

IN RE INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON
THE LINE OF THE NORTHERN OHIO TRACTION & LIGHT
COMPANY NEAR RAVENNA, OHIO, ON DECEMBER 8, 1920.

March 2, 1921

On December 8, 1920, there was a head-end collision between a passenger train and a freight train on the line of the Northern Ohio Traction & Light Company, near Ravenna, Ohio, which resulted in the death of 1 passenger and 3 employees, and the injury of 15 passengers, and 2 employees. This accident was investigated jointly with the Ohio Public Utilities Commission, and as a result of this investigation the Chief of the Bureau of Safety reports as follows:

Location

This accident occurred on the Akron, Kent and Ravenna Division, an electric line which extends between Akron and Ravenna, a distance of 18.55 miles. Between Ravenna and Silver Lake, a distance of about 12.55 miles, within which territory this accident occurred, it is a single-track line over which trains are operated by timetable and train orders transmitted by telephone, no block-signal system being in use. Approaching the point of accident from the east there is a tangent about 2,430 feet long, followed by an 8-degree curve to the left 634 feet long; the accident occurred on this curve about 150 feet from its eastern end. West of this curve the track is tangent for about 3,375 feet. On the north side of the track and near the center of the curve there is a small waiting room known as Stop 17. On the south side of the track near the east end of the curve are pine trees, an

orchard and house which obstruct the clear view from cars approaching in either direction to about 325 feet. Approximately 2,000 feet east of Stop 17 there is a 400-foot passing track, known as Black Horse siding; about 965 feet west of Stop 17 there is spur track known as Dietrich's siding. Beginning at a point about 800 feet west of Black Horse siding the grade is descending westward for about 2,000 feet, the gradient varying from 3.9 per cent to about 0.4 per cent, being about 2.4 per cent at the point of accident. The weather at the time of the accident was clear.

Description

Westbound extra 1056, consisting of combination baggage and express car 1056, in charge of Conductor Babb and Motorman Maxwell, was en route from Ravenna to Akron. It left Ravenna at 11.45 a. m., with an order to run extra to Akron, and proceeded to Black Horse siding, a distance of 1.82 miles, where it held the main track and waited 5 or 6 minutes for the purpose of meeting eastbound passenger train No. 232. Black Horse siding is the time-table meeting point of trains Nos. 232 and 229. Westbound passenger train No. 229 came up behind the extra, stopped, and sounded two short blasts of the whistle as an indication that extra 1056 should pull up so that train No. 229 could clear the east switch of the passing siding. Extra 1056 proceeded westward, however, and at about 11.56 a. m., while running at a speed of about 8 miles an hour, collided with train

No. 232 at a point 157 feet east of Stop 17.

Eastbound passenger train No. 232, consisting of passenger car 2028, in charge of Conductor Stein and Motorman Waters, left Akron at 10 50 a. m., on time, passed Silver Lake at 11.14 a. m., on time, passed Dietrich, less than 1 mile from Black Horse siding, at about 11.55 a. m., 2 minutes late, and collided with extra 1056 just east of Stop 17, while traveling at a speed of approximately 25 or 30 miles an hour.

The front ends of both cars were crushed and badly damaged, but the cars remained upright on the rails. The employees on duty who were killed were the two motormen.

Summary of evidence.

While extra 1056 was waiting at Black Horse siding for train No. 232, Conductor Babb and Motorman Maxwell, together with Conductor Taylor, who was deadheading, were talking in the forward end of the car. When the motorman of train No. 229 stopped his train behind extra 1056 and sounded the whistle twice, Conductor Babb, according to his own statement, remarked "I wonder if they are going to Dietrich," while Conductor Taylor said Conductor Babb's remark was "All right, go to Dietrich." The statements of both employees indicated that Motorman Maxwell started immediately without saying anything. Conductor Taylor saw train No. 232 at a distance estimated by him to have been about 1,000 feet and immediately called Motorman Maxwell's attention to it; the motorman shut off the power, applied the air brakes and then

reversed the power. Conductor Taylor estimated that the speed of extra 1056 had been reduced at the time of the accident to 8 or 10 miles an hour, while Conductor Babb said the train had practically stopped.

