IN RE INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE FORT DODGE, DES MOINES & SOUTHERN RAIL-ROAD NEAR ERICSON, IOWA, ON MARCH 4, 1918.

April 17, 1918.

On March 4, 1918, there was a head-end collision on the Fort Dodge, Des Moines & Southern Railroad between a passenger train and a freight train near Ericson, Iowa, which resulted in the death of 4 employees and the injury of 22 passengers and 13 employees. After investigation the Chief of the Bureau of Safety reports as follows:

That part of the Fort Dodge, Des Moines & Southern Rail-road upon which this accident occurred is a single-track electric line, over which trains are operated by time table and train orders transmitted by telephone, no block system being in use. The trains involved in this accident were northbound freight train extra lll and southbound passenger train No. 4.

Extra 111, en route from Kelly to Boone, Iowa, consisted of electric motor car No. 111, 1 line repair car, 1 empty coal car and a caboose, in charge of Conductor Berglund and Motorman Young. Before leaving Kelly the crew received train order No. 3, reading as follows:

"Motor 111 run extra Kelly to Boone and meet No. 4 at East Long Track."

That order was made complete at 6:43 a.m. and extra lll left Kelly at about 6:55 a.m., being delayed there several minutes on account of train breaking in two, and stopped at Napier, 3.2 miles north of Kelly, at which place the conductor telephoned to the dispatcher for the purpose of giving him an opportunity to change the meeting place with train No. 4 if he so desired. The dispatcher then gave him train order No. 4, reading as follows:

"Extra 111 will meet No. 4 at Ericson instead of East Long Track."

That order was made complete as to extra 111 at 7:09 a.m. and that train left there at about 7:12 a.m. and collided with train No. 4 at a point about 4 miles north of Napier, or 1.2 miles south of Ericson, while running at a speed estimated to have been from 18 to 25 miles an hour.

Train No. 4, en route from Fort Dodge to Des Moines, Iowa, consisted of motor car No. 68, which was a three-compartment electric passenger car, and was in charge of Conductor Prang and Motorman Powers. It left Fort Dodge at 5:20 a. m. and arrived at Boone at 7:02 a. m. where the conductor received two copies each of train order No. 3 and a clearance card; left Boone at 7:05 a. m., passed East Long Track and Ericson, 1 and 4.7 miles, respectively, south of Boone, without stopping, stopped at Mary Brown Crossing, about three-fourths of a mile south of Ericson, to let a passenger off, left there and collided with extra 111 at a point about 2,800 feet south of that place, or about 1.2 miles south of Ericson, at about 7:20 a. m., while running at a speed estimated to have been about 40 miles an hour.

The force of the collision raised the front end of motor car No. 111 above the floor of motor car No. 68, telescoping the baggage and smoking compartments of that car and several feet of the rear compartment, almost completely destroying the front half of that car. All the persons killed were riding in the forward compartment of motor car No. 68. The forward trucks of motor car No. 111 were forced back to about the middle of that car but the car was not seriously damaged.

The track is straight for a distance of 2.9 miles north and 6.6 miles south of the point of collision and the views of approaching motormen are unobstructed. The accident occurred on a slightly ascending grade for northbound trains and on a five-foot fill. The weather at the time was misty and there was a dense fog.

Dispatcher Hensley, who was on duty at Boone, stated that he issued train order No. 3, addressed to extra 111 at Kelly and to train No. 4 at Boone, made out a clearance card for train No. 4, placed both the train order and clearance card on the table in the office, and answered the telephone. While he was talking over the telephone Conductor Prang came into the office, signed train order No. 3, tore off two copies of it, picked up the two copies of the clearance card and walked out without saying anything. He said he was standing about four or five feet away from him, saw him sign the order, and after he had finished telephoning he looked at the remaining carbon copy and saw Conductor Prang's signature on it. He did not have Conductor Prang read the order back to him and made it complete before giving it to him. He said he transmitted train order No. 3 to Conductor Berglund at Kelly by telephone and when extra 111 reached Napier Conductor Berglund called him up on the telephone and said his train had been delayed at Kelly and asked if he wanted to change the meeting place with train No. 4. Dispatcher Hensley replied that he did, and issued train order

No. 4, which was made complete at 7:09 a. m. At that time train No. 4 had left Boone and he expected Conductor Prang to call him up when he reached East Long Track, at which time he would give him train/No. 4. He had not given Conductor Prang any instructions to telephone him from East Long Track but expected him to comply with instructions contained in Bulletin No. 278, which provide that "When a passenger train arrives at a non-agency station where it is to meet another train that has not arrived nor is in sight, the conductor will immediately call up the dispatcher on 'phone. He may have other orders to give you making the 'meet' at next station." A clearance card was found near the scene of accident by the Superintendent which Dispatcher Hensley identified as being the one received by Conductor Prang on the day of the accident, it reading in part as follows:

Boone 7:05 a.m., 3/4/1918. Conductor and Motorman or Engineman No. 4. I have one orders for your train. Signal is displayed for all trains.

Conductor Prang of train No. 4 stated that his train left Fort Dodge at about 5:20 a.m., and upon arriving at Boone at about 7:02 a.m. he went into the station to register. He saw Dispatcher Hensley and the night ticket agent standing there, and the dispatcher asked him if a brakeman came in on his train and when he answered in the negative the dispatcher began telephoning, and was still telephoning when he left the office. Conductor Prang said he picked up two copies of a clearance card from a table in the office but did not see any train orders there, nor did the dispatcher say anything to him about any orders. He left the station at about 7:05 a. m., gave the motorman a copy of the clearance card, and left there without any knowledge whatever that extra lll was on the road. He said his train did not stop at East Long Track or Ericson, and the only stop made between Boone and point of accident was at Mary Brown Crossing, located about three-fourths of a mile south of Ericson. He said he usually placed his train orders in a small box at the rear end of the car, and after the accident he asked a friend to look in that box and ascertain whether or not there were any orders there, and the friend reported that he could not find any.

