

## INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN RE  
INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON  
THE ANN ARBOR RAILROAD AT LAKE GEORGE, MICH.,  
ON JULY 29, 1925.

November 19, 1925.

To the Commission:

On July 29, 1925, there was a head-end collision between a passenger train and a freight train on the Ann Arbor Railroad at Lake George, Mich., resulting in the death of one employee, and the injury of two passengers and two employees. This accident was investigated in conjunction with a representative of the Public Utilities Commission of Michigan.

Location and method of operation

This accident occurred on the Second Division, extending between Crossover and Cadillac, Mich., a distance of 119.89 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. Train orders on Form 31 are not used, neither are middle orders required. There is a rule in the time-table requiring the delivery of clearance cards with all train orders, but these clearance cards do not contain any provision for their O.K. by the dispatcher before a train is cleared nor is there anything in the book of rules requiring this to be done. The accident occurred about 300 feet east of the station at Lake George, opposite the water tank, which is located on the south side of the main track, approaching this point from the east there is about 1 mile of tangent, a 3° curve to the left 687 feet in length, and then about 120 feet of tangent track to the point of accident. The grade in this vicinity is slightly undulating, being 0.44 per cent descending for westbound trains at the point of accident.

The passing track at Lake George is 4,746 feet in length and parallels the main track on the north; the east switch of the passing track is located 4,133 feet east of the water tank. Owing to a tool house located south of the main track and about 100 feet east of the water tank, also a coal dock and an elevated track leading to the dock upon which cars were standing, located

on the inside of the curve and about 450 feet east of the tool house, the view of the point-of collision was materially restricted from the cab of a westbound engine

The weather was clear at the time of the accident, which occurred at about 2.14 p.m.

#### Description

Eastbound freight train extra 184 consisted of 65 cars and a caboose, hauled by engine 184, and was in charge of Conductor Hoy and Engineman Draper. This train departed from Selma yard, Cadillac, at 12.20 p.m., with copy of train order No. 24, Form 19, reading in part as follows:

"Eng 184 run extra Selma to Owosso  
meet \* \* \* No. 51 at Lake George \*\*\*  
No. 51 take siding \*\*\*."

Extra 184 arrived at Lake George at 2.10 p.m. and was brought to a stop on the main track with the engine opposite the water tank; while standing at this point taking water it was struck by train No. 51.

Westbound passenger train No. 51 consisted of one baggage car, one combination car, one coach, and one parlor car, in the order named, hauled by engine 203, and was in charge of Conductor Bright and Engineman Scott. The second car had a steel underframe, while the others had steel center sills. This train left Owosso, 87.02 miles east of Lake George, at 10.50 a.m., on time, and arrived at Farwell, the last open office, 10.5 miles east of Lake George, at 1.55 p.m. A copy of train order No. 24, Form 19, had been put out at Farwell, addressed to extra 153 and trains Nos. 67 and 51. Copies of the order were not delivered to the crew of train No. 51, however, and the train departed from that point at 1.56 p.m., one minute late, passed the east switch of the passing track at Lake George, at which point it was supposed to head in under the requirements of train order No. 24, and collided with extra 184 at the water tank while traveling at a speed estimated to have been about 25 miles an hour.

Engine 184 was driven backward a distance of 31 feet by the force of the impact, but remained upright; its tender was forced against and completely destroyed

the car behind it, while the next car in this train was only slightly damaged. The forward end of engine 203 climbed up and came to rest on the pilot beam of engine 184, with the driving wheels off the rails. The tender cistern was torn from its frame, its front end was jammed against the boiler head of the engine and its rear end against the baggage car; the baggage car was torn from its forward truck and stopped with its head end above this truck and resting on the tender frame, upright. The employee killed was a roadmaster who was riding on engine 203.

