

## INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN RE  
INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON  
THE ILLINOIS CENTRAL RAILROAD AT HAMMOND, LA.,  
ON APRIL 18, 1923.

May 23, 1923

To the Commission:

On April 18, 1923, there was a rear-end collision between two freight trains on the Illinois Central Railroad at Hammond, La., which resulted in the death of one employee and the injury of three employees.

Location and method of operation.

This accident occurred on the McComb District of the Louisiana Division, a double-track line extending between McComb, Miss., and New Orleans, La., a distance of 105.44 miles, in the vicinity of the point of accident trains are operated by time-table, train orders and an automatic block-signal system. The accident occurred within yard limits, 4,950 feet south of the station at Hammond; approaching this point from the south the track is tangent for several miles, while the grade is practically level. The south yard-limit board at Hammond is located 5,901 feet south of the point of accident and the north yard-limit board is 15,885 feet north of this point, there is also a station sign at a point 3,178 feet south of the point of accident. Under the rules flag protection against other than first class trains within yard limits is not required except during foggy weather.

Northbound automatic signals Nos. 8604 and 8616, located 1,662 and 8,592 feet south of the point of accident, respectively, are of the three-position, upper-quadrant type, they are so arranged that with a train in the block, signal 8604, at the entrance of the block, displays a stop indication while signal 8616 displays a caution indication.

Under special instructions in the time-table, trains may use the double track between Asylum and Orleans Junction, within which territory the accident

occurred, without train orders; however, this does not relieve them from obtaining a clearance card.

The weather was clear at the time of the accident, which occurred at 1:30 a.m

Northbound freight train extra 949 consisted of 56 cars and a caboose, hauled by engine 949, and was in charge of Conductor Travis and Engineman Broutin. This train was brought to a stop with its rear end approximately a mile south of the station at Hammond, at 12 45 a.m., while the engine was switching at this point the rear end of this train was struck by northbound freight train extra 853.

Northbound freight train extra 853 consisted of 49 cars and a caboose, hauled by engine 853, and was in charge of Conductor Wright and Engineman Hafen. This train passed Orleans Junction, 41.75 miles south of Hammond, at 11 40 p.m., passed signal 8616, which was apparently displaying a caution indication, passed the south yard-limit board, and the station sign at Hammond, passed signal 8604, which was apparently displaying a stop indication, continued to work clear, and while traveling at a speed variously estimated to have been between 15 and 35 miles an hour, collided with the rear of extra 949.

As a result of the collision the caboose of extra 949 was derolished, the first car ahead of the caboose, a box car containing alcohol, caught fire and was destroyed, the fire also destroying the caboose and four cars, and damaging 5 other cars. The employee killed was the engineman of extra 853.

#### Summary of evidence

Engineman Broutin, of extra 949, stated that approaching Hammond signal 8616 was displaying a clear indication and signal 8604 was at caution. He said he could see signals distinctly and that the weather had been clear at all points en route. After stopping at Hammond, at about 12 45 a.m., he did not sound a whistle signal for the flagman to go back and protect his train as the rules do not require flag protection against any trains other than first class trains when within yard limits. He did not hear extra 853 approaching, but said that he noticed the reflection of the headlight of that train a few minutes before starting southward to couple to his train.

Conductor Travis of extra 949, stated that after coming to a stop at Hammond, he left the caboose, at which time he noticed the markers and cupola top-light were red and were burning brightly, and went to the yard office with the waybills. Returning from the office, when about eight car lengths from the head end of the train, he saw the headlight of an approaching train, his first impression being that it was at the next station southward, 4.83 miles distant, but upon hearing the engine of that train working steam, he hurried toward the rear of his train, and had proceeded about 15 car lengths when the collision occurred. He stated that as his train was within the yard limits no flag protector was required or afforded in this instance.

Flagman Bowlin of extra 949, stated that as speed was being reduced approaching Hammond, he turned the cupola light red and after the train came to a stop he inspected the train while the head brakeman and engine crew were engaged in switching duties, he then went to the engine and was helping the fireman when the collision occurred.

Special Officer Gordon, whose duty is to ride trains to protect and watch contents of cars, stated that he was riding in the caboose of extra 949 on the morning of the accident and that on arrival of that train at Hammond he went forward and inspected the train, and upon returning to the caboose he noticed the head-light of the following train which appeared to be at about Ponchatoula, a station approximately  $4\frac{3}{4}$  miles south of Hammond. As the train came nearer he noticed that the markers on the caboose of extra 949 were red, he took a red lantern and started back toward the approaching train and commenced to flag slowly at first but as his signals were not acknowledged, he flagged more violently until, when he was about 125 or 150 yards from the caboose, the engine of extra 853 passed him at a speed of about 30 or 35 miles an hour, working steam and crashed into the rear of extra 949. He stated there was no one visible on the engine of extra 853 as it passed him.