At the public investigation held to determine the cause of this accident, seven train orders on which his name appeared, including train order No. 3, were shown to Conductor Prang without his knowing their contents, and he practically identified his signatures on all of them. When shown his name on train order No. 3 and asked if that was his signature, he replied, "Yes, that looks like mine," but he said he has no recollection of signing that order. He was shown the clearance card

which was found near the scene of accident but could not identify it as being the one he had received at Boone.

Motorman Powers of train No. 4 stated that he received a clearance card at Boone from Conductor Prang but was positive in his statements that he did not receive any train orders there, and when he received the clearance card he understood there were no orders for his train. He said he did not read the clearance card carefully but thought it was stated thereon, "I have no orders," but admitted it might have read, "I have one order." He took the headlight off his train at Boone, left there, and was proceeding at a speed of 35 or 40 miles an hour when he saw extra 111 about 40 or 50 feet away, and immediately shut off the power and applied the air brakes in emergency. After the accident he was shown a copy of train order No. 3 and stated that he had never seen that order.

Conductor Berglund of extra lll stated that he received train order No. 3 at Kelly by telephone, delivered a copy of it to Motorman Young and had him read it back to him, that order being made complete at 6:43 a.m. His train left Kelly within seven or eight minutes after receiving that order, being delayed there on account of the train breaking in two, and upon arriving at Napier he telephoned to the dispatcher and asked him if he wanted to change the meeting place with train No. 4, and received train order No. 4. He delivered a copy of that order to Motorman Young and had him read it back to him. Upon leaving Napier he was riding in the caboose of his train and was riding there when the collision occurred and had no warning that train No. 4 was approaching. Shortly after the accident he saw Conductor Prang and asked him if he had any orders and he replied that he had none.

Motorman Young of extra 111 stated that Conductor Berglund delivered train order No. 3 to him at Kelly and train order No. 4 at Napier and he read both orders back to the conductor. He said he first saw train No. 4 when it was about 100 feet away and had only sufficient time to shut off the power and apply the air brakes before the collision occurred. He said the speed of his train was 18 or 20 miles an hour at the time and its headlight was burning.

Signal Foreman Fronsdahl stated that he was standing on the station platform at Boone when train No. 4 arrived, saw Conductor Prang come out of the station and give a train order and clearance card to Motorman Powers, and heard the motorman repeat the order, the substance of which was that train No. 4 would meet extra 111 at East Long Track. He said he was standing about ten feet away from the motorman and saw and overheard the transaction distinctly.

Baggage and Freight Agent Nelson stated that he was standing on the station platform at Boone and saw Conductor Prang deliver a train order to Motorman Powers but could not say what the order contained as he did not see its contents or hear it read.

Bridge Carpenter Peterson stated that he was in the baggage room at Boone and saw Conductor Prang leaving the ticket office reading a train order, but paid no particular attention to it except that he heard him say something about meeting someone at East Long Track.

The direct cause of this accident was the failure of the crew of train No. 4 to obey train order No. 3 fixing a meeting point for their train at East Long Track with extra 111 and bring their train to a stop before passing there.

Although the meeting point had subsequently been changed from East Long Track to Ericson, yet had train No. 4 been stopped at East Long Track and Conductor Prang complied with the requirements contained in Bulletin No. 278 and telephoned to the dispatcher when he found extra 111 had not arrived, he would have been given train order No. 4, which would have informed him of the change in meeting points and the accident would have been everted.

While Conductor Prang and Motorman Powers deny ever having received train order No. 3 or any other train order at Boone on the day of the accident, the dispatcher and three other eye-witnesses were positive in their statements that Conductor Prang did receive a train order there that morning and two of those witnesses state that they saw him deliver a train order to Motorman Powers. One of those witnesses stated that he heard Motorman Powers reading the order to the conductor and distinctly heard him read that train No. 4 would meet extra lll at East Long Track. The dispatcher stated positively that he saw Conductor Prang sign train order No. 3 and take two copies of it and the clearance card with him, and Conductor Prang identified his own signature on a carbon copy of that order.

The evidence is conclusive that Conductor Prang signed and received two copies of train order No. 3, received two copies of a clearance card which distinctly indicated that he should have one train order, and he delivered copies of the order and clearance card to Motorman Powers and had him read the order back to him; it is also apparent that neither of them carefully read the clearance card, for if they had they would have noted that they should have had a train order. What caused both of these experienced employees completely to overlook train order No. 3 and the contents of the clearance card could not be ascertained.

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Dispatcher Hensley is also at fault for violating the rules prescribing the method to be employed in the delivery of train orders. Had he withheld the completion of train order No. 3 until the signature of the conductor had been obtained, and required him to read it aloud, as required by the rules, the meeting point fixed by that order might have been so thoroughly impressed upon the conductor's mind that he would not have overlooked it.

All of the employees involved in this accident were experienced men with good records. At the time of the accident Dispatcher Hensley had been on duty 7 hours and 20 minutes, and the crews of extra 111 and train No. 4, 1 hour and 35 minutes and 2 hours and 15 minutes, respectively.