

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN RE  
INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON  
THE CHICAGO, BURLINGTON & QUINCY RAILROAD NEAR  
MEADVILLE, MO., ON JANUARY 4, 1923.

February 6, 1923.

To the Commission:

On January 4, 1923, there was a head-end collision between two freight trains on the Chicago, Burlington & Quincy Railroad near Meadville, Mo., resulting in the death of 4 employees, and the injury of 4 employees.

Location and method of operation.

This accident occurred on that part of the Brookfield Division of the Missouri District extending between Brookfield and St. Joseph, Mo., a distance of 101.9 miles; in the vicinity of the point of accident this is a single-track line over which trains are operated by time-table, train orders, and a manual block-signal system. The accident occurred approximately  $1\frac{1}{4}$  miles east of Meadville, at which point the track is on a fill about 10 feet in height. Approaching this point from the west there are 4,484 feet of tangent, followed by a 1-degree 33-minute curve to the right 1,472 feet in length, the accident occurring on this curve at a point 221 feet from its western end. Approaching from the east there are 4,344 feet of tangent, followed by the curve on which the accident occurred. The grade in each direction from the point of accident is undulating, being 1.6 per cent descending for eastbound trains at the point of accident under time-table No. 26, effective December 3, 1922, eastbound trains are superior to westbound trains of the same class. Owing to trees near the right-of-way, neither engine crew could see the engine of the opposing train across the inside of the curve until within 800 feet of each other. The weather was clear at the time of the accident, which occurred at about 6 13 p. m.

Description.

Westbound freight train No. 83 consisted of 14 cars, and a caboose, hauled by engine 5126, and was in charge of Conductor Jones and Engineman Barclay. At Laclede, 7.3 miles east of Meadville and the last open office, the crew received copy of train orders Nos. 78 and 80, Form 19, reading as follows:

No. 78. "Second 72 Wait at Wheeling Until 540 Pm Meadville Until 547 Pm Laclede Until 602 Pm No. 83 Will Use South track Brookfield to Needles."

No. 80. "Fourth 72 Meet No 109 and No 83 at Mooresville."

A clearance card to the effect the block would be clear on arrival of trains second and third No. 72 at Laclede, was also attached to these train orders. Immediately after train second No. 72 passed, train No. 83 headed out of the west switch of the passing track at Laclede, about 6.04 p. m., 1 hour and 49 minutes late, without waiting for the arrival of train third No. 72, and after having proceeded approximately  $5\frac{1}{2}$  miles collided with this train while traveling at a speed estimated to have been about 35 miles an hour.

Eastbound freight train third No. 72 consisted of 22 cars, and a caboose, hauled by engine 5049, and was in charge of Conductor Cassidy and Engineman Erdman. This train left Meadville, the last open office, at 6.08 p.m., 1 hour and 28 minutes late on the schedule of train No. 72, and collided with train No. 83 while traveling at a speed estimated to have been about 35 miles an hour.

Both engines, together with their tenders, came to rest down the embankment, bottom side up, badly damaged, about 35 feet south of the track, their head ends being telescoped until the cylinder saddles came together. Four cars in train No. 83, and six cars in train third No. 72 were demolished. The employees killed were the engineman, fireman, and head brakeman of train No. 83, and the engineman of train third No. 72.

#### Summary of evidence.

At Laclede, train No. 83 headed in at the east switch of the passing siding for the purpose of meeting train second No. 72, coming to a stop just opposite the station, after which Conductor Jones, Head Brakeman Birmingham, and Flagman Mygind went into the office. Conductor Jones then secured copy of the train orders and clearance card previously mentioned. After reading these instructions he handed his set to Flagman Mygind for his information and gave Head Brakeman Birmingham a set to deliver to Engineman Barclay, at the same time issuing instructions to the head brakeman to have their train moved to the west end of the passing track, which was done. When train second No. 72 arrived it was properly displaying signals for a following section, and as the engine of that train passed the caboose of the westbound train, Conductor Jones and Flagman Mygind shouted to Engineman McCovell, inform-

