## INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY CONCERNING AN ACCIDENT ON THE MINNEAPOLIS, ST.PAUL & SAULT STE.MARIE RAILWAY AT WHEATLAND, WIS., ON DECEMBER 21, 1932.

January 26, 1935.

### To the Commission:

On December 21, 1932, there was a head-end collision between a passenger train and a freight train on the Minreapolis, St. Paul & Sault Ste. Marie Railway at Wheatland, Wis., which resulted in the injury of 6 passengers, 3 mail clerks, 1 Pullman porter, and 6 employees.

# Location and method of operation

This accident occurred on the First Subdivision of the Fond Du Lac Division, which extends between Forest Park (Chicago) Ill., and Shops Yard, (Fond du Lac) Wis., a distance of 147.5 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. Compass directions are nearly north and south but time-table directions are east and west and these latter directions are used in this report. The passing track at Wheatland is 4,003 feet in length and parallels the main track on the north, the accident occurred on the main track at a point 334 feet west of the east passing-track switch. Approaching this point from the east, there is a 30 30' curve to the right 882 feet in length, followed by tangent track to the point of accident, a distance of 7,378 feet, and for 3,720 feet beyond that point. The grade is undulating, and at the point of accident is 0.09 per cent descending for westbound trains.

The weather was misty but the visibility was good at the time of the accident, which occurred about 2.45 a.m.

### Description

Eastbound third-class freight train No. 26 consisted of 45 cars and a caboose, hauled by engine 4016, and was in charge of Conductor Mantz and Engineman Zynda. At Rugby Junction, 51.6 miles west of Wheatland, the crew received, among others, train order No. 12, Form 19, directing train No. 1 to take siding and meet train No. 26 at Wheatland. Train No. 26 departed from Rugby Junction at 1.05 a.m., passed Burlington, the last open office, 6.6 miles west of Wheatland, at 2.31 a.m., 1 hour and 27 minutes late, and stopped at the east switch at wheatland about 2.44 a.m., where it was standing when it was struck by train No. 1.

(Chicago) Forest Park, Ill

Lake Villa, J11

\* Wheatland, Ill.

Rugby, Jct , 1s.

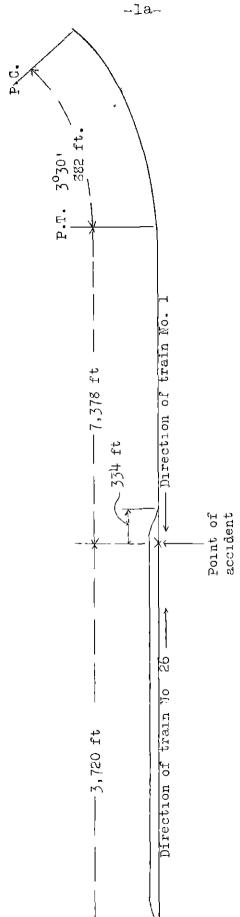
Shops Yard, "rs. (Fond du Lec)

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51.6 mles

40 7 miles



Inv. No. 1799 Inneapolis, St Paul & Sault Ste Herie Ry Wheatland, 'is. Wheatland, '1s. December 21, 1932

Westbound passenger train No.1 consisted of 1 mail car, 1 bashage car, 1 combination coach and baggage car, 1 coach, and 2 sleeping cars, all of steel construction, hauled by ensine 3709, and was in charge of Conductor holies and Ensine an Graham. The crew received several train orders at Lake Villa, 15.1 miles east of wheatland, among them being order No. 12, Form 31, referred to above; train No. 1 departed from that point at 2.20 a.m., 10 minutes late, passed Trevor, 7.8 miles from Wheatland, at 3.35 a.m., 8 minutes late, passed the east switch at wheatland and collided with train No. 26 while traveling at a speed estimated to have been between 20 and 30 miles per hour.

The engines locked together, with their front ends budly damaged, but remained upright. The first car in train No. 1 was considerably damaged and the second and sinth cars sustained slight damage. The first four cars in train No. 26 were detailed and so badly damaged as to be considered a total loss. The employees injured were the engineran, fireman, a baggageman and a train porter of train No. 1, and the fireman and conductor of train No. 26.

# Surnary of evidence

Engineman Zynda, of train No. 26, stated that the headlight of his engine was burning brightly as the train approached the neeting point but he dimied it as soon as the train stopped clear of the east switch train No. 1 was then about 60 car-leights as not and he saw the headlight change from bright to dim. The head brake in started towards the switch to line it for train No. 1 and Engineman Zynda had started to get out in order to look at the wheels under the tender, when the collision occurred. He could not estimate the speed of train No. 1 but said he had been expecting it to stop at any moment.

Brakeman Palm said that as soon as his train stopped he got off the engine and started towards the switch to open it for train No. 1 out had reached a point only about three cir-lengths from his own engine when he saw the front end of the passenger engine pass over the switch. He estimated the speed of train No. 1 at 25 or 30 miles per nour at the time the engine cassed him.