Although rule 162 requires that extra trains must keep out of the way of scheduled trains and clear their time not less than 5 minutes, Conductor Babb said that at Black Horse siding the westbound train always holds the main track and that had he remained at Black Horse siding and met the eastbound train he would have proceeded ahead of train No. 229 without an order and that this movement would have been in accordance with the regular practice. Conductor Babb further stated that when the westbound train has an order to meet a train at Dietrich, the procedure is for the crew of the regular train, providing the extra is ahead of it at Black Horse siding, to tell the crew of the extra that the regular trains are going to meet at Dietrich, sometimes showing them the order, the extra then proceeding to Dietrich ahead of the regular train. In the case of the accident here under investigation Conductor Babb stated he assumed that the crew of the regular train were trying to save a little time and therefore sounded the whistle instead of showing their orders; he also said, however, that such a signal was frequently used when it was desired to have the preceding train pull ahead a short distance and that he had never before departed on the authority of such a signal. Not only did Conductor Babb's state-

ments indicate that he had predated a regular train after being told by the crew of that train that they had an order to meet an opposing train at some succeeding station, but he said it was a common practice for extras to run ahead of regular trains without orders and that he had never taken the siding at this particular point to allow a regular train to pass.

Conductor Taylor said the idea had not occurred to him that extra 1056 was departing from Black Horse siding without orders. While neither he nor Conductor Stein, of train No. 232, had ever known of an extra proceeding to the next station ahead of a regular train when the regular train held an order to meet the opposing train at that next station, Conductor Berg, of train No. 229, said there had been instances of that kind. In such cases however the conductor of the extra would go back to the regular train and find out what orders the crew of that train were holding. Dispatchers Clapp and Gilson did not know of extra trains running ahead of regular trains without orders, or of their preceding a regular train from one station to another on the meet orders held by the regular train.

Conclusions

This accident was caused by extra 1056 being operated against an opposing superior train without orders, for which Conductor Babb and Motorman Maxwell are responsible,

Conductor Babb acknowledged that his train departed without orders, assuming that the following regular train

had orders to meet the opposing train at the next station and therefore starting out with the intention of operating his train to that meeting point ahead of the regular train, this being in accordance with what he said was a regular practice. While the evidence is not sufficiently definite to warrant a statement that this is a regular practice on this line, it does appear that it has been followed to some extent and it is probable that Motorman Maxwell was acting under the same assumption when he started his train away from Black Horse siding. In operating their train against the opposing superior train in this manner the crew of extra 1056 disregarded rule 157 of the Rules and Regulations for the Government of Employees. This rule reads as follows:

"Extra trains are inferior to all scheduled trains of whatever class and have no rights except those conferred upon them by train order."

Their action in departing from Black Horse siding on the time of the following regular train was a violation of rule 162 which reads as follows:

"All extra trains must keep out of the way of scheduled trains and clear their time not less than five minutes, unless they have been given a meeting or passing order, or other orders relieving them from this necessity.

A train failing to clear the main track by the time required by rule must be protected as prescribed by rule 172."

The evidence developed as a result of this investigation indicates the existence of lax operating conditions on this railroad. A few days after the accident the Commission's Inspectors observed an extra running ahead of a reg-

ular train in violation of the provisions of rule 162 previously quoted; they also observed several violations of rule 178, which requires that at meeting points if the train ^{that} is to keep the main track arrives first the conductor shall immediately set the switch for the siding. There are no instructions as to which train of the same class or right shall take the siding at a meeting point, it was thought that a bulletin or a general order on this point had been issued several years previously but none of the present officials was able to produce a copy of it. Attention is also called to the fact that although rule 30 provides that the railroad is operated by central standard time, investigation showed that several officials and employees were using eastern standard time; the dispatcher obtained the time by telephone from a jeweler and compared it with his watch, while conductors and motormen compare their watches with the dispatcher's watch by telephone. It is also noted that the name "Dietrich" is spelled in time-table No. 30, effective April 1, 1919, as "Derrich"; in time-table No. 33, effective December 16, 1920, the error in spelling is still uncorrected.

Both cars were of steel-underframe construction, but combination baggage and express car 1056 was equipped with nine-and-one-half-inch buffers, the bottoms of which were 41 inches above the rails, while passenger car 2028 was equipped with six-and-one-half-inch buffers, the tops of which were $30\frac{1}{4}$ inches above the rails. This difference

in the height of the buffers undoubtedly is responsible for the fact that the front end of the passenger car was crushed in for a distance of about 10 feet while the right side of the combination car was crushed for a distance of only 3 feet

Motorman Maxwell had had nearly 19 years' experience as a motorman in the service of this company; his record shows that in June, 1920, he met an opposing superior train on the main line. Conductor Babb was employed as a conductor in June, 1918. The crew of extra 1056 had been on duty about 6 hours, after 12 hours off duty, the crew of train No. 232 had been on duty about $7\frac{1}{2}$ hours, after about 14 hours off duty.