INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY CONCERNING AN ACCIDENT ON THE CHICAGO, ST.PAUL, MINNEAPOLIS & OMAHA RAILWAY NEAR MARSHFIELD, WIS., ON SEPTEMBER 21, 1932.

November 23, 1932.

To the Commission:

On September 21, 1932, there was a rear-end collision between two freight trains on the Chicago, St. Paul, Minneapolis & Omana Railway near Marshfield, Wis., which resulted in the injury of two employees.

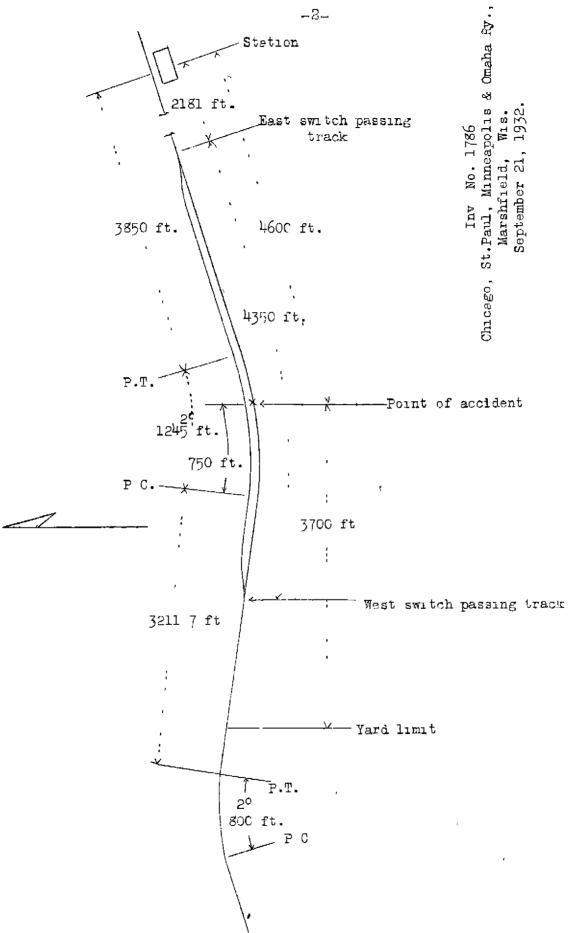
Location and method of operation

This accident occurred on the Marshfield Sub-division of the Eastern Division, which extends between Merrillan and Marshfield. Wis., a distance of 37.9 miles, and is a single-track line over which trains are operated by time-table and train orders, no block-signal system being in use. The point of accident was within yard limits, about 3,700 feet east of the west yardlimit board and approximately 4,600 feet west of the station at Marshfield. Approaching the point of accident from the west, there is a 2° curve to the right, 800 feet in length, followed by 3,211.7 feet of tangent track and then a 2° curve to the left 1,245 feet in length, the accident occurring on this latter curve approximately 750 feet from its western end. The grade is 0.802 per cent ascending for eastbound trains for a distance of approximately 4,100 feet to within 300 feet of the point of accident, and it is then level to the point of accident. A passing track 4,350 feet in length parallels the main track on the north, the east switch being located 2,181 feet west of the station.

The weather was clear at the time of the accident, which occurred about 2.25 p.m.

Description

Eastbound freight train extra 2326 consisted of 31 cars and a caboose, hauled by engine 2326, and was in charge of Conductor McKinnon and Engineman Tiebert. This train departed from Merrilan at 11.30 a.m., according to the train sheet, arrived at Marshfield at 1.45 p.m., and the rear portion of the train was left standing on the main track, where it was struck by train No. 168.



Eastbound third-class freight train No. 168 consisted of four cars and a caboose, hauled by engine 316, and was in charge of Conductor Strande and Engineman Benson. This train departed from Merrillan at 12.40 p.m., according to the train sheet, 30 minutes late, left Chili, 9.5 miles west of Marshfield, at 2.14 p.m., 39 minutes late, and collided with the rear end of extra 2326 while traveling at a speed variously estimated to have been from 10 to 30 miles per hour.

The caboose of extra 2326 was telescoped by engine 316 and the two cars ahead of the caboose were badly damaged; engine 316 also was considerably damaged. None of the cars in either train was derailed. The employees injured were the engineman and conductor of train No. 168.

Summary of evidence

Conductor McKinnon, of extra 2326, stated that when his train arrived at Marshfield it was stopped to clear the east end of the passing track, the rear end of the train standing about one-half mile east of the yard-limit board, where it was customary to leave the train while work was being performed. The work had been completed and he had received his orders, but before he returned to his train he was informed of the collision.

Flagman Kebble, of extra 2326, stated that he assisted in uncoupling cars which were to be set out at Marshfield and later coupled up the cars picked up, and was on his way to the rear end of his train and had reached a point about 10 or 15 car-lengths from the caboose when he heard train No. 168 whistle for the crossing located about 900 feet west of the caboose, and about a minute later it struck his train. He estimated that when he first saw train No. 168 approaching its speed was from 25 to 30 miles per hour. Flagman Kebble further stated that on several occasions train No. 168 had overtaken this train while standing on the main track at this point and had headed around it through the passing track.