Inginerm Graham, of train No. 1, stated that the usual standing and running brake tests were made at the initial terminal and that the brakes functioned properly en rowe. At Like Villa the conductor delivered several train orders to him, along them being an order to neet train No. 25 at Wheatland, his train being required to take siding. He theroughly suderstood the contents of this order at the time, but while the train was approaching Wheatland for some reason he formed the opinion that the order was a straight neet order and required train No. 26 to take siding. He sounded the whistle at the mile coard and ralso sounded a meeting-point signal and dimmed the headlight, and when the train reached a point about three-fourths mile from

the east switch he made a light application of the brakes to ascertain if they were working properly. He did not notice the position of the switch but kept watching the headlight of train No. 26, which he thought was pulling through the siding. As soon as he realized that the opposing train was on the main track, at about which time the fireman called a warning to his, he applied the brakes in emergency. Engineman Graham thought this brake application was made at a highway crossing located approximately 1,000 feet east of the switch, and at that time the train was traveling at a speed of about 55 miles per hour; he was unable to estimate how much this speed had been reduced by the time the collision occurred. He also said that he had operated train No. 1 quite frequently and that it was nothing unusual for this train to take siding when neeting the freight train.

Fireman Fredrickson, of train No. 1, stated that when the conductor delivered the train orders at Lake Villa he heard the enginerian read them back to the conductor, after which they were handed to him and he in turn read them aloud and them returned the 1 to the engineman and at the same time discussed their contents with him, and it was his belief that the engineman understood them properly. After leaving that point one station stop was made and speed was reduced at another point, in both cases the brakes appeared to function properly. Although the westher was misty and the cab windows frosted, he observed the headlight of train No. 26 as soon as his own train rounded the curve east of the passing track at Wheatland and a remark was hade by either the engineman or himself that the opposing train had arrived. A short time later the engineman sounded a station whistle-signal followed by a meeting-point signal, and then he applied the brakes. Patisfied that the engineman intended to couply with the requirements of the neet order, the fireman became engaged in other duties and paid no further attention to the operation of the train until he saw the flash of the red crossing-signal light as the engine passed over the highway crossing. It then occurred to him that the train was traveling at too high speed and upon opening the window on his side of the cab he saw train No. 26 standing on the main track and the switch light was green, he immediately shouted a warning and the entineran applied the orakes in emergency. Fireman Fredrickson juiped off when his train was about two car-lengths from the point of accident and at that time the speed was approximately 30 miles per hour. He said that the engineman appeared to be in normal condition during the trip, and it was his opinion that weather conditions did not contribute to the cause of the accident.

Conductor Holmes, of train No. 1, was riding in the third car and heard the station and meeting-point whistle signals sounded and then felt a light application of the brakes, followed shortly afterwards by the sounding of a road-crossing signal.

He could not say to what extent this brake application reduced the speed but he thought at the time that they were applied for the purpose of reducing speed sufficiently to enable the train to enter the passing track. He felt no emergency application of the brakes and did not become apprehensive of the speed until just before the collision occurred, as a result he did not have sufficient time to take any action himself.

Dispatcher Shurly stated that train No. 26 had some stock as well as other important cars and at the time he issued the order it appeared that train No. 1 would arrive at Wheatland in advance of train No. 26, in order to expedite the movement of the freight train, having in mind that train No. 1 could overcome the time lost, if any, he issued order No. 12 accordingly.

Air Biake Inspector Potter arrived at the scene of accident at 6.50 a.m., and on examining the equipment of train No. 1 he found that the brake shoes on the entine were discolored, although there were no flat spots on the wheels, the angle cocks on all of the cars were open and the brakes were set.

#### Conclusions

This accident was caused by the failure of Engineman Graham, of train No. 1, properly to obey a meet order.

The order fixing the meeting point petween the trains involved required train No. 1 to take siding. When he received this order Engineran Graham understood what was required, but while en route he formed the idea in some unexplained way that the order was a straight meet order and that the inferior train was to take siding. he observed that train at the meeting point while his own train was some distance away but thought it was on the siding and did not discover his error until it was too late to avert the accident. The statements of other heapers of the crew made it clear that Engineenan Graham must have been on the alert and had the neet in mind, as he sounded the proper whistle signals and also inde a light application of the brakes while the train was approaching the point of accident, but they nad no intimation that he was not going to comply with the requirements of the mest order until just before the collision occurred.

The traffic on this single-track line for 30 days prior to the occurrence of the accident here under investigation averaged slightly more than 14 trains daily, both directions included.

Under normal business conditions there is no doubt but that this number would be increased very materially, in fact, at the time of an investigation in 1925 there were 20 scheduled trains, daily or faily except Sunday, in addition to numerous extras, and it is believed that the company should give serious consideration to the question of providing the increased safety in train operation which would be afforded by the adoption of a clock—signal system.

Respectfully subrutted,

W. P. BORLAND,

Director.