#### Summary of evidence

Agent-Telegrapher Palmer, stationed at Farwell, stated that he had had 32 years' experience in his present capacity with this railroad, 27 years of which had been at Farwell; he is 61 years of age. At 11.20 a.m. he received train Order No. 24 addressed to extra 153 and to trains Nos. 67 and 51. Dispatcher Waterman instructed him to make seven copies of this order, Operator Palmer did not have a train-order pad arranged to make this many copies, but he did have a pad arranged to make five copies and another pad with carbons arranged to make three copies, and he used the five-copy pad at the time the dispatcher issued the order, intending then to trace the order for the purpose of securing the two additional copies needed for delivery to train No. 51, which, however, he failed to do. Train No. 67 arrived shortly after train order No. 24 was issued, and Operator Palmer delivered two copies of the order and a clearance card to the crew of this train and then went outside to check the freight which had been unloaded, according to the train sheet this train arrived at Farwell at 11.25 a.m. and departed at 11.35 a.m. Operator Palmer stated that extra 153 arrived shortly after train No. 67 had departed, and he delivered two copies of the train order and a clearance card to the crew, the train leaving, according to the train sheet, at 12.01 p.m. Operator Palmer stated that he must have then placed the fifth copy of the order on the file as he did not again remember the order until learning of the accident through the operator at Lake George, while he thought he placed the train-order board in the clear position when he went to lunch, shortly after noon; he returned from lunch about 1 p.m., and the train-order board was still in the clear position when train No. 51 arrived. Operator Palmer further stated that at the time he received train order No. 24 he did not start a clearance card for train No. 51, and

he did not recall having seen a circular in this connection. This circular, No. 4095, was issued over the signature of the superintendent under date of May 26, 1924, approximately five months after the present book of rules took effect, and was addressed to all agent-telegraphers, telegraphers and towermen, it read as follows:

"Recently an operator failed to deliver an order to a train that had been transferred to him by another operator.

"As has previously been brought to your attention, there is no duty which you have to perform, which is as important as the handling of train orders. Had this operator checked his clearance against the numbers of orders transferred to him by the other operator, this would have been one way to have caught the mistake. When an operator receives a train order for a train, it is good practice to immediately start a clearance card for the train addressed, adding any other orders as they are received."

Dispatcher Waterman stated that the first he knew of anything wrong was when the operator at Lake George called him about 2.18 or 2.20 p m. and informed him of the accident, he immediately called Operator Palmer, at Farwell, and asked whether train order No. 24 had been delivered to train No. 51, and the operator replied "No." Then Dispatcher Waterman asked why it had not been delivered and he stated that Operator Palmer replied in one word, "Forget." Dispatcher Waterman further stated that after issuing train order No. 24 he had no further conversation with Operator Palmer about it prior to the collision.

Engineman Scott, of train No. 51, was in the hospital at the time of this investigation and owing to his condition no statement could be obtained from him. Fireman Tufford stated that the operator at Farwell was outside the office, performing his regular duties during the stop made by train No. 51 at that

point, while the train-order board was in the clear position, he had no conversation with the operator. Approaching Lake George, on reaching a point near the coal dock, which is located about 550 feet east of the water tank, he was riding on the fireman's seat box, and at about this time Engineman Scott made a service application of the air brakes. When about two car lengths east of the coal dock the fireman noticed a coal-dock employee making motions with his hands and on looking ahead he saw extra 184 standing on the main track, he at once shouted a warning of danger and jumped, he estimated the speed of his train to have been about 25 or 30 miles an hour at the time of the collision. Fireman Tufford further stated that the air brakes had been tested and worked properly, but he did not know whether or not they were again applied after he gave warning of danger.

Conductor Bright, of train No. 51, said he was in the dining car eating his lunch when the train stopped at Farwell, he looked out and saw that the train-order board was in the clear position. When approaching Lake George he noticed only one application of the air brakes, which was made in the vicinity of the coal dock, and he thought the speed was about 25 miles an hour at the time the accident occurred. Brakeman Henneman noticed the air-brake application made a short distance east of the coal dock, but noticed no other application prior to the accident. Baggage-master Bacon stated that he talked with Operator Palmer at Farwell, but the operator mentioned nothing about train order No. 24, he noticed nothing unusual about the operator's actions or conversation at this time.

The statements of the crew of extra 184 brought out no additional facts of importance, the engine crew was engaged in oiling the engine and taking water while the members of the train crew were inspecting the train, and none of them was aware of the approach of train No. 51 until a few seconds before the accident occurred.

#### Conclusions

This accident was caused by the failure of Operator Palmer, stationed at Farwell, to deliver a copy of a meet order.

The investigation showed that Operator Palmer did not make the requisite number of copies of train order No. 24 when he first received it from the dispatcher, and that after delivering two copies of the order to each of the two previous trains he filed the remaining copy and forgot to make the two additional copies required for the crew of train No. 51.

As previously stated, there is no block-signal system in use on this line, thus placing upon the train-order system of operation full responsibility for the safe movement of trains. The lessons of previous accidents have emphasized only too well the many weaknesses of this method of train operation and the desirability of adopting additional means of promoting safety.

Had an adequate automatic 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.

All the employees involved were experienced men, and 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. DORLAND

Director.