INTERSIATE COMMERCE CONTISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY CONCERNING AN ACCIDENT ON THE CHICAGO, BURLINGTON & QUINCY RAILROAD NEAR DONNELLEY, IOWA, ON JANUARY 12, 1933

February 17, 1933

To the Commission.

Cn January 12, 1933, there wes a head-end collision between two passenger trains on the Chicago, Burlington a Quincy Railroad near Donnelley, Iowa, which resulted in the death of 1 mail clerk and 4 employees, and the injury of 21 passengers, 2 mail clerks, 1 road foreman, 1 division freight agent, 1 special agent, 3 employees on duty, 2 employees off duty, and 1 Railway Express Company employee This accident was investigated in conjunction with the Iowa Board of Railroad Commissioners.

Location and method of operation

This accident occurred on the Albia-Des Moines Subdivision of the Ottumwa and Creston Divisions, which extends
between Albia and Des Moines, Iowa, a distance of 68 O miles;
in the vicinity of the point of accident this is a singletrack line over which trains are operated by time-table and
train orders, a manual block-signal system in effect provides for permissive blocking for following movements.
The accident occurred at a point approximately 1 5/8 miles
north of the north switch of the passing track at Donnelley,
at the north end of bridge 38 57, a pile bent trestle 105
feet in length, approaching this point from the south there
ere 958 feet of tangent, the accident occurring on this
tangent at a point about 34 feet from its northern end
Approaching from the north, there is a 1° curve to the left
1,183 feet in length, followed by the tangent on which the
accident occurred. The grade is 0 31 per cent ascending
for northbound trains at the point of accident.

Donnelley is a non-emency station; the passing track at that point is 1,495 feet in length and is located on a curve It is on the west side of the main track, and at its center is separated therefrom by a considerable distance. A passenger shelter and an abandoned water tank are located between these two tracks at points 10 and 12 car-lengths, respectively, south of the north switch. At the time of the accident an occupied tank-ging bunk car stood on the passing track about opposite the inter tank, this was an old combination baggage and passenger car with side windows in the north helf of it, and the car was lighted with kerosene lamps.

Owing to a bluff covered with trees on the east side of the track, together with the curve just north of the bridge, the view had by the southbound enginemen was restricted to about 600 feet

The weather was clear at the time of the accident, which occurred about 7 25 p m

Description

Northbound passenger train No. 179 consisted of gas-electric motor car 9665, this being an all-steel combination mail and passenger car, hauling one wooden baggage car, and was in charge of Conductor Baker and Engineman Warren At Albia, 37 1 miles south of Donnelley, the crew received copy of train order No 215, Form 31, providing for a meet with train No at Donnelley, the scheduled meeting point for these trains They also received copy of clearance card, Form A, as well as a Form 19 train order notifying them that there were occupied bunk cars on a track at Tracy, 19.4 miles north of Albia, but no train order was issued notifying them about the bunk car that stood on the passing track at Donnelley. Train No. 179 left Albia at 6 06 p m., according to the train sheet, 11 minutes late, left Knoxville, the last open office, 4 miles south of Donnelley, at 7 08 p m , seven minutes late, passed Donnelley without stopping, and collided with train No. 28 while traveling at an undetermined rate of speed.

Southbound passenger train No. 28 consisted of steam engine 2215, hauling gas-electric motor car 9567, this being an all-steel combination passenger and baggage car, and one wooden mail and baggage car, and was in charge of Conductor Worden and Engineman Hayes. At Des Moines, 30.9 miles north of Donnelley, the crew received, among others, a copy of train order No. 215, Form 19, previously mentioned. Train No. 28 left Des Moines at 6 15 p.m., according to the train sheet, on time, left Pleasantville, the last open office, 6 1 miles north of Donnelley, at 7 09 p.m., seven minutes late, and collided with train No. 179 while traveling at a speed estimated to have been between 25 and 30 miles per hour

None of the equipment in either train was derailed, but the steam engine of train No. 28 telescoped the gas-electric motor car of train No. 179 a distance of about 4 or 5 feet and shoved that train backwards about four car-lengths, the wooden trailer of train No. 28 stopping on the bridge. Motor car 9665 had a fuel capacity of 300 gallons, while motor car 9567 had a capacity of 200 gallons, the fuel tank of motor car 9665 was punctured, causing gasoline to be scattered over the bridge and around the equipment, the gasoline ignited immediately and destroyed the bridge and all equipment with the exception of the steam engine. The entire crew of train No. 179, composed of the engineman, conductor, and brakeman-baggageman were killed, as was the

engineman of train No 28, while the employees on duty injured were the conductor, fireman and the brakeman of train No 28

Summary of evidence

On account of the death of all members of the crew of train No. 179, no accurate information could be obtained concerning the operation of the train immediately prior to the occurrence of the accident. From the statements made by others who were on the train as passengers, about all that was developed of any importance was a statement by a fireman who had formerly worked on this subdivision to the effect that he was sure the train reduced speed when passing Donnelley, if in fact it did not come to a full stop at that point. None of the passengers was aware of anything wrong prior to the accident.

