

## INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN RE INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE OKLAHOMA CITY-ADA-ATOKA RAILWAY NEAR KONAWA, OKLA., ON APRIL 4, 1927.

May 10, 1927

To the Commission

On April 4, 1927, there was a head-end collision between a passenger train and a freight train on the Oklahoma City-Ada-Atoka Railway near Konawa, Okla., which resulted in the death of one employee and the injury of eight passengers and four employees.

Location and method of operation

This railway extends between Oklahoma City and Atoka, Okla., a distance of 132.9 miles, in the vicinity of the point of accident this is a single-track line over which trains are operated by time-table and train orders, no block-signal system being in use. The point of accident was 724.5 feet north of mile post 414, approaching this point from the north there is a tangent 2,039 feet in length, followed by a 4° curve to the left 1,150 feet in length, the accident occurring in about the center of the curve. Approaching from the south there is a tangent 3,327.5 feet in length, followed by the curve on which the accident occurred. The grade at the point of accident is 0.5 per cent descending for southbound trains. On account of an embankment on the inside of the curve the range of vision is restricted to about 380 feet.

The weather was clear at the time of the accident, which occurred at about 5.22 p.m.

Description

Northbound passenger train No. 16 consisted of one wooden baggage car, one steel combination mail and passenger car and one wooden coach, hauled by engine 351, and was in charge of Conductor Burkey and Engineman Werli. Train No. 16 departed from Ada, 15.7 miles south of Konawa, at 4.48 p.m., 12 minutes late and collided with southbound freight extra 491 at a point about 3 miles south of Konawa while traveling at a speed estimated to have been from 15 to 20 miles per hour.

Southbound freight train extra 491 consisted of 12 cars and a caboose, hauled by engine 491, and was in charge of Conductor Bradley and Engineman Johnson. It departed from Shawnee at 11.30 a.m., stopped at Konawa at 4.50 p.m., departed from that point at 5.13 p.m., and collided with train No. 16

while traveling at a speed variously estimated to have been between 8 and 20 miles per hour

Both engines were partly derailed and came to rest in an upright position, quite badly damaged. The baggage car in train No. 16 was derailed and both ends of it were telescoped for a distance of about 3 feet, while the sixth car in the freight train was demolished, none of the other equipment was derailed or damaged. The employee killed was the fireman of the passenger train.

#### Summary of evidence

Engineman Johnson, of extra 491, stated that at Konawa he received a message to set out his train at Ada and to proceed to Stonewall, south of Ada, and at that time he thought of train No. 16, but afterwards he completely overlooked that train and did not think of it again until after the accident had occurred. When his train departed from Konawa he received a proceed signal from the conductor, who was located at the rear of the train, and the first knowledge he had of anything wrong was when the fireman shouted and jumped off. Engineman Johnson said his train then was about two telegraph pole-lengths from the point of accident, moving at a speed of about 10 miles per hour, he immediately applied the air brakes in emergency and thought he had brought the train practically to a stop before the collision occurred. Nothing had been said to him by any other members of the crew with regard to train No. 16 and he held no orders involving that train. Engineman Johnson further stated that he was carrying a standard watch which had been inspected about two weeks prior to the accident, and that before departing from the terminal he had compared it with a standard clock and also with the conductor, but that he did not sign the time-comparison record saying it had always been his practice to compare his watch but not always to sign the record.

Fireman Sebers, of extra 491, stated that before reaching Konawa and also while at that station he had inquired of Engineman Johnson as to where he intended to pass train No. 16, but in each case he did not think the engineman heard him and he did not say anything more about it after leaving Konawa. Approaching the point of accident he had been working on the deck of the engine and had just returned to his seat box when he observed train No. 16 approaching, at which time the two trains were 75 or 100 feet apart with his own train moving at a speed of 15 or 20 miles per hour. He at once called to the engineman and jumped off. He attributed the cause of the accident to the overlooking of train No. 16 by the crew of extra 491. Fireman Sebers further stated that on the day of the accident he had no time-table in his possession.

