

INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN RE INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE CHICAGO, ROCK ISLAND & GULF RAILWAY, AT NORTH FORT WORTH, TEXAS, ON SEPTEMBER 12, 1930.

October 10, 1930.

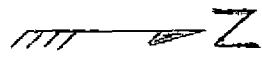
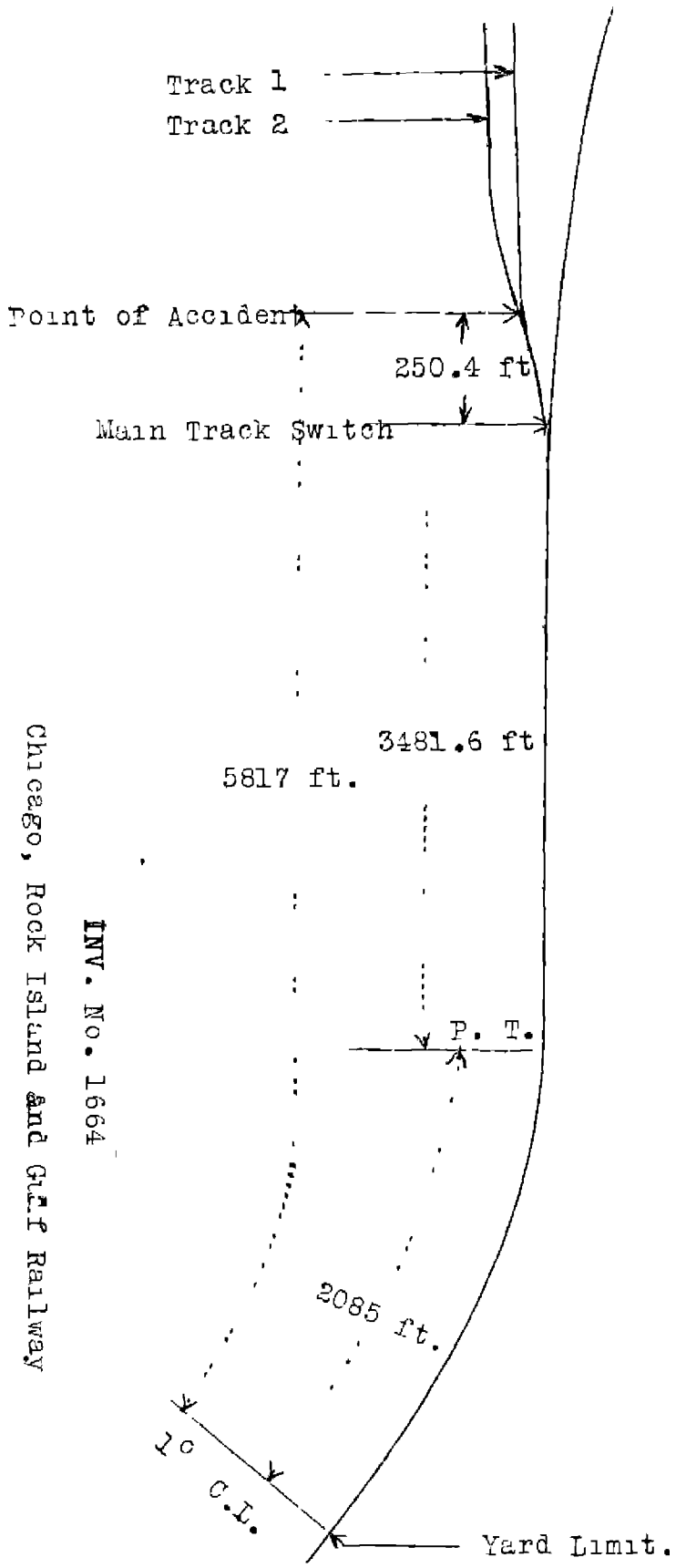
To the Commission:

On September 12, 1930, there was a head-end collision between a freight train and a yard engine on the Chicago, Rock Island & Gulf Railway at North Fort Worth, Texas, resulting in the death of two employees and the injury of three employees.