Fireman Withers, of train No 28, stated that his train approached the meeting point at a speed of about 30 miles per hour, he saw the reflection from the headlight of the opposing train and at that time he thought it was writing at Donnelley for his own train to arrive. He got down off his seat box to put in a fire but after putting in three or four scoops of coal his enginemen made a light air-brake application and then applied the brakes in emergency. Realizing that something was vrong, Fireman Withers looked out of the left window across the inside of the curve, and saw the reflection from the headlight of train No. 179 about 60 feet distant, the collision occurring immediately afterwards. The air brakes had been tested and vorked properly en route. Conductor Worden and Brakeman Fleming were riding back in the train and were unaware of anything wrong prior to the crash.

O L Longshoop, who lives nearby, said the train from the north, which would be train No. 28, sounded the vhistle, but he did not hear the whistle sounded by the crew of train No. 179. The fireman and also the brakeman of train No. 28 heard their engineman sound the whistle shortly before the accident, but no one on train No. 179 heard a whistle except that one of the passengers remembered having heard the whistle at some point after leaving Knoxville.

Geng Foreman Unglesbee was making out reports in the bunk car that stood on the passing track at Donnelley and heard train No 179 then it passed that point, saying that it seemed as if the train reduced speed, passed the bunk car and then proceeded, no stop having been made, he did not get up to look out of the window, nor did he hear train No 179 sound the whistle at any time. The bunk car had been at Donnelley less than 24 hours, having arrived there about midnight, January 11

Trein Dispatcher Tullis stated that Donnelley is the scheduled time-table meating point for trains Nos 179 and 28. It is customery to notify crews of trains whenever occupied bunk cers are left standing on sidings, but no train order was issued

notifying the crews involved as to the occupied bunk car that stood on the passing track at Donnelley, and he said that he had no knowledge that such a car was there until after the occurrence of the accident. Under the rules it is not required that angune numbers be used when issuing meet orders involving regular trains. Dispatcher Tullis also said that it was not unusual for a steam engine to haul a motor car and trailer, and that between January 1, 1932, and January 12, 1933, a period of slightly over one year, train No. 28 had been so hauled 32 times, while train No. 179 had been so hauled 46 times.

Operator McDonald, at Albia, stated that he personally delivered the clearance card and two train orders to Conductor Baker, giving him two copies of the orders, and the conductor read the orders aloud to him. The conductor appeared normal in every respect, he did not see Engineman Warren at any time. The meet order involved was the same as orders that had been given to the conductor practically every night prior to the accident.

Conclusions

This accident was caused by the failure of the crew of train No 179 to obey a meet order.

Under the provisions of the meet order, train No. 179 was required to stop clear of the north switch and await the arrival of train No 28; it was also required under the rules that the engineman should sound a meeting-point whistle signal at least I mile before reaching the meeting point and that should he fail in his duty the conductor should take immediate action to stop the train It is not known whether the engineman sounded the required whistle signal when approaching Donnelley, neither is it known what steps, if any, were taken by the conductor toward bringing the train to a stop Donnelley was the time-table meeting point of these two trains, such evidence as is available indicated that the crew of train No 179 had received the meet order, that both the motor car and the trailer were equipped with a conductor's valve which would have enabled the conductor to take such action as the occasion required, and that the brake valve in the motor car was equipped with safety feature which would have resulted in the brakes being applied if the engineman's hand were removed from the brake-valve handle at any time. It further appeared that the engineman's seat was so located that it would have been necessary for him to stop his train in order to obtain a good view of the bunk car standing on the siding near the passenger shelter at Donnelley; and in view of the fact that there was evidence that the speed was reduced at Donnelley, it is possible Engineman Warren made this reduction in the endeavor to identify the car occupying the siding instead of bringing his train to a full stop and then leaving his seat for the purpose of making sure of the identification.

The investigation did not develop how it happened that the dispatcher did not know of the presence of the bunk car on the passing track. This bunk car was occupied and the dispatcher said it was customery to notify trains when occupied bunk cars are located on passing tracks, had an order to this effect been issued to the cret of train No 179 it would have eliminated any possibility of their mistaking the bunk car, thich was an old combination baggage and passenger car, for train No 28, which usually consisted of a motor car and a trailer.

Respectfully submitted,

W. P. BORLAND,

Director.