

IN RE INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE
ILLINOIS CENTRAL RAILROAD NEAR VILLA RIDGE, ILL.,
ON DECEMBER 16, 1918.

January 24, 1919.

On December 16, 1918, there was a rear-end collision between two light engines on the Illinois Central Railroad near Villa Ridge, Ill., resulting in the death of 1 employee and injury of 6 employees. After investigation the Chief of the Bureau of Safety reports as follows:

The Centralia District of the St. Louis Division, on which this accident occurred is a double-track line extending between Centralia and Mounds, Ill., a distance of 103.81 miles over which train movements are governed by time table, train orders and an automatic block signal system.

This accident occurred about three-quarters of a mile south of Villa Ridge, the first station north of Mounds, and 3.2 miles distant therefrom. Approaching the point of accident from the north and beginning at mile post 353, just north of Villa Ridge station, there is a 1-degree curve to the right about 1750 feet long followed by a tangent about 970 feet long to a 3-degree 30 minute curve to the left; the collision occurred on this curve about 1150 feet from its north end. Approaching the point of accident from the south there is a 1-degree 54-minute curve to the left 2120 feet long, followed by a tangent 770 feet long, leading to the 3-degree 30-minute curve above mentioned, 200 feet from the south end of which the accident occurred.

Starting at Mile Post 352 north of Villa Ridge and proceeding south, the grade varies from .25% to .675% ascending for a distance of approximately a mile to the summit of the ridge; after passing the summit of the ridge the grade is continuously descending to the north crossover of Mounds Yard. Helper on-line service is maintained for the purpose of assisting northbound trains out of Mounds to Villa Ridge, the practice being for helper engines to cut off at Villa Ridge, cross over and return to Mounds on the southbound track.

The engines involved in this accident were No. 1759 and No. 516. No. 1759 was a road engine hauling train No. 71, a southbound time freight from Centralia to Mounds. No. 516 was a road engine in service as a helper or pusher out of Mounds.

Train No. 71, consisting of engine 1759, 54 loaded and 17 empty cars and a caboose, left Centralia, at 4 p.m., in charge of Conductor Keister and Engineer Jones. On account of a broken rail this train was flagged near Palaski, 4 miles north of Villa Ridge. Pulling over the broken rail slowly prevented the usual run for the hill; the train stalled near Villa Ridge, and it became necessary to double. The first 40 cars were cut off and taken into Mounds, the rear end of the train being left on the southbound main track with the head car 25 or 30 car lengths north of the crossover located on the main track south of Villa Ridge station. This crossover is the one regularly used by the crews on helper engines to crossover to the southbound main and return to Mounds after helping northbound trains up the hill to Villa Ridge.

After engine 1759 had disposed of the head end of its train, it backed out on to the southbound main track and started north to return for the rear end of its train and at 1.10 a.m., while moving backwards against the current of traffic at a speed estimated by the crew at 8 or 10 miles an hour, it collided with engine No. 916.

Engine No. 916, in charge of Conductor Baldwin and Engineman Reel, left Mounds Yard at 12.36 a.m., with instructions as follows:

Assist Extra 1761 to Villa Ridge and return to Mounds for another tonnage train.

Engine No. 916, after shoving extra 1761 to Villa Ridge as instructed, backed through the crossover to return to Mounds on the southbound main track, and at 1.10 a.m., while backing at a speed estimated to have been 5 or 6 miles an hour collided with engine No. 1759. The weather at the time was clear and mild, and it was bright moonlight.

The engineman on No. 916 was killed. Both engines remained on the rails. The tender of engine 916 was driven into the cab which was of wooden construction, and the cab was totally demolished. Its tender and frame were practically destroyed; the trucks were broken loose from the tender and driven up under the cab. The tender of engine 1759 was driven into the cab, which, being of steel construction, was not badly damaged. The tender and frame were bent to some extent as was the engine frame under the cab. The force of the collision drove engine 916 up grade for a distance of 500 feet. This

fact and the fact that the damage was principally sustained by this engine seems conclusive evidence that the rate of speed of engine 1759 was much greater than the estimate given.

Conductor Keister on train No. 71, engine 1759, stated that when his train was flagged by track men just north of Pulaski, the first station north of Villa Ridge, the signal man told him there was a broken rail, but suggested that it would be all right for the train to pull slowly over it. No. 71 did so and stalled near Villa Ridge. Conductor Keister stated that he cut off forty cars and took them to Mounds, leaving the rear of his train standing north of the crossover, the head car of the rear portion being about 25 or 30 car lengths north of the crossover and there being no light on the head end of the rear portion. Engine 1759 was returning on the same track, the southbound main, for the rear end of the train when it collided with pusher engine 915. Conductor Keister stated he did not know that a northbound train was being pushed out of Mounds while he was putting away the head end of his train, but he did know it was frequently done and in cases of this kind, it is the practice for the pusher to use the southbound track to return to Mounds. He stated that he took no precautions to protect this crossover at Villa Ridge through which the helper returns on the southbound track. He said that he had made this double at various times and had never fouled the crossover with a car nor left a flagman to protect it. He said that while backing up from Mounds toward the rear of the train, he was not riding where he could see the track,

but estimated the speed of the engine at about eight or ten miles an hour. He said there was a red light on the tender of engine 1759 and the deck light in the cab was burning.

