## INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN REINVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE ILLINOIS CENTRAL RAILROAD AT FREEPORT, ILL., ON FEBRUARY 7, 1931.

February 27, 1931.

To the Commission.

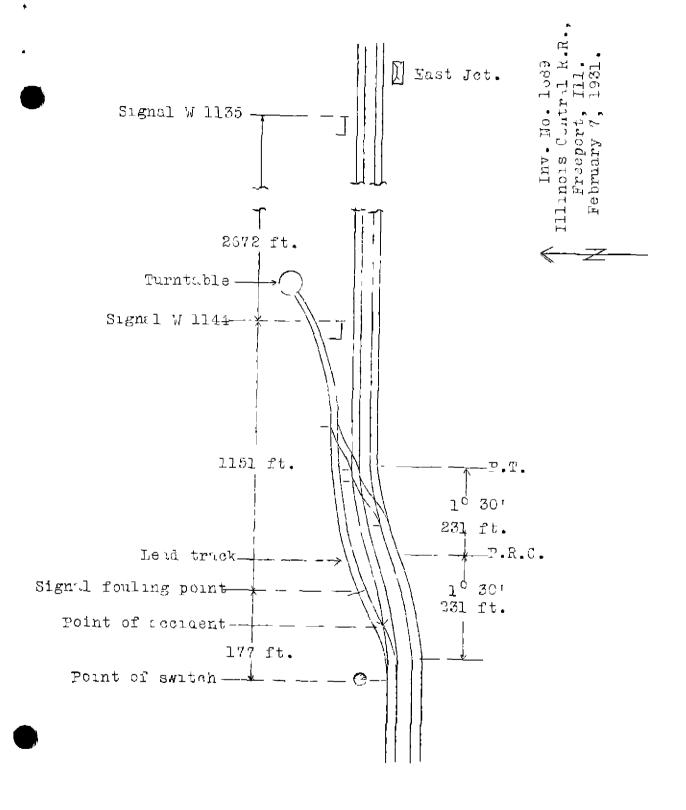
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On February 7, 1931, there was a side collision between a light engine and a freight train on the Illinois Central Railroad at Freeport, Ill., resulting in the death of one employee. This accident was investigated in conjunction with a representative of the Illinois Commerce Commission.

Location and method of operation

This accident occurred on the Freeport District of the Wisconsin Division, extending between South Addison and West Junction, Ill., a distance of 94.5 miles, in the immediate vicinity of the point of accident this is a double-track line over which trains are operated by time-table, train orders, and an automatic blocksignal system. The accident occurred at the fouling point of the trailing-point switch that connects the lead track with the westbound main track, located approximately 400 feet east of the depot at Freeport, within yard limits. Approaching the switch from the east, the track is tangent for more than 5,000 feet and then there is a reverse curve, consisting of 231 feet of 10 30' curve to the left and 231 feet of 10 30' curve to the right, following which the track is tangent for a considerable distance; the switch involved is located approximately 9 feet west of the reverse curve, the switch stand being on the north side of the tracks. The grade for westbound trains descends at the rate of 0.665 per cent until a point about 625 feet east of the switch is reached, from which point it descends at the rate of 0.08 per cent for a distance of about 300 feet and is then level to and beyond the switch. The view of the point of accident is unobstructed.

The lead track parallels the main tracks on the north. The signal fouling point on the lead track is located 177 feet east of the switch points; automatic signal W1144 is located 1,151 feet east of the signal fouling point, while signal W1135 is located 2,672 feet farther east. Night indications are red, yellow, and



green, for stop, caution, and proceed, respectively.

The weather was cloudy at the time of the accident, which occurred about 3.20 a.m.

## Description

Westbound light engine 2361, headed west and hauling its caboose, was in charge of Engineman Wheeler, and it was en route from the roundhouse to the yard west of Freeport, in order to continue the trip westward with train first No. 71, which was then entering Freeport. The switch leading from the lead track to the westbound main track was opened and engine 2961 was fouling the main track when it was cornered by the right side of engine 1546, which was handling train first No. 71 into Freeport.

Westbound freight train first No. 71 consisted of 43 loaded and 15 empty cars, and a caboose, hauled by engine 1546, and was in charge of Conductor Coble and Engineman Krauthoff. This train passed East Junction, the last open office, O 9 mile east of Freeport, at 3.16 a.m., according to the train sheet, 3 hours and 31 minutes late, and received a caution indication at signal W1135 Signal W1144, however, was displaying a proceed indication, some open switches having been restored to their normal positions, and the train was approaching the switch involved at a speed estimated to have been between 6 and 10 miles per hour when it struck the left side of light engine 2961.

