

Chairman

(620)

Sept 29/19
IN RE INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON
THE NASHVILLE, CHATTANOOGA & ST. LOUIS RAIL-
WAY NEAR ESTILL SPRINGS, TENN. ON
AUGUST 1, 1919.

September 16, 1919.

On August 1, 1919, there was a rear-end collision between two freight trains on the Nashville, Chattanooga & St. Louis Railway near Estill Springs, Tenn., 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 Chattanooga Division, on which this accident occurred, extends from Nashville, Tenn., to Chattanooga, Tenn., a distance of 151 miles. Estill Springs is located 77 miles south of Nashville and this railroad in the vicinity of Estill Springs is a single-track line, over which train movements are governed by time-table and train orders, no block signal system being in use. Approaching the point of accident from the south the track is tangent for about 2,348 feet, followed by a 1-degree curve to the right 452 feet in length, a tangent 1,341 feet in length and then a 2-degree curve to the left 827 feet in length. The collision occurred on this last mentioned curve, 65 feet north of its south end, and 913 feet north of a bridge over Elk River. On the inside of the curve on which the accident occurred an embankment rises about 10 feet above the track and materially limits the view of enginemen on approaching northbound trains. Approaching from the south the track is nearly level to within 900 feet of the point of accident, followed by a .97 per cent.

ascending grade to the point of accident.

On the day of the accident northbound freight train extra 402, in charge of Engineman W. H. Blessing and Conductor Poe, left Cowan, Tenn., at 8.10 a.m., to do switching work between Cowan and Fullahoma; it arrived at Decherd, Tenn., at 8.20 a.m., and upon completion of the switching at that point departed at 11.54 a.m., consisting of locomotive 402, 16 cars and a caboose. Arriving at the south end of the Estill Springs passing track at 12.05 p.m., the caboose and 12 cars were left on the main track, while the locomotive and 4 cars were taken into the sand pit, about one-fourth mile distant, for the purpose of making a switching movement. At this time the conductor and flagman exchanged duties, the flagman going with the head portion of the train to the sand pit, while the conductor remained to protect the rear portion. At 12.35p.m., the locomotive returned with 5 cars and had just coupled to the other 12 cars, when northbound freight train 1st No. 42 approached and collided with extra 402.

Northbound freight train 1st No. 42 was a test train operating for the purpose of determining the relative efficiency of hand and stoker-fired locomotives, and was in charge of engineman O'Donnell and Conductor Wiggs. This train, consisting of locomotive 653, 26 loaded cars, 4 empty cars and a caboose, left Chattanooga at 8.10 a.m., passed Decherd, the last train order office, at 12.27 p.m., and at 12.35 p.m., while traveling at a speed estimated to have been 10 or 12 miles an hour, collided with the rear end of extra 402 near Estill Springs.

The locomotive of train 1st No. 42 came to rest with its pilot and front end on the rear of a flat car of extra 402, with the cupola of the demolished caboose of extra 402 on top of the locomotive. Four cars of extra 402, including the caboose, were overturned and heavily damaged. In train 1st No. 42, a wooden flat car was demolished while an adjacent car was derailed and another overturned. As a result of the collision Fireman Smith of train No. 42 was killed; J. C. Blessing, local representative of the Brotherhood of Locomotive Firemen and Enginemen who was riding on the locomotive of train No. 42, was injured and E. L. Willis, mechanical draftsman, who was also riding on the locomotive of train No. 42 was slightly injured. At the time of the accident a drizzling rain was falling.

Engineman Blessing of extra 402 stated that upon arrival of his train at Estill Springs, the locomotive and first four cars were cut off and he took this part of the train to the sand pit where he left the four cars and picked up five others, returning then to the rear portion of the train. While his train was being coupled up, his fireman saw train No. 42 approaching from the south and called out to him, "Bill, I believe they are going to run into us." When the engineman looked out and saw that a collision was inevitable, he sounded the whistle to warn his brakeman who was between cars coupling up the air hose. Engineman Blessing said that he heard no torpedoes exploded nor any whistle sounded by train No. 42. He also said that about a minute elapsed between the time he first saw train No. 42 and the time of the collision and he was unable to pull his train out of the way.

