beyond the tunnel, where he could first ascertain definitely that the opposing train had not yet ar-The train at this time was travelling at a speed probably close to 18 miles per hour and he immediately applied the brakes in emergency by means of the value on the caboose plutform, reducing the speed to about 8 or 9 miles per hour by the time the accident occurred. Conductor Fletcher said it was impossible to reduce the speed of the train to a greater extent, due to the heavy tonnage and the fact that the train then was on a 1 per cent descending grade. Conductor Fletcher of course did not know whether the engineman had read train order No. 213 but thought this must have been the case as this order contained the running orders for the movement of the train beyond Adrian Junction. The statements of Flagman Scott, of extra 2815, practically corroborated those of Conductor Fletcher; he estimated the speed to have been 18 or 20 miles per hour when the conductor applied the brakes.

Engineman Hoover, of extra 3913, stated that he received the order at Buckhannon to meet extra 2815 at Hampton Junction. His train departed from Buckhannon at 6.01 or 6.03 p.m., and was running at a speed of about 15 miles per hour at the time it entered the tangent track just west of the point of accident. At that time he noticed the reflection of what he thought was a head-light shining on some cars standing on a siding south of the main track at Hampton and he closed the throttle and made a light application of the brakes. Upon leaning

out of the cab window he observed the right classification lamp of extra 2815 not more than 30 car-lengths distant. He immediately applied the air brakes in emergency, reversed the engine and then got off just before the accident occurred; he estimated the speed of his train at the time of the accident at 3 or 4 miles per hour, and the speed of extra 2815 to have been about 3 or 8 miles per hour.

The statements of Fireman Wood and Head Brakeman Lough, of extra 2912, substantiated those of Engineman Hoover. Neither of them noticed the approaching train until their attention was called to it by Engineman Hoover as their engine left the curve west of the point of accident, and they estimated that at this time the two trains were within 10 or 13 car-lengths of each other.

Conductor Berry and Flagman Alkire, of extra 2912, were riding in the caboose and the first knowledge they had of anything wrong was when the brakes were applied in emergency as their train was rounding the curve west of the point of accident.

Dispatcher Plum, who was on duty at the time of the accident and in whose territory it occurred, stated that he issued train order No. 212 to extras 2815 and 2912, through the operators at Adrian and Buckhannon, respectively, authorizing the movement of these trains and fixing their meeting point at Hampton Junction. He also issued an order to the crew of extra 2815 authorizing them to pass Hampton Junction without registering, which is frequently done to save delay when no other train is involved and which is permitted by the rules. He said the trains involved in the accident were operated daily over this territory, that the crews in charge had been operating them for some length of time and that they had frequently met at Hampton Junction.

Conclusions

This accident was caused by failure to obey a meet order, for which the engineman, fireman, and head brakeman, of extra 3815, are responsible.

Fireman Nutter, of extra 3815, read and understood train order No. 213, which required his train to meet extra 2913 at Hampton Junction, and he said the engineman and head brakeman also read it. Fireman Nutter then discussed with the engineman two messages which had been received regarding work to be performed upon the arrival of their train/Buckhannon, and before his train reached Hampton Junction, he had entirely forgotten the meet order and did not recall it again until he noticed

the opposing train approaching only a few car-lengths distant. He could offer no explanation for his failure to remember the order, nor can any reason be assigned for the apparent failure of the engineman and head brakeman to remember the order. It seems clear, however, that the engineman read the order, for this order also included the running orders without which the train could not have left Adrian Junction.

The statements of Fireman Nutter indicate that his first knowledge of anything wrong was when the head brakeman shouted a warning and at the same time the engineman applied the air brakes in emergency, and on looking out he saw the opposing train only two enginelengths distant. Conductor Fletcher, however, said that when the caboose had reached a point from which he could see that extra 2912 had not arrived he opened the valve on the rear of the caboose, which statement, if correct, would have resulted in an application of the brakes being made when the engine was 1,000 feet or more from the point of accident. The statements of these two employees as to where the brakes were first applied differ so widely that/it is impossible to draw any definite conclusions therefrom, but apparently the speed of the train was reduced considerably before the accident occurred for Engineman Hoover, of extra 2912, estimated the speed of extra 2815 at the time of the accident to have been 6 or 8 miles per hour, and the condition of the wreckage also indicated that the speed could not have been as high as 18 or 30 miles per hour.

Had an adequate block-signal systembeen in use on this line this accident probably would not have occurred; an adequate train stop or train control device would have prevented it.

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.