Light engine 2961 was not derailed and came to a stop with its front end 16 feet east of the switch points. Engine 1546, its tender and the first car in the train were derailed, but they remained upright and in line with the track; engine 1546 stopped with its front end 23 feet east of the switch points. The employee killed was the fireman of light engine 2961.

## Summary of evidence

Assistant General Yardmaster Nelson said he was on the westbound track in the vicinity of the switches, which were lined for a switch engine to cross over with some cars, when he saw the headlight of train first No. 71 as it came over the hill near East Junction. He lined the switches back for the main track and at about the same time saw engine 2961 coming from the round house on the lead track. The assistant general yardmaster said he then crossed over to another track

to give instructions to some switchmen and that when engine 2961 was in the vicinity of the crossover, which is approximately 500 feet east of the point of accident, he called to the fileman, across the two main tracks, to look out for train flist No. 71, but he was not sure that the fireman heard him—Shortly afterwards he noticed that engine 2961 was not clear of the main track, and began giving signals to train first No. 71, but realizing that an accident could not be averted, he then got out of the way. He estimated the speed of train first No. 71 at the time of the accident to have been 10 or 12 miles per hour. In his opinion there was nothing to have prevented the crew of engine 2961 from seeing train first No. 71 approaching had they looked in that direction

Engineman Wheeler, of light engine 2961, stated that he was aware train first No. 71 was due about this particular hour and that he had handled this train westbound out of Freeport at various times extending over a period of years. He brought his engine to a stop in the clear on the lead track and the head brakeman, who was on the pilot, got off and started running toward the switch. Engineman Wheeler, being on the opposite side of the engine from the direction in which train first No. 71 was approaching, turned around to Fireman Goodwin and asked "how does it look back there?", saying that he watched the firemen turn around and apparently look carefully while leaning out of the open cab window and then the fireman replied "it is all clear." Engineman Wheeler looked ahead, received a proceed signal from Head Brakeman Fall, and started the engine, but when the front end of the engine was about over the switch points, moving at a very low rate of speed, about 1 or 2 miles per hour, the fireman said to "back up", although not in an excited manner. The engineman at once reversed the engine and started to back up, wondering why the fireman had said to do so, and thinking that perhaps some car had gotten away or that a switchman wanted to make some other movement, never giving train first No. 71 a thought. The fireman then repeated "back up, back up", the accident occurring immediately afterwards. He had not heard the assistant general yardmaster call to the fireman to look out for train first No. 71. Engineman Wheeler stated that the last he saw of Head Brakeman Fall was when the head brakeman gave him a proceed signal, after lining the switch from the roundhouse lead to the main track, and as far as the engineman knew, the head brakeman did not step across to the westbound main track in order to see whether a train was approaching.

Engineman Wheeler also said that he roomed beside Fireman Goodwin at the hotel and that prior to going on duty he ate with the fireman and then they went down and changed clothes together, the engineman reaching the engine shortly before the fireman; he noticed nothing wiong whatever with the conduct of the fireman, who had been firing for him for about eight months on this particular job, and for about six or seven years in all. Engineman Wheeler further stated that he did not know whether train first No. 71 had passed, although ordinarily it preceded the light engine to the yard, and said that he was guided entirely by the advice given to him by the fireman and the proceed signal received from the head brakeman, as well as having watched the fireman turn around and apparently look carefully for an approaching train.

Head Brakeman Fall, of light engine 2961, stated that he rode on the pilot of the engine, right side, approaching the switch, and that when the engine was brought to a stop in the clear on the lead track, he got off on the right side, crossed over to the left side, looked eastward to see whether a train was approaching, did not see anything of one, ran forward and opened the switch, and gave the engineman a proceed signal. The engineman acted promptly on the signal and the engine moved forward until the pilot was right at the switch, after which it started to back up, the accident occurring immediately afterwards. Head Brakeman Fall said that since he did not know why his engine started to back up, he crossed over to the middle of the westbound track, opposite the switch, and was at that point when the accident occurred, and although he was looking at his own engine and heard the noise caused by the impact, yet he did not actually see the engines come together, because his engine cut off his view of the engine of the approaching train, it would have been possible for him to have seen the engine of the approaching train, however, had he stepped over to the eastbound main track and out of range of the headlight of his own engine. He had not seen the reflection from the headlight of the engine of the approaching train, saying that steam from other engines obstructed his vision when he looked back after his engine was brought to a stop in the clear; after the accident, however, he observed that the headlight of engine 1546 was burning. Head Brakeman Fall further stated that at the time he opened the switch he never gave a thought to train first No. 71, that when he was at the switch the reflection from the headlight of his own engine blinded him, and

that he did not cross over to the eastbound main track, away from the headlight of his own engine, from which point he could have obtained an unobstructed view of the headlight of the engine of the approaching westbound train, because he did not consider it necessary to do so.

