INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN REINVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE CHICAGO, ROCK ISLAND & PACIFIC RAILWAY NEAR ENTERPRISE, IOWA, ON DECEMBER 1, 1928.

February 19, 1929,

To the Commission:

On December 1, 1928, there was a rear-end collision between two passenger trains on the Chicago, Rock Island & Pacific Railway near Enterprise, Iowa, resulting in the injury of 20 passengers and 1 employee. This accident was investigated in conjunction with a representative of the Board of Railroad Commissioners of Iowa.

Location and method of operation

This accident occurred on Sub-division 18 of the Cedar Rabids-Minnesota Division extending between Valley Junction and Manly, Iowa, a distance of 135.5 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. Trains in the same direction are required to be spaced at least 10 minutes abart, except in closing up at stations. This accident occurred 5,382 feet east of the station at Enterprise; approaching this point from the east the track is tangent for a distance of 1.8 miles. The grade is 1 per cent ascending at the point of accident, this grade extending several thousand feet beyond that point.

The weather was very foggy at the time of the accident, which occurred at about 1.05 a.m.

Description

Westbound passenger train No. 441 consisted of three baggage cars, one coach and two Pullman sleeping cars, in the order named, hauled by engine 937, and was in charge of Conductor Stearns and Engineman Van Dorn. The baggage cars were of wooden construction and the coach and sleeping cars of steel construction. This train left Short Line Junction, the last open office, 11.9 miles from Enterprise, at 11.40 p.m., five minutes late, and was delayed at Swanwood, 5.2 miles west of Short Line Junction, in meeting another passenger train and sawing by with two freight trains. One of these freight trains, No. 917, being unable to back into clear on account of an adverse grade, proceeded ahead of train No. 441 and stalled on the 1 per cent grade east of Enterprise. Train No. 441 was flagged and it then was moved ahead and brought to a stop

behind train No. 917, train No. 441 and been standing at this point about 10 minutes, coupled to the rear of train No. 917, when it was struck by train No. 17.

Vestbound passenger train No. 17 consisted of one baggage car, one coach, one mail car, one combination car, one club car and two Pullman sleeping cars, in the order named, hauled by engine 895, and was in charge of Conductor Myers and Engineman McCormick. All of the cars were of steel construction with the exception of the fourth car, which was of steel—underframe construction. This train left Short Line Junction, according to the train sheet, at 12.39 a.m., 40 minutes late, and struck the rear end of train No. 441 while traveling at a speed estimated to have been about 10 miles per hour.

The third car in train No. 441, a wooden baggage car, was so bidly damaged that it was later destroyed; the fourth and sixth cars were considerably damaged while the first, second and fifth cars were but slightly damaged. The rear truck of the rear car of train No. 441 was derailed but the remainder of the equipment in both trains remained on the track. Engine 895 of train No. 17 was only slightly damaged, as was the baggage car in this train.

Summary of evidence

Engineman Ven Dorn, of train No. 441, stated that when flagged by the crew of train No. 917 he slowed down, picked up the flagman, whistled out a flag for his own train and then moved shead and coupled his engine to the caboose of the preceding train, but was unable to start it. He thought it was about 12.50 a.m. when he coupled to the rear of train No. 917, and that the accident occurred about 12 or 14 minutes after he whistled out the flag. He estimated that a lighted lantern could be seen about five car-lengths and a red fusee about 1/4 mile. Fireman Blaine said his train moved shead a distance of from 15 to 20 car-lengths after whistling out a flag, and that the accident occurred about 8 or 10 minutes after they coupled to the caboose of train No. 917. Head Brakeman Barrett, also of train No. 441, stated that he thought the flagman was whistled out while the train was moving and before the engine was coupled to the caboose, and that his train had been standing six or seven minutes when the accident occurred, although he said he did not look at his watch.

Conductor Stearns, of train No. 441, said it was understood that train No. 917 would proceed to Enterprise ahead of his own train and that his train backed out on the main track and departed behind the freight train. After leaving Swanwood, Brakeman Corey came into the coach to get his oversnoes, at this time Conductor Stearns instructed the brakeman to look out for train No. 17 and to use plenty of fusees. His train was moved cautiously after leaving Swarwood and at the foot of the

grade east of Enterprise it was flagged by the flagman of train No. 917. Conductor Stearns stated that Engineman Van Dorn waistled out a flag after the train stopped but he pelieved the brakeman started out to flag before the train rtopped, as when he observed the brakeman with a lighted fusce the latter was about one or two car-lengths from the rear of the train and the conductor saw him disappear in the fog at a distance of about six or seven car-lengths. Conductor Stearns estimated that seven or eight minutes elapsed between the time his train was coupled to the caboose and the time the accident occurred, he did not see or heir train No. 17 approaching, being in the caboose at the time. It further appeared from the statements of Conductor Stearns that the fog was very dense and it was his opinion that wenther conditions had a great deal to do with the occurrence After the accident Brakeman Carey told of this accident. him that he had been book about one-fourth mile and Conductor Stearns thought that under favorable weather conditions this would have been sufficient, and that in this particular case Brakeman Carey was unable to get back fartner on account of the deep snow, he did not consider, however, that the brakeman was out the required distance to give proper warning to the engineman of train No. 17.