Engineman Benson, of train No. 168, stated that approaching the yard-limit board at Marshfield he was operating his train at a high rate of speed, which he reduced to about 25 miles per hour, and as he reached the curve on which the accident occurred he further reduced the speed to about 15 or 20 miles and was traveling at that rate when he saw the caboose about four carlengths ahead of his engine. He applied the air brakes in emergency and jumped off, and at the time of the collision he thought the speed was about 10 miles per hour. Engineman Benson knew extra 2326 departed from Merrillan at 11.15 or 11.30 a.m., and did not expect to overtake it. He was familiar with rule 93, which requires protection within yard limits only against first-class trains, and thought he had his train practically under control, but stated that if the fireman had been looking ahead the fireman could have seen the caboose in time to have warned

him, thus enabling him to stop before the collision. He further stated that the air brakes seemed to work properly, and he thought he reversed the engine; after the accident the fireman told him that the engine was in the reverse position. Engineman Benson did not how his fireman was making his first trip over this territory for the past several years.

Fireman Lenz, of train No. 168, stated that this was his first trip on the Marshfield Sub-division since 1927, and that he did not know exactly where the passing track and yard-limit poard were located, although he had seen a bulletin at the time the change was made. After leaving Chili they were traveling at a high rate of speed, probably 40 or 45 miles per hour, and as they reached a bridge which is about 1,400 feet west of the yaid-limit board the engineman applied the brakes and then released them, and made no further effort to reduce speed until they reached the curve on which the accident occurred. Fireman Lenz stated that he clanced ahead at the highway crossing located just west of the cuive, and then stopped down to attend to his fire, he felt the engine lunge as it struck the curve and when he got back up in the cao the engineman was then making a service application of the brakes, Fireman Lenz looked anead, saw the caboose about 12 carlengths distant, and called to the engine man, the latter applying the brakes in emergency.

Conductor Strande, of train No. 168, stated that as they rounded the curve west of the curve on which the accident occurred, he felt an air-brake application which reduced the speed to betwee 130 and 35 miles per hour, and he assumed that the engineman would enter the passing track at Marshfield, he had made a remark to that effect to Brakeman Brott after leaving Chili, thinking that the extra train probably would be occupying the main track. He was making out his reports and the next thing he noticed was that they were passing over the switch. Brakeman Brott then looked out ahead and saw the rear end of the extra train and warned those in the caboose of the impending danger.

Head Brakeman Brott, of train No. 168, who was riding in the caboose, stated that when he looked out approaching Marshfield they were passing over the switch, at a speed of about 30 miles per hour, and he realized that they were traveling at too high a rate of speed. He saw the caboose of extra 2326 about 25 carlengths distant, warned the others, and then prepared to set off, but did not jump until their engine was about one or two carlengths from the carcose, at which time the speed of his train was about 20 miles per hour.

Rear Brakeman Doolittle, of train No. 168, stated that he was lookin, out of the windor on the left side of the caboose and soon after passing the switch the brakes were applied in emergency and he could see the rear end of the extra thin around the curve. He made no attempt to leave the train and estimated the speed to have been 18 or 20 miles per hour at the time of the collision.

Conclusions

This accident was caused by the failure of Engineman Benson of train No. 168, to operate his train under proper control within yard limits.

Rule 93 of the operating rules provides that second and third class and extra trains must move within yard limits prepared to sto, unless the main track is seen or known to be clear. evicance indicates that Engineman Benson was familiar with this rule and made a service application of the brakes approaching the yard-limit coard, but did not again make any attempt to reduce the speed of his train until he reached the curve on which the accident occurred, it was then too late to stop in time to avert the accident. It also appeared that he was depending on the fire an to inform him of conditions ahead, but the fireman, after seein that the crossing just rest of this curve was clear, atte ded to his fire and when he looked out apain he saw the caboose ahead, the engineman apparently seeing it at the same tile. If necessary for the safe operation of his train, Engineman lenson should have instructed the fireman, who it afterwards appeared was not entirely familiar with the territory, to maintain a lookout from the left side while passing through these yard limits.

In addition to that part of rule 93 referred to above, this rule provides that "yard limit boards will be placed at certain stations designated in time-table. Within yard limits the main track may be used, protecting against first class trains." On the other hand, nowever, rule 12, of the special instructions in the time-table, reads as follows:

"On the Ellsworth, ***Marshfield, ***Sub-divisions trains will, when possible, be notified of following extras by the train dispatcher who will issue train order to all trains affected, in the following form

'C and E.... at . . . after . . M. ... protect against extra. .. (east or west).

"Preceding trains receiving this order will, after the specified time, protect according to rule 99. In the absence of this order trains may occupy the main track at stations between station mile boards, protecting against scheduled trains only, and following extras just approach all stations prepared to stop, expecting to find the main track occupied between station mile poards."

This rule requires trains standing inside the <u>mile boards</u>
at stations to protect against all <u>scheduled</u> trains, whereas rule
93 requires trains within <u>yard limits</u> to protect against <u>first</u>-

class trains only. Engineman Benson understood he was governed by the provisions of rule 93, which places on the approaching train the duty of moving prepared to stop, and did not understand that time-table rule 12 applied, which would have required extra 2326 to protect against him by flag, since his train was an overfue scheduled train. The provisions of these rules should be made consistent with each other before they result in the occurrence of an accident.

Respectfully submitted,

W. P. Borland,

Director.