Engineman Jones on No. 71, engine 1750, stated that his train was flagged by trackmen south of Pulaski and later it stalled on Villa Ridge hill. The train was cut in two and the head end taken to Mounds Yard and put away. A red light was placed on the rear of the tender, the light in the cab was burning, and the engine was backing northward on the southbound main track to get the rear of its train when it collided with pusher 916. The engineman stated that he knew that no flagmen had been left at the crossover and no cars were left fouling it. He said that the speed of his engine was between six and ten miles an hour at the time of the collision, and stated that he saw the northbound train with engine 916 as a pusher leaving Mounds as he was bringing in the head end of his train.

Head Brakeman Blair on No. 71 stated that after his train stalled at Villa Ridge he rode the head end into Mounds in order to throw the switches. The head end was put away and engine 1750 was returning light for the rest of the train when the collision occurred. This engine was backing northward on the southbound main track. The deck light in the cab was burning and there was a red light on the rear end. The brakeman stated that he had doubled the hill several times and never left any cars to foul the crossover. He stated that just before the collision occurred he was looking back, but saw nothing of the approaching engine.

Conductor Baldwin on engine 918 stated that his engine had shoved extra 1761 into Villa Ridge, and had instructions to return to Maunds for another train. He said that at the crossover he noticed particularly to see if anything was coming up the southbound main, but did not look northward. Extra 1759 was being doubled into Maunds, but he could not tell where they had left the rear of their train. It was too far for him to see and everything looked clear. He stated that his headlight on the rear of the tender was burning. After the crossover was lined up and the engine started back the conductor was on the fireman's side standing in the dack with his hand on the reverse lever. The engine was backing at a speed of about six miles an hour. The fireman said that the home signal was clear, but did not mention the caution signal. He said that he took the fireman's word about the signal and did not himself look. They knew nothing of the approach of engine 1759 until the two engines collided.

Fireman Bour on engine 918 stated the headlights on the front and rear ends of his engine were burning and in good order. He said that he did not see any southbound trains between Maunds and Villa Ridge, that when he cut off at Villa Ridge he looked north and could see nothing coming south and nothing of the rear end of No. 71. The lower arm of the signal showed yellow, but he did not mention this fact. He saw no sign of an opposing engine backing up.

This accident was caused by engine 1759 of train No. 71 being operated against the current of traffic without au-

thority and without protection, in violation of the rules, for which Conductor Keister and Engineman Jones were responsible.

Rules 105, 106 and D-151 read as follows:

105. Both conductors and enginemen are responsible for the safety of their trains, and, under conditions not provided for by the rules, must take every precaution for their protection.

106. In all cases of doubt or uncertainty the safe course must be taken and no risks run.

D-151. Trains must keep to the right, unless otherwise provided.

D-152. When a train crosses over to, or obstructs the other track, unless otherwise provided it must first be protected as prescribed by Rule 99 in both directions on that track.

These rules were not observed since the conductor and engineman on 1759 did not take every precaution to protect their engine, they did run a risk, did not keep to the right, and when returning northward on the southbound track did not have flagging protection. Had they taken the precaution of fouling the crossover with cars or left a flagman at the crossover to prevent any other train from getting between their engine and rear end of their train, the accident would not have happened. Had Rule D-151 been observed, that is, had engine 1759 returned for its rear end by way of the northbound track and run with the current of traffic, this collision could have been avoided.

From the statement of Fireman Bour of engine 216 that the lower arm of the signal south of Villa Ridge was in the caution position, it appears that engine 1759 had not

at that time entered the southern end of the block; this also appears to be quite probable, as the collision occurred about midway of the block. Had Fireman Bour called attention to the caution signal instead of merely calling the top arm clear, a better lookout might have been maintained and the impending danger discovered.

All of the employees involved in this accident were experienced men. The train crew on No. 71, engine 1759, had been on duty 9 hours and 10 minutes after being off duty for 16 hours and 40 minutes; the engine crew had been on duty the same length of time after 14 hours and 30 minutes off duty. The crew on engine 816 had been on duty 1 hour and 5 minutes, the engineman having had 16 hours and 4 minutes, the fireman 55 hours and 55 minutes and the conductor 13 hours and 15 minutes of duty prior to beginning this period of service.

A.H.C.