Location and method of operation

This accident occurred on Sub-division 1 of the Second District of the Oklahoma-Southern Division, extending between Waurika Yard, Okla., and Fort Worth, Texas, a distance of 112.3 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. The accident occurred within yard limits, on a spur track, at a point 5,817 feet west of the east yard-limit board. The spur-track switch is a facing-point switch for westbound trains and parallels the main track on the south, the accident occurring 250.4 feet from the switch. Approaching the point of accident from the east yard-limit board, there is a 1° curve to the left 2,085 feet in length, followed by 3,481.6 feet of tangent track to the switch, this tangent extending 308 feet beyond. The grade is 1.0 per cent descending for westbound trains.

The switch stand is located $9\frac{1}{2}$ feet south of the track and is equipped with a red target 12" x 24", mounted with its center $8\frac{3}{4}$ inches below the top of the mast, the top of the mast being 7 feet 9 inches above the tie. The spur track is used for spotting oil and gasoline tank cars at the loading rack of the White Eagle Refinery and is known as track 1. There is another spur, known as track 2, which leads from track 1 at a point about 210 feet west of the main-track switch. Track 1 is 1,132 feet in length and track 2 is 967 feet in length, and the loading rack is located between the two tracks. An unobstructed



INV. No. 1664

Chicago, Rock Island and Gulf Railway

North Fort Worth, Tex.

September 12, 1930

view of the target on the main track switch stand can be had from the cab of an approaching westbound engine for a considerable distance. At the time of the accident this switch was open, with the red target displayed.

The weather was clear at the time of the accident, which occurred about 6 p.m.

Description

Yard engine 2120, headed east, was in charge of Engine Foreman Clodfelter and Engineman Fridge, and was engaged in switching on tracks 1 and 2 at White Eagle Refinery. The engine was standing on track 1 just west of the switch leading to track 2, while the crew was occupied in coupling the cars preparatory to pulling out on the main track, there being 18 cars behind the engine on track 1 when it was struck by extra 1727.

Westbound freight train extra 1727 consisted of 41 cars and a caboose, hauled by engine 1727, and was in charge of Conductor Moorehead and Engineman Christopher. This train passed Saginaw, the last open telegraph office, at 5.52 p.m., according to the train sheet, entered the White Eagle Refinery spur track, and collided with engine 2120 while traveling at a speed variously estimated to have been between 15 and 35 miles per hour.

Engine 2120 was driven back a distance of 138 feet and came to rest on its right side just clear of the south rail of track 1; the first, third, ninth, and tenth cars behind engine 2120 on track 1 were slightly damaged; the fourth, fifth, sixth and seventh cars were considerably damaged, and the eighteenth car, the last car on track 1, was shoved off the end of the track and slightly damaged. The first car which stood on track 2 was struck by the wreckage and knocked on top of a tool house located 15 feet south of that track, badly damaging the car and demolishing the tool house. Engine 1727 came to rest on its left side, and the first seven cars in its train were derailed and more or less badly damaged, two being demolished. The employees killed were the engineman of yard engine 2120 and the fireman of extra 1727, and those injured were the fireman of yard engine 2120 and the engineman and brakeman of extra 1727.

Summary of evidence

Engine Foreman Clodfelter, of yard engine 2120, stated that on the day of the accident he obtained a line-up of trains before leaving Fort Worth, and then proceeded to North Fort Worth, where he again obtained information

relative to extra 1727. His engine then proceeded to the north end of the yard, picked up five cars, and went to White Eagle Refinery. He ~~rode~~ on the engine en route to that point and informed the engineman as to the line-up he had obtained, and they figured that extra 1727 would reach the refinery about 6 or 6.10 p.m. On arrival at the plant, he informed the car inspector and switchmen that they would do the switching on the spur tracks and keep the main line clear. One switchman was on top of the oil rack where he would be in view of the engineman to pass the signals, while the other switchman, the car inspector, and the engine foreman were engaged in coupling the cars on track 1, when the collision occurred. Engine Foreman Clodfelter was near the rear car on track 1 at the time and did not see extra 1727 approaching nor did he hear the whistle of that train sounded at any time before the occurrence of the accident. Engine Foreman Clodfelter stated that under the rules, he was not required to protect his movements while switching within yard limits under the weather conditions that existed at the time of the accident. These rules require flag protection when the approaching train does not have a clear view of at least 750 feet.