Engineman Krauthoff, of train first No. 71, stated that a caution indication was displayed on signal W1135, and he therefore made about a 10-pound brakepipe reduction, and had his train under control prepared to stop at signal W1144 in the event the stop indication on that signal did not change before his engine reached it. When his engine got within 200 feet of it, however, the indication changed to proceed and he released the air brakes. On reaching a point about 550 feet from the switch involved, he saw engine 2961 on the lead track, but thought it was standing in the clear; he made about a 12 to 15-pound brake-pipe reduction, however, bringing the speed of his train down to about 10 miles per hour. When he was about three car-lengths from engine 2961, he realized that it was fouling the main track, and moved the brake-valve handle to the emergency position, no release having been made from the previous service application, and he said that while the emergency application reduced the speed of the train further, yet a fulle emergency effect was not obtained, owing to the previous/ application, and he estimated the speed to have been about 8 or 10 miles per hour at the time of the impact. He had not seen anyone giving stops signals. Engineman Krauthoff also stated that a green indication was displayed on the switch lamp involved when he first saw it, and that it remained that way until engine 2961 obscured it from view. It further appeared from his statements that when about three car-lengths from the light engine, he saw the fireman of that engine turn around and then the fireman turned back and left the window, that being the last he saw of that fireman prior to the accident. Engineman Krauthoff further stated that the headlight of his engine was burning brightly, that the air brakes had been tested and worked properly, and that he felt he had his train under control within the meaning of the vard-limit rule.

Fireman Grilliot, of train first No. 71, stated that when his engine reached a point about 500 feet from the switch, at the beginning of the reverse curve, he saw engine 2961 on the lead track, but it did not look to him as if it were in the clear, so he got down on the step and on reaching a point about 120 feet from the point of accident he definitely realized that the light engine was fouling the main track and jumped; he estimated the speed of his train at that time to have been between 6 and 10 miles per hour, saying that he did not

fall down after jumping off. Head Brakeman Cummings gave testimony similar to that of Engineman Krauthoff and Fireman Grilliot. Conductor Coble and Flagman Adams were riding in the caboose; their statements brought out nothing additional of importance.

## Conclusions

This accident was caused by light engine 2961 fouling the main track directly in front of an approaching train, for which Fireman Goodwin and Head Brakeman Fall are responsible.

Rule 93 of the transportation rules of this railroad reads as follows:

"Within yard limits the main track may be used, clearing the time of first class trains.

Second and third class and extra trains must move within yard limits prepared to stop unless the main track is seen or known to be clear. In case of accident the responsibility rests with the approaching train.

Trains and yard engines occupying the main track within yard limits must be protected by flagman during fogs, storms or other unfavorable conditions, also, where the view of an approaching train is obstructed by curvature or other conditions. Trainmen and yardmen will be held responsible for any failure to exercise reasonable precaution in protecting their trains under such conditions"

Fireman Goodwin, of the light engine, could have obtained an unobstructed view of the approaching westbound freight train from his side of the cab. Why he did not see it, and then inform Engineman Wheeler of its approach, is not known, as he was killed in the accident. Head Brakeman Fall said that when his engine was brought to a stop in the clear on the lead track, he crossed over to the left side and looked to see if any train was approaching, for some unknown reason he also failed to see the approaching train, but instead he proceeded to the switch, opened it, and then gave a proceed signal to the engineman, assuming that the way was clear, and making no further attempt to know definitely whether this was the case. Engineman Wheeler was on the opposite side of the cab of the light engine

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from the direction in which train first No. 71 approached, and it was necessary for him to depend on the information given him by the fireman and the head brakeman.

Under rule 93, responsibility rests with the approaching train, but the evidence indicates that Engineman Krauthoff complied with the requirements of rule 93 so far as it was possible to do so. A proceed indication was displayed on automatic signal Wil44 for his train and he was proceeding through the yard limits under caution, but the switch was opened after his train passed that signal and then light engine 2961 fouled the main track directly in front of him, no opportunity whatever being given him to bring his train to a stop in time to avert the accident.

All of the employees involved were experienced men. At the time of the accident they had been on duty less than  $9\frac{1}{2}$  hours, prior to which they had been off duty more than 10 hours.

Respectfully submitted,

W P. BORLAND,

Director.