IN RE INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE NORFOLK & WESTERN RAILWAY NEAR WAR EAGLE, W. VA., ON NOVEMBER 5, 1920.

January 27, 1921.

On November 5, 1920, there was a head-end collision between two freight trains on the Norfolk & Western Railway near War Eagle, W. Va., which resulted in the death of 1 employee and the injury of 2 employees. After investigation of this accident the Chief of the Bureau of Safety reports as follows:

The main line of the Pocahontas Division, on which the accident occurred, extends between Bluefield, W. Va., and Williamson, W. Va., a distance of 105 miles. It is a double-track line over which trains are operated by time-table, train orders, and an automatic block-signal system. In the vicinity of the point of accident the line follows the course of the Tug River and because of excessive curvature and obstruction by trees and hills, the range of vision is extremely limited. For several miles east of the point of the accident there is a descending grade varying from .2 to .8 per cent; west of the point of accident the descending grade continues, but is slightly greater.

The signals are of the three-position, upper-quadrant type, located approximately three-quarters of a mile apart. The one involved in this accident was signal 4345, located on the westbound track just west of the west switch to the passing siding at Alnwick and 3,900 feet east of the point of accident. The weather at the time of the accident was clear.

The trains involved were westbound freight train extra 1419 and eastbound helper engine 1363, which had been helping eastbound freight train extra 1369 and was returning to Alnwick after having gone to Glen Alum for water. Both engines were of the 2-6-6-2 Mallet type.

Extra 1369, consisting of engine 1369, 63 cars and a caboose, assisted by helper engine 1363, which was headed east, and coupled in between the last car and the caboose, was in charge of Conductor Mounts and Enginemen Gearhart and Simpkins, and was en route from Williamson to Eckman, W. Va. It left Williamson at 4.20 a.m. and passed Vulcan, the last open telegraph office about 16 miles west of the point of the accident, at 6.17 a.m.

Between Lindsay and Alnwick the train was delayed setting off a car with a hot box and also a burst air hose which damaged the drawbars in three cars. This resulted in the train being operated into Alnwick in two parts; the leading engine, 1369, hauling the forward part and the helper engine pushing the rear portion. On arrival at Alnwick both portions of the train were put on the passing siding, which is located between the two main tracks, to let train No. 2, a superior eastbound train pass. Neither engine having sufficient water to take the train to Monawk, the next water station, about 5 miles east, the leading engine cut off and went to Monawk light while helper engine 1363 cut off and with the caboose crossed over to the westbound track and proceeded back to Glen Alum for water.

In returning to its train at Alnwick on the westbound track against the current of traffic it collided with westbound extra 1419 at a point about 500 feet east of War Eagle station while running at a speed estimated to have been about 25 miles per hour.

Extra 1419 consisted of 68 cars and a caboose, hauled by engine 1419, and was in charge of Conductor York and Engineman King. It left Eackman at 4.55 a.m. and passed Iaeger, the last reporting office, 13.5 miles east of Alnwick, at 7.47 a.m., ran by the flagman of extra 1363 at Alnwick, passed signal 4343 displaying a caution indication, and while running at a speed of 8 or 10 miles per hour collided with engine 1363 at 10.05 a.m.

The front ends of both engines were badly damaged, and the cistern of engine 1363 was driven forward against the cab of the engine. The first and seventh cars in extra 1419 were demolished, and two other cars in the train were derailed. The employee killed was the engineman of engine 1363.

When it was learned that engine 1363 needed water it was decided to return to Glen Alum for that purpose. Before leaving Alnwick, Conductor Mounts, who accompanied the engine to Glen Alum, was informed by a track flagman that the section men had a rail up on the eastbound track just west of there, and that the track would be impassable for an hour or so, this made it necessary for the engine to use the westbound track both going to Glen Alum and returning therefrom as is frequently done under similar circumstances. Conductor Mounts shouted to Flagman Shepherd, who stood some distance away; "Flag up the westbound track, we have to go to Glen Alum for water. Hold everything

westbound until we get back". To these instructions the flagman made no reply. Flagman Shepherd asserted that he heard no such instructions and that he expected the engine to return on the eastbound track; his subsequent conduct and the testimony of others substantiates this statement. The fireman of engine 1363 stated that up to the time the engine started on its return movement he expected that it would return with the current of traffic, that when the approaching train was discovered there was only time to jump.