Conductor Bradley, of extra 491, stated that he talked with the dispatcher while his train was at Konawa but train No. 13 was not mentioned nor did he hold any train orders concerning that train, he had a time-table in his possession but did not refer to it. At the time his train departed from Konawa, which he said was at 5.05 p.m., he intended to go to Tyrola, located 5.9 miles south of Konawa, to meet train No. 16, which he thought was due at that point at 5.22 p.m. As a matter of fact train No. 16 is due out of Tyrola at 5.01 p.m., while train No. 14 is due at 5.22 a.m., instead of 5.22 p.m., he claimed, however, that he had confused the times of these two trains. After leaving Konawa there were some brakes sticking and the train was brought to a stop for the purpose of releasing them, and due to this delay and considerable clerical work which he had to do he entirely forgot about train No. 16. He did not notice any application of the air brakes prior to the accident and estimated the speed of the train at the time to have been 8 or 10 miles per hour. His practice was similar to that of Engineman Johnson in that he always compared his watch with a standard clock but did not always sign the time register.

Flagman Keller, of extra 491, stated that while his train was at Konawa he consulted his time-table and noted the time at which train No. 16 was due at that point, but he did not mention the fact to any member of the crew as he thought his train would not leave Konawa until the superior train had arrived. After departing from Konawa he still remembered train No. 16, but again failed to notify other members of the crew, saying that he was engaged in releasing the brakes on a car on which the wheels were sliding. Flagman Keller did not have a standard watch nor had he been furnished with a book of rules. The statements of Head Brakeman Brookshire, of extra 491, who was riding on one of the cars near the head end of the train, brought out no additional facts of importance. He had been furnished with a book of rules and time-table, but did not have the book of rules with him while the time-table had worn out and he had not asked for another copy.

Engineman Werli, of train No. 16, said the first knowledge he had of an opposing train was when he observed extra 491 approaching around the curve, about 400 feet distant, at which time the speed of his own train was about 20 miles per hour. He immediately shut off steam, applied the air brakes in emergency and jumped off, calling to his fireman to do the same thing. He thought he had succeeded in reducing the speed of his train to about 15 miles per hour before the accident occurred.

Conductor Burkey, of train No. 16, stated that after the occurrence of the accident he inquired of the conductor of extra 491 as to what orders he held and he replied that he had none regarding train No. 16 and had entirely overlooked the train.

### Conclusions

This accident was caused by the fact that the crew of extra 491 overlooked train No 16, an opposing superior train

The conductor said he had confused the departing time of train No 16 from Tyrola, 5.01 p.m., with the departing time of train No 14, 5.22 a.m., and that afterwards he forgot entirely about train No. 16, the flagman said he remembered train No 16, even after his own train had departed from Konawa, but failed to notify the other members of the crew, being engaged in bleeding the brakes from one of the cars in the train, apparently the remaining members of the crew simply overlooked train No 16 entirely. The members of the crew of extra 491 had nothing in the way of unusual conditions to contend with, and under these circumstances there is little that can be said by way of excuse for their failure to keep their minds on their duties

The investigation developed that the requirements of the rules with regard to carrying time-tables and standard watches were not being complied with by all of the members of the crew of extra 491, while one of these employees had not even provided with a copy of the book of rules. It also appeared that during the six-day period ending with April 4, the day on which the accident occurred, 20 engine crews had departed either from the passenger station at Oklahoma City or from the yard at Shaw and that only one engineman had signed the time-comparison record, during the same period 19 train crews departed from the same points and only 8 conductors signed the time-comparison record. Out of 20 inbound engine crews, only 11 enginemen and 7 firemen signed the call register and out of 14 train crews only 2 crews signed the call register. The rules require conductors and enginemen to examine bulletin books and to sign their names on the last bulletin posted as an indication that they have familiarized themselves with all bulletins posted up to that time, the investigation disclosed, however, that 126 bulletins were posted in the bulletin book at the passenger station in Oklahoma City, where passenger trainmen report, between April 14, 1925, and February 11, 1927, and that none of these bulletins was posted in the bulletin book located in Shaw yard, where all freight trainmen report for duty. No bulletin book is maintained at the round-house where the engine crews report for duty. It also appeared that very few of the bulletins posted in the passenger station had been signed by the employees affected thereby. The existence of such a situation indicates laxness in supervision which is certain to be reflected by the employees in their attitude toward their duties and is something which should be corrected with the least possible delay.

Had an adequate block-signal system been in use on this line, this accident probably would not have occurred, an adequate automatic train stop or train control device would have prevented it

With the exception of the head brakeman, all of the members of the crew of extra 491 were experienced men, they had been on duty nearly 10 hours, previous to which they had been off duty approximately 24 hours. The crew of train No. 16 had been on duty slightly more than 10 hours after from 22 to 32 hours off duty

Respectfully submitted,

W. P. BORLAND

Director