Flagman Norvell of extra 402 stated that on leaving Decherd he asked his conductor whether they would leave the train on the main line at Astill Springs while performing their duties in the sand pit or whether they would take the train on to the side track, at the same time suggesting to the conductor that, in order to save time, the train be left on the main track. He also made the suggestion to the conductor that the conductor protect the rear end of the train while he attended to the switching in the sand pit. He received instructions from his conductor which were in conformity with his suggestions and upon arrival at Astill Springs he went to the sand pit with the locomotive and four cars. Within a half-hour they returned to the main track with five cars and he was coupling them up with the balance of the train when the collision occurred. Flagman Norvell stated that he did not know how far Conductor Poe went back to protect the train, but that if he had been doing the flagging he would have remained at the south end of Elk River bridge until called in. He stated that the conductor had not been called in when the collision occurred.

Conductor Poe of extra 402 stated that his train left Decherd at 11.55 a.m. and that he had no information concerning following trains at that time. He stated that he had made arrangements with Flagman Norvell to go to the sand pit at Astill Springs, thinking that the flagman could handle the work there more efficiently than he could. When the train stopped at Astill Springs, he started back with torpedoes and went back to mile post 78, about a half-mile distant, and there placed two torpedoes on the rail. He then came back to the south end of Elk River bridge

from which point he could watch the locomotive of his train at work in the sand pit and there placed one torpedo on the rail. When he saw his locomotive starting back to the main track with the 5 cars, he picked up the torpedo and started across the bridge toward his train. He stated that the reason he started in as soon as he did was so that he could get in promptly when called. Just before the locomotive and five cars coupled to the standing cars, he saw train No. 42 coming around the curve, at which time he was about 20 car lengths from his caboose. He did not hear train No. 42 explode the torpedoes which he had left at mile post 78. He stated that he started flagging the approaching train as soon as he saw it but the engineman did not answer his signals, although he thought he had been seen, as when the train reached the south end of the bridge, he saw dust and sand flying, indicating that the brakes had been applied in emergency. When the locomotive of train No. 42 passed him he yelled to the engine crew, but he received no response. Conductor Roe stated further that he considers 20 car lengths a sufficient distance to remain back to protect a train if the train is protected by torpedoes farther back, and he said he would not have remained back farther to flag a passenger train. He also stated that he knew of other instances when torpedoes had failed to explode.

Engineman O'Donnell, of train No. 42, stated that the air brakes on his train were tested before leaving Chattanooga on the day of the accident and all were found to be working properly. After leaving Cowan he came down the mountain grade slowly, making about 3 applications of the brakes, and on each occasion the brakes

worked properly. At Decard he received a clear board and proceeded toward Estill Springs. At just about the time he reached the north end of the Elk River bridge and while running at a speed of about 25 miles an hour, J. C. Blessing, who was standing beside him, called out to him, "Look out, Jack," and at about the same time he grabbed hold of the brake valve handle, opened the sand lever and leaned out of the window. He saw the caboose of extra 402 only 14 or 15 car lengths ahead and saw a man 4 or 5 car lengths south of the caboose, who he learned afterwards was Conductor Joe. He stated further that he reduced the speed of his train from 25 miles an hour at the time Mr. Blessing spoke to him to 10 or 12 miles an hour at the time of the collision. Engineman O'Donnell stated he did not hear any torpedoes or see the smoke of extra 402 as he approached Estill Springs, neither did he have any knowledge of extra 402 being ahead of him. He stated that the time card authorizes extra trains to run ahead of third class trains.

Traveling Fireman Neal, who was riding on the locomotive of train No. 42 and having charge of the fuel test being made, stated that approaching Estill Springs he noticed smoke near the passing track switch and remarked to Mr. Blessing who was sitting behind him that if that train was on the main track, it looked near. As train no. 42 neared Estill Springs, he kept on looking ahead, but failed to see anything of the caboose of extra 402 until the train had passed over Elk River Bridge. At the time he saw the caboose he also saw a man with a red flag; he immediately rushed to the right side of the locomotive and reversed

the engine, Engineman O'Donnell applying the brakes in emergency and opening the sand lever at the same time. He judged that the train was 14 or 15 car lengths from the caboose when he first saw the flagman of extra 402 and that the flagman was 7 car lengths from the caboose; he estimated the speed of train No. 42 at that time to be 20 or 25 miles an hour. He further stated that he heard no torpedoes explode.

