

INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY CONCERNING AN
ACCIDENT ON THE CHICAGO, MILWAUKEE, ST. PAUL & PACIFIC
RAILROAD NEAR SOBIESKI, WIS., ON FEBRUARY 8, 1933.

April 12, 1933.

To the Commission:

On February 8, 1933, there was a derailment of a passenger train on the Chicago, Milwaukee, St. Paul & Pacific Railroad near Sobieski, Wis., which resulted in the death of 1 employee, and the injury of 5 passengers and 3 employees.

Location and method of operation

This accident occurred on the subdivision of the Superior Division which extends between Green Bay Shops, Wis., and Channing, Mich., a distance of 118.1 miles, and is a single-track line over which trains are operated by time-table, train orders, and a manual block-signal system. The accident occurred at a point approximately 2 miles east of Sobieski; approaching this point from the east, there is a 1° curve to the left 475 feet in length, followed by tangent track for more than 1 mile, the accident occurring on this tangent track 1,323 feet from its eastern end. The grade for westbound trains is 0.13 percent descending at the point of accident.

The track was laid with 75-pound resawed rails, 30 feet 10 inches in length, with an average of 16 ties to the rail-length, tie-plated, and ballasted with 3 inches of gravel. The general maintenance of the track was good.

The weather was very cold and clear, and there was some wind and snow blowing at the time of the accident, which occurred about 5 a.m.

Description

West-bound passenger train No. 3 consisted of 1 mail and express car, 1 baggage car, 1 coach and 1 sleeping car, all of steel construction, hauled by engine 6201, and was in charge of Conductor Arnett and Engineman Lehan. At Green Bay Shops the crew received a copy of train order No. 24, Form 31, reading as follows:

Broken rail about 1½ miles east of Sobieski.
Stop examine know to be safe before passing
over it.

This train departed from Green Bay Shops, 15.5 miles east of Sobieski, at 5.28 a.m., according to the train sheet 1 hour and

23 minutes late, and was derailed by a broken rail about 2 miles east of Sobieski while traveling at a speed estimated to have been between 25 and 30 miles per hour.

The engine and first three cars were partially derailed and stopped with the front end of the engine approximately 900 feet beyond the initial point of derailment, the engine truck, the rear truck of the first car and the front truck of the second car were derailed to the north, while the third car was entirely derailed with the front truck to the south and the rear truck to the north of the track. The fourth car broke loose from the train and overturned on its right side down an 8-foot embankment approximately 285 feet beyond the initial point of derailment. The employee killed was the flagman.

Summary of evidence

Engineman Lehar stated that he received the train order concerning a broken rail about $1\frac{1}{2}$ miles east of Sobieski, the conductor at the same time telling him to look out for it and that the section men were being called. Engineman Lehar was operating his train at a speed of about 45 miles per hour when he reached the curve which he thought was about $2\frac{1}{2}$ miles from Sobieski, he made a 12-pound brake-pipe reduction and instructed the fireman to cut on the blower to raise the steam so they could watch for the broken rail, and while the train was traveling at a speed between 25 and 30 miles per hour it struck the broken rail. He immediately applied the brakes in emergency, although he did not get the full effect of the emergency application as the train line had not been fully recharged, the brakes had been tested at Green Bay Shops and were found to function properly. Engineman Lehar stated that in interpreting the word "about" as used in the train order, he took it to mean about $\frac{1}{2}$ mile on either side of the point mentioned, and he had planned on complying with the order when at a point $1\frac{1}{4}$ miles from Sobieski. He is familiar with that territory and knew just about when he would reach that point. The statements of Fireman Aylward practically corroborated those of Engineman Lehar.

Conductor Arnett stated that the dispatcher warned him about the broken rail and when he handed the train order to the engineman he told him to be careful. He was of the opinion that the train order was being complied with when the engineman started braking on the curve about 3 miles from Sobieski and according to the way the order read he considered that the territory within which this broken rail would be found would be within the limits of $\frac{1}{2}$ mile in either direction from the point mentioned.

Westbound train No. 9 had departed from Green Bay Shops at 4.01 a.m., 1 hour and 27 minutes prior to the departure of train No. 3. As this train was approaching Sobieski, Conductor J. M. Stien, Brakeman E. P. Stien and Flagman Sniels felt a bump which they thought was due to a broken rail. The flagman

was riding in the last car while the conductor and brakeman were in the car just ahead of it. They immediately conferred with each other and on establishing their location decided that the broken rail was about 2 miles east of Sobieski, Conductor Stien saying that on looking out of the window just after feeling the bump he saw that they were passing through the cut which is approximately $1\frac{1}{2}$ miles from Sobieski, while Brakeman Stien went to the front vestibule of the car to ascertain their location. Conductor Stien reached for his overcoat so as to report it when the train stopped at Sobieski, but the brakeman was already prepared to go out and said he would make the report. When the stop was made the brakeman called the dispatcher at Green Bay and said he thought there was a broken rail about 2 miles east of Sobieski and the dispatcher repeated what he said, the conductor did not talk with the dispatcher, but was informed by the brakeman as to what was said and was satisfied that the dispatcher had received the proper information. The engine crew and baggageman of train No. 9 did not feel the bump and were unaware of the existence of the broken rail until informed about it sometime afterwards.