After the departure of engine 1363 from Alnwick, Flagman Shepherd set some brakes on the rear of the train and shortly thereafter, hearing a westbound train approaching, he looked up and saw the indication of signal 4343 change from clear to caution. The thought entered his mind that his engine might be returning against the current of traffic, he thereupon crossed to the westbound track, stood in the center of the track just east of the signal, and swung his flag and also pointed his flag to the caution signal, it was his intention to stop extra 1419, tell the engineman what the situation was, and let him use his own judgment as to whether or not it was best to proceed. The engineman of extra 1419 shut off and answered the signal but passed him without stopping. The engineman and fireman of extra 1419 deny that the flag was swung, but admit seeing the flagman point to the caution signal with his flag.

Engineman King, of extra 1419, stated that approaching Alnwick his train was running at a speed of 25 or 30 miles per hour; he first saw signal 4343 when about 28 car-lengths from it, it was then in the caution position. As he approached he saw a man, whom

he thought was a trackman, cross the track 20 or 25 car-lengths ahead at about the west switch of the siding, and as the engine passed this man he held up his flag, pointed at the caution signal and said something about " a train down there" which he did not understand, he immediately made an application of the independent air brakes to bunch the train. From the position of the signal he knew that the block in advance was not occupied and expected to reduce speed and be prepared to stop at the next signal; he thought that there was some train ahead of him at War Eagle and that the flagman simply wanted to notify him to be on the lookout for them. Between that point and the point of the accident he made two or three service applications of the automatic brakes and reduced the speed of the train to 8 or 9 miles per hour. When he first saw engine 1363 he thought it was on the eastbound track until the engines were only 6 or 8 car-lengths apart. He stated that the brakes on his train were working properly, but at the speed at which his train was running he could not have stopped before passing the flagman if he had wanted to do so. He estimated that engine 1363 was running at a speed of about 30 miles per hour when the collision occurred.

This accident was caused by engine 1363 running against the current of traffic without proper flag protection, for which Conductor Mounts is responsible. A contributing cause was the failure of Engineman King, of extra 1419, to obey the stop signals of Flagman Shepherd.

Accepting his own statement, Conductor Mounts started on the trip for water without knowing whether Flagman Shepherd under-

stood or even heard his instructions, but merely assumed that he did. Instructions to a flagman should always be clear and explicit and acknowledgement required. Had Conductor Mounts made certain that Flagman Shepherd clearly understood the instructions which he issued in this case, this accident would probably have been averted.

Between Alnwick and Glen Alum, a branch line known as the War Eagle Branch enters the westbound track from the north. At this point is maintained a register for the purpose of furnishing information regarding trains on the branch. Investigation disclosed that Conductor Mounts made no check of this register and when his engine left Glen Alum on its return trip he had provided no protection against the possibility of a train coming off this branch, which intervened between his engine and the flagman left at Alnwick, and proceeding westward without knowledge of the opposing movement. Such action on the part of Conductor Mounts indicates a flagrant disregard of the precautions required by the rules and necessary for the safety of train operation.

Engineman King assumed, as he had a right to, that with signal 4343 in the caution position he had one clear block ahead of him, but the signal given by the flagman required that he should have stopped and ascertained the purpose of the flagman, and what instructions he had to give, if any.

Conductor Mounts entered the service of the Norfolk & Western Railway as brakeman in 1906 and was promoted to conductor in 1910 and at the time of the accident had been on duty 7 hours and 20 minutes having previously been off duty several days.

Engineman King entered the service as fireman in 1900 and was promoted to engineman in 1905 and at the time of the accident had been on duty 6 nours and 50 minutes after having been off duty 12 hours 5 minutes.