Fireman Rodgers, of extra 853, who was making his second trip under pay, stated that no stops were made between LaBranch, 33.87 miles from Hammond, and the point of accident, although speed was reduced crossing the bridge at Manchac, 15.5 miles from Hammond. About ten minutes

before the collision occurred, Engineman Hafen told him not to allow the safety valve to pop, in order to avoid wasting water, as it was low and he wanted to reach Hammond on their present supply. About two minutes before the collision occurred, Fireman Rodgers had just finished putting in a fire and at this time he noticed Engineman Hafen sitting on the seat box, stooped over, with his hand on the throttle lever, apparently very drowsy. He said the air brakes were not applied and that the engine continued to work steam until the accident occurred. He was of the opinion that Engineman Hafen was asleep just prior to and at the time of the collision.

According to the testimony of Head Brakeman Sauls, of extra 853, Engineman Hafen appeared to be perfectly normal at Stuyvesant docks, about 53 miles from Hammond, at which point he conversed with him, he also stated that at Kenner, about 43 miles from Hammond, it was necessary to switch some cars and Engineman Hafen handled the engine properly and appeared to be fully alert and attentive to his duties. Approaching Hammond he was riding on the running board of a car about twenty cars from the engine and did not hear the engine whistle sounded in that vicinity, he said he knew they were within yard limits but on account of the smoke and cinders he could not see the position of the block-signals, and as he thought the engineman intended to stop at the coal chute at the north end of the yard, he did not apprehend any danger at the speed, about 20 miles an hour, at which they were running within yard limits, although he knew of the rule which requires trains of the class of extra 853 to approach yard limits under control and prepared to stop unless the main track is seen or known to be clear. He also said he saw the markers and cupola light of extra 949 all showing red just before the collision, he did not notice any application of the air brakes before the collision, at which time the engine was working steam. Shortly after the accident the engine of a following train was coupled to the rear of extra 853 and it was found necessary to release a number of the brakes on the cars of the train before it could be pulled back a few car lengths from the fire.

Flagman Smith stated that he was riding on the caboose on the west side of the cupola approaching Hammond and saw a red flare ahead just before he felt the jar of the collision, he did not feel any application of the air brakes at any time approaching Hammond.

Conductor Wright, of extra 853, stated that he rode on the engine from Harahan to Kenner, sat beside and talked with Engineman Hafen, but noticed nothing unusual about him. He said the brake-pipe pressure gauge in the caboose showed 65-pounds pressure when he looked at it at Kenner, LaBranch and Manchac, that the train brakes were working properly, the last application prior to the collision was made at LaBranch, where a stop for water was made. He was riding on the right side of the caboose approaching Hammond, and did not hear any whistle signals sounded. He said he did not realize they were within yard limits at Hammond as the train was running at a speed of about 20 miles an hour, at which speed he said they were traveling at the time of the collision.

Master Mechanic Roddie and Bridge Foreman McKneely made an examination of engine 853 shortly after the accident and found the reverse lever latched just forward of center on the quadrant, the throttle about half open and the engineman's brake valve in running position.

Signal Maintainer Hastings stated that shortly after the accident he found signal 8604 displaying a stop indication, and that he never knew of any instance of either of the signals involved giving a false clear indication. Signal Supervisor Scott tested the signals involved just after the tracks were opened to traffic and found them to be working properly.

#### Conclusions

This accident was caused by the failure of Engineman Hafen, of extra 853, properly to observe and obey automatic block-signal indications, and to operate his train under control within yard limits.

Rule 93 of the Rules and Regulations of the Transportation Department, effective September 1, 1920, reads as follows.

"Within yard limits the main tracks may be used, protecting against first-class trains

"Second and third class trains and extra trains must move within yard limits prepared to stop unless the main track is seen or known to be clear"

Apparently Engineman Hafen was not in possession of his faculties approaching Hammond and therefore did not observe the signal indications or comply with the above rule. The automatic-block system in this vicinity is so arranged that signals 8616 and 8604 should have been displaying caution and stop indications, respectively, at the time extra 853 passed them. These signals were working properly when passed by extra 949, and subsequent examination and test failed to disclose anything irregular in their operation; it is therefore believed that they were displaying their proper indications at the time extra 853 passed.

Under the rules firemen are required to call signal indications to enginemen. Although Fireman Rodgers was not familiar with the physical characteristics of this division or the location of the signals, he should have made an effort to either bring extra 853 to a stop in time to have prevented the accident, or to have aroused Engineman Hafen, especially in view of the fact that shortly before the accident occurred he noticed that Engineman Hafen was apparently very drowsy, for his failure to do so he is open to severe censure.

This accident again directs attention to the necessity for an automatic train-control system which will operate and control a train whenever for any cause an engineman fails to see or heed danger signal indications. In accidents of this character, involving automatic-block signals, such failure of the human element can not be fully checked and provided against except by the use of an automatic train-control system to supplement existing signal systems for the purpose of compelling obedience to such indications.

Engineman Hafen entered the service of this railroad as a fireman in 1906, and was promoted to engineman in 1911, his record was good; Fireman Rodgers entered the service as a fireman on April 16, 1923. The other employees involved were experienced men. At the time of the accident the crew of extra 949 had been on duty about 5 hours, and the crew of extra 853 about 5 hours and 15 minutes, previous to which both crews had been off duty approximately 18 hours.

Respectfully submitted,

W. P. BORLAND,

Director.