ing him their train was No. 83, but did not understand the reply given. Flagman Mygind also gave Engineman McDowell the usual lantern signal exchanged between crews of opposing trains as a salute or sign of recognition. Immediately afterwards train No. 83 proceeded out upon the main track against train third No. 72, without authority, this being the superior train and the following section for which train second No. 72 was displaying proper signals. Shortly afterward, on rounding a curve, Conductor Jones and Flagman Mygind noticed that the headlight on their train was burning properly; the first intimation they had of anything wrong was when they saw the headlight of train third No. 72, just before the accident occurred. Conductor Jones stated he had no conversation with Engineman Barclay at Laclede, nor did he converse with Flagman Mygind, between Laclede and the point of accident, in regard to their right to proceed. Both of these employees stated when the whistle signal was sounded by the eastbound train, approaching the west end of the passing track, calling attention to the signals displayed, it was answered by a whistle signal from their engine, also that they saw the signal lights on train second No. 72. Conductor Jones and Flagman Mygind stated to the best of their recollection Engineman Barclay departed from the passing track at Laclede without having received a proceed signal, however, Flagman Mygind said that after their train passed through the west switch, he closed it, then gave Engineman Barclay a proceed signal. Conductor Jones admitted his responsibility for this accident, both he and Flagman Mygind stating when train second No. 72 passed them at Laclede they mistook it for train third No. 72.

Fireman Moling and Head Brakeman Woods, of train third No. 72, stated the first knowledge they had of anything wrong was when they saw the headlight of train No. 83, as it rounded the curve, at which time they were only a short distance away, and they jumped just before the accident occurred. Conductor Cassidy and Flagman Wilkerson were not aware of anything wrong until the accident occurred; they stated the air brakes on train third No. 72 had been tested and worked properly.

Engineman McDowell, of train second No. 72, stated as his engine passed the head and rear ends of train No. 83, at Laclede, he shouted the number of his train and was informed as to the number of the westbound train in a like manner, someone on the caboose of that train also giving a lantern signal which he interpreted as meaning what he shouted was understood.

Operator Hall, on duty at Laclede at the time of the accident, stated it was customary to issue clearance cards to westbound trains on the passing track, such as

was done on this occasion to train No. 83, before the block is actually clear, in order to permit trains to proceed to the west end of the siding, beyond a switch connecting with a wye leading to the yard track, which places a west-bound train a considerable distance west of the station. Under this arrangement the east end of the passing track is not blocked, and an eastbound train in the yard can also use the passing track, via the wye switch, then depart east-bound while the west end of the passing track is occupied; a move of this kind was made on this occasion.

#### Conclusions.

This accident was caused by train No. 83 occupying the main track on the time of train third No. 72, a superior train, for which the crew of train No. 83 is responsible

Conductor Jones and Flagman Mygind acknowledged mistaking train second No. 72, for train third No. 72, when it passed them at Laclede. The entire engine crew of train No. 83 was killed.

One of the conditions which led up to this accident was the issuance of a clearance card stating that the block would be clear after the arrival of certain trains; the clearance card was issued before the block was actually clear, and train No. 83 was allowed to depart from the block station on the passing track, the clearance card being authority to enter the block when the opposing trains had arrived. It appears that the practice of issuing clearance cards to be acted upon at some later time was for the purpose of avoiding congestion in the yard and on the passing siding, and that a train crew having accepted a clearance card of this character and proceeded to the outgoing switch of the passing siding was entirely beyond the control of the block operator. In this case the accident resulted from failure of the crew to identify a passing train and to wait until both of two opposing trains had arrived. Had train No. 83 been held at the block office, or had the movement of that train from the passing siding to the main line required the cooperation or permission of the block operator, at the time such movement was made, the mistake in identifying train second No. 72 would probably have been discovered in time to have averted the accident. The occurrence of this accident indicates the necessity in situations of this character for installing signals at outlet switches, electric locking of such switches, or other similar means to prevent improper movements from siding to main line.

With the exception of Head Brakeman Birmingham, who entered the service of this railroad December 22, 1922, all of the employees involved were experienced men. At the time of the accident none of them had been on duty in violation of any of the provisions of the hours of service law.

Respectfully submitted,  
W. P. Norland,  
Director