Trainmaster Sibbet, who was riding on the caboose of train No. 42 and assisting with the test, stated that the engineman did not exceed a speed of 30 miles an hour between Decherd and Estill Spring; and that the speed was about 25 miles an hour across Elk River bridge. Just before the caboose reached the bridge he felt the brakes go on in emergency and after the train had run a distance of not more than 15 car lengths, he felt a second jar which was caused by striking the caboose of extra 402. He did not hear torpedoes and could not recall whether or not he heard a whistle signal of any kind approaching Estill Springs.

Conductor Wiggs, of train No. 42, stated that he heard no torpedoes approaching Estill Springs. He felt the application of the brakes in emergency 10 or 12 car lengths from the point of collision at which time the speed was about 25 miles an hour. He thought the speed had been reduced to about 15 miles an hour when the collision occurred. He stated that he did not see Conductor Roe before the accident occurred and does not know where he was located.

Head Brakeman Moody, of train No. 42, stated that he had gone back to the caboose to eat his lunch and was washing some

dishes when he felt the brakes applied in emergency. He stated that the train traveled a distance of 7 or 8 car lengths after the brakes were applied before the collision occurred. He estimated the speed of the train at 25 or 30 miles an hour at the time the brakes were applied.

Rear Brakeman Terry, of train no. 42, stated that from the time the brakes were applied to the time the collision occurred, the train ran a distance of 6 or 7 car lengths. He further stated that he went back to protect the rear of his train immediately after the accident and saw no torpedoes on the track near mile post 78.

Mechanical Draftsman Willis, who was riding on the locomotive of train no. 42 in connection with the test, stated that his first intimation of the impending accident was when he heard Mr. Blessing give warning and the brakes were applied in emergency. He stated he then swung out of the window, saw the corner of the caboose of extra 402 just ahead, jumped off and was knocked unconscious. He stated further that he did not see the conductor of extra 402 at the time he swung out of the window.

George Hendon, colored, who lives near Elk River bridge, stated that on the day of the accident he came home for dinner at 12.15 p.m. and noticed a flagman standing near the north end of the bridge. After he had gone inside his house to eat it started to rain. A short time later he heard train No. 42 approaching and upon looking out saw the flagman running from the caboose of the standing train toward the approaching train, and he judged the flagman was 5 or 6 car lengths from the caboose at that time. It

was his supposition that the flagman he saw near the bridge at 12.15 p.m. went to the caboose for shelter when it started to rain.

Alvin Cook, employed at Heltons Gravel Pit, stated that he saw train No. 42 approaching the point of accident and noticed a flagman from extra 402 running toward the approaching train, being about 2 car lengths from the standing caboose when he first saw him.

This accident was caused by the failure of Conductor Poe properly to protect the rear of his train, in accordance with rule 99 of the Nashville, Chattanooga & St. Louis Railroad book of Operating rules, which reads in part as follows:

When a train stops or is delayed, under circumstances in which it may be struck, the flagman must go back immediately with stop signals a sufficient distance to insure full protection, at which point he must place two torpedoes on the rail, two rail lengths apart, as a caution signal. He may then return to such distance from his train as will admit of a stop signal being given to an approaching train by hand or torpedo in time to prevent accident, where he will place one torpedo on the rail. When recalled, he may return to his train, first removing the single torpedo.

While the statements of Conductor Poe and other witnesses conflict in regard to his location on the arrival of train No. 42, Conductor Poe himself admitted that he had not been called in by the engine whistle when he started to return to his train, and that he was no more than 20 car lengths from his caboose when he signalled the following train to stop. According to his own statement, therefore, he was not in position to furnish adequate protection for his train, and the fact that he returned nearly to his train before being called in indicates a wanton disregard for the elemental principles of train protection. The

weight of evidence is that he was considerably less than 20 car lengths from the rear end of his train when No. 42 approached. Had a block signal system been in operation on this line this accident might have been averted.

Conductor Poe entered the service of the Nashville, Chattanooga & St. Louis Railroad as brakeman in July, 1892, and was promoted to conductor in 1897. His service record shows no offense of any great magnitude standing against him.

None of the employees involved in this accident had been on duty in violation of the provisions of the Hours of Service Law.