Dispatcher Held, on duty at Green Bay at the time of the accident, stated that at 4.27 a.m. the conductor of train No. 9 called from Sobieski and advised him of a broken rail about $1\frac{1}{2}$ miles east of Sobieski, he was positive the location given was $1\frac{1}{2}$ miles, and not 2 miles, east of Sobieski. He made a pencil note of it and immediately tried to get in touch with the section foreman at Abrams, 4 miles west of Sobieski. As he discovered that the section foreman did not have a telephone, he called Agent Betts and told him he wanted the section foreman out, the agent wanted to give him a telephone number to call, but he told the agent to call the section foreman himself. He then issued train order No. 24 and delivered it personally to the conductor of train No. 3, at the same time telling him to notify the engineman to watch out for section men approaching the broken rail from Abrams. Dispatcher Held further stated that in complying with the train order the engineman should have brought his train under control at least 1 mile from the point mentioned in the order.

Agent Betts, located at Abrams, stated that the dispatcher called him sometime between 4.40 and 5 a.m., and asked him if there was any way to locate the section foreman by telephone. He said he could give the dispatcher the telephone number of a neighbor of the section foreman, but the dispatcher hesitated to make the call on account of the expense and asked him to make the call. Agent Betts tried several times to call the neighbor but received no answer, and as he understood train No. 3 was to leave Green Bay about five minutes after the dispatcher called him, while it would take 35 or 40 minutes to walk to the home of the section foreman, he knew train No. 3 would be gone before he could notify the foreman and therefore made no further attempt to get in touch with the foreman, nor did he call back to the dispatcher as that would have entailed

additional expense. He further stated that the dispatcher did not order him to go on duty, and he understood he was called merely as an accommodation. When he later went to the station, at 7.15 a.m., he found that the section foreman had started west and to patrol that part of his section.

Section Foreman Falk said he had patrolled the track on the previous day and had found a cracked or broken section point at Soopieski, he notified the dispatcher and after doing other work he went off duty at the usual time, 11 a.m. On the day of the accident he went on duty at 7 a.m., and started west, he found a broken rail and applied some angle bars and on his return to Soopieski he was informed of the accident. He at once started east, found another broken rail en route, applied an angle bar, and then reached the scene of the accident.

Examination after the occurrence of the accident revealed that there had been a square break across both angle bars at the rail joint on the north or right side of the track. This was followed by several fractures of the rail itself within a distance of 4 feet of its receiving end, and one piece about 6 inches in length, near the joint, was missing. At a point about 25 inches from the receiving end of this rail there was a scar break in the case of the rail 9 inches in length, this being an old defect. The leaving end of the preceding rail was broken at several points within a distance of $4\frac{1}{2}$ feet.

Conclusions

This accident was caused by a broken rail.

The existence and approximate location of the broken rail were known nearly an hour before train No. 3 left Green Bay Shops, its initial terminal on this subdivision. It had been reported to the dispatcher by the crew of the preceding train, and the fact that several members of that crew distinctly felt the jar or shock as their train passed this point and attributed it to a broken rail is evidence that the safety of the track was seriously impaired. Having this information, it was then the responsibility of Dispatcher Held to see to it that necessary repairs were made and until that was accomplished to provide other necessary safeguards for train movements. Dispatcher Held aroused and talked with Agent Betts at Abrars but he did not order him on duty and while he said he wanted the section foreman out, Agent Betts did not understand that he was instructed to call him, the dispatcher himself did not call out the section foreman, nor did he take any steps to know definitely that he had been called. According to the dispatcher's own statement, only the approximate location of the broken rail had been reported, knowing the circumstances under which this report was made, he was in a better position than anyone else to determine just what safeguards should be observed until the defect was more definitely located and necessary repairs were made, and under the circumstances he should have prescribed definite limits within which low speed

and the exercise of special caution were required. His responsibility in the matter was not fully met by issuing order No. 34 which in effect did little more than merely pass on to the crew of train No. 3 the incomplete information which was then in his possession, leaving them to determine what precautions were necessary to safeguard the movement of their train.

The crew of train No. 3 were advised of the presence of a broken rail and its approximate location, but notwithstanding this information train No. 3 approached the location of the broken rail at a much higher rate of speed than was safe. This resulted partly from a misunderstanding between Brakeman Stien of train No. 9, who stated he reported the location of the broken rail as about 2 miles east of Sobieski, and Dispatcher Held, who understood this distance to be about $1\frac{1}{4}$ miles, also in part because of the interpretation placed upon the word "about" by Engineer Lehman of train No. 3, who considered that a quarter of a mile on either side of the point indicated in the order was a sufficient distance within which to run at low speed and look out for the broken rail. When the existence of the broken rail became known to the crew of train No. 9 an examination to determine the extent of the defect and its exact location would have been a reasonable precaution. Had this information been procured, necessary protective measures could readily have been provided.

At the time of the accident and for several days prior to that time, low temperatures had prevailed, at times being 28 or 30 degrees below zero, and a number of broken rails had been reported. On the day of the accident, in addition to the two broken rails involved in the accident, the section foreman found two broken rails on his section, which embraces 12 miles of main track. The section foreman and one helper worked from 7 a.m. to 11 a.m., and there was no other track patrol. Furthermore, the investigation indicated reluctance on the part of Dispatcher Held to call out the agent or the section foreman, and on the part of both Dispatcher Held and Agent Betts to use the telephone, even under the conditions existing immediately prior to the occurrence of this accident, because of the additional expense which would be incurred. In this instance the curtailment of expenditures was carried to an extreme which was one of the contributing factors leading up to the occurrence of this accident.

Respectfully submitted,

M. P. BORLAND,

Director.