Rear Brakeman Carey, of train No. 441, stated that he was riding in the rear car of the train with the exception of about two minutes when he went to the coach, the third car ahead, to get his overshoes just after leaving Swanwood, at which time the conductor told him to use plenty of fusees for the benefit of train No. 17. He knew train No. 917 was ahead, that his own train was moving at a maximum speed of 15 miles per hour, and also that he was on the time of train No. 17. Brakeman Carey said he threw off several lighted red fusees after leaving Swanwood, the first one being at Quilhart, which is about 2 miles east of the point of accident, another about 1 mile west of Quilhart, and a third at a point he thought about 3/4 mile from where his train stopped. He stated he started back to flag just before the train came to a stop and that he also heard the engineman whistle out a flag, which was after the stop had One torpedo was put down about 7 telegraph poles been made. from the rear end of his train and a second one just as he heard train No. 17 opproaching, at which time he thought he was about 16 telegraph poler from the rear of his train. When he first saw the headlight of train No. 17 he thought it was about 8 or 10 car-lengths distant and he flagged it The train passed him at a speed of about with a red fusee. 60 miles per hour, with fire flying from the wheels of the second sleeping car, and ne estimated that the train had passed him a distance of 4 telegraph poles before his stop signal was answered; he then continued back and flagged a following oil train. In flagging the two trains he used five torpedoes and all of them exploded, although

those exploded by train No. 17 were muffled by the snow, and he said he had no difficulty in lighting the fusces. Brakeman Carey thought his train stopped at about 12.55 a.m. and that the accident occurred about five or six minutes later.

Engineman McCormick, of train No. 17, stated that he was traveling at a speed of about 60 miles per hour when he saw a red light about a car-length distant, he immediately made an emergency application of the air brakes, opened the sanders and then answered the flagman's signals. He thought his train moved a distance of about 1/4 mile before striking the rear end of train No. 441 and that the speed had been reduced to about 8 or 10 miles an hour, it was then between 1 a.m. and 1.05 a.m. Train No. 17 passed Swanwood at 12.52 a.m., 44 minutes late, and traveled the distance of nearly 6 miles between Swanwood and the point of accident at a speed the engineman estimated to have been between 50 and 60 miles per hour; he thought the accident occurred between 1 and 1.05 a.m. Engineman McCormick further stated that he heard no torpedoes at any time and the only fusee he saw was the one at the time he was flagged. He stated that the brakes on his train were working properly, his engine was in good condition, and nothing occurred that would have detracted his attention from the track ahead. Engineman McCormick also stated that he had no knowledge of other trains in that vicinity.

The statements of Fireman Simpson, Head Brakeman Groff and Conductor Myers, of train No. 17, brought out nothing additional of importance, except that none of them heard any torpedoes at any time during the trip. The fireman was putting in a fire when he heard the brake applied in emergency and the sound of two short blasts of the whistle, he did not see the fusee, but Brakeman Groff and Conductor Myers both saw the flash of the fusee just before the occurrence of the accident.

Brakeman Hume, of train No. 17, said he was in the rear sleeping car when he felt an application of the air brakes and was knocked down by the force of the collision. He immediately started back to flag and at a point about one-fourth mile from his train he found a burning red fusee and when about one-half mile from the rear of his train he saw the headlight of the approaching oil train, about 10 car-lengths distant. The engine of the oil train stopped about even with him, 10 or 12 minutes from the time he started out to flag, and he saw Barkeman Cdrey about 12 or 15 car-lengths distant after the oil train had stopped.

Conductor Tilzey, of train No. 917, stated that the engine of train No. 441 coupled to the choose of his train at about 12.50 a.m. and he thought the accident occurred at about 1.05 a.m. Brakeman Hodges, of train No. 917, stated that he thought he flagged train No. 441 at a point about one-fourth mile from the caboose of his train and that his range of vision was limited to about six carlengths due to the fog.

Conclusions

This accident was caused by the failure of Brakeman C_{η} rey, of train No. 441, properly to protect his train by flag.

Brakeman Carey knew his train was late and running on the time of train No. 17, he also knew they were following a freight train and were running at a rate of speed of only 15 miles per hour. The operation of his train under these circumstances, with very unfavorable weather conditions, should have prompted Brakeman Carey to take unusual precautions for the protection of his train. The testimony is conflicting as to now much time he had at his disposal in which to flag train No. 17, but the weight of evidence would make it appear that if Brakeman Carey had been on the ground before Engineman Van Dorn whistled out a flag, as stated by him, and if he had hurried back he would have been able to go far enough to have flagged train No. 17 in time to have prevented the accident, this would be particularly true in view of the fact that his train was moved ahead a considerable distance after picking up the flagman of the preceding train.

The evidence indicates that the air brakes on train No. 17 were working properly and that assoon as Engineman McCornick saw the flagman's signal he immediately applied the air brakes in emergency and reduced the speed from 60 to 8 or 10 miles per hour.

All of 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. BORLAND

Director