Fireman Raines, of yard engine 2120, stated that his engine was standing about four car-lengths from the main line switch. He was seated on his seat box looking back in the direction of where the work was being done, and when he turned around he saw extra 1727 enter the spur track; he did not hear any whistle signal sounded, and estimated the speed of the approaching train to have been about 35 miles per hour.

Switchman Gentzke, of engine 2120, stated that while he was on top of the oil rack passing signals to the engineman he turned around and saw extra 1727 approaching, about three or four car-lengths from the main line switch, and traveling at a speed of about 35 miles per hour. He immediately called to the engineman, pointed in the direction of the approaching train, and jumped off the rack. Switchman Howell stated that he was near the sixth or eighth car from the rear on track 1, assisting in the coupling of the cars, and did not see nor hear extra 1727 approaching. The statements of Car Inspector Jeffries brought out nothing additional of importance.

Engineman Christopher, of extra 1727, stated that an air-brake test was made before his departure from Waurika, the initial terminal, and that the air brakes worked properly en route. Upon approaching the yard-limit board at North Fort Worth his train was traveling at a speed of about 25 miles per hour; he sounded the whistle for a road crossing and then made a 7-pound brake-pipe reduction,

which reduced the speed to about 20 miles per hour within a distance of approximately 20 car-lengths. When the brakeman and fireman said "everything is in the clear", he moved the brake-valve handle to full-release position and held it there about one second before moving it to running position, and he thought the train was then about 30 car-lengths east of the refinery. The speed of the train increased to approximately 35 miles per hour and when he reached a point about 10 or 15 car-lengths from the refinery he saw that the switch was open, saw the switch engine standing 6 or 8 car-lengths clear of the main track, and at once applied the air brakes in emergency and jumped from the engine. He thought the speed of his train had been reduced to 15 or 18 miles per hour when it entered the spur track. Engineman Christopher was familiar with the rules, had worked on the engine that does the switching at the White Eagle Refinery and was aware that the plant was located within yard limits and that it was not necessary for the crew to flag when using the main track at that point, and admitted that he had been cautioned on previous occasions for having violated speed restrictions, but said he thought everything was clear on this occasion, and admitted that he did not approach that point with his train under control.

Head Brakeman Minor, of extra 1727, stated that approaching the point of accident he was sitting on the tender of the fireman's side, looking back over the train as it came around the curve, and he did not see the position of the switch at White Eagle Refinery until the fireman called that the switch was red. The train was then about 15 or 20 car-lengths from the switch and was traveling at a speed of approximately 30 or 35 miles per hour. The engineman applied the air brakes, but the head brakeman did not notice whether the speed had been reduced before the collision occurred, saying that he jumped off the tender just as the engine had passed the switch. Head Brakeman Minor said at the time they passed the yard-limit board the train was traveling at a speed of about 30 or 35 miles per hour and he did not notice any application of the air brakes until immediately before the accident, although one might have been made without his knowledge. He further said that he did not call "clear" to the engineman, nor did he hear the fireman say anything of that nature.

Conductor Moorehead, of extra 1727, stated that as his train passed the yard-limit board he climbed down in the caboose from the cupola and shortly afterwards he felt the air brakes apply in emergency, followed in about 30 or

40 seconds by the occurrence of the collision. He did not notice any reduction in the speed of his train as it passed the yard-limit board, and estimated that its speed was 30 or 35 miles per hour when the emergency application was made. Conductor Moorehead stated that on several occasions his train had been stopped at the White Eagle plant by some member of the yard crew, and that it was a common occurrence to find a yard engine doing work at that point. He further stated that Engineman Christopher had violated rule 93 while working with him, and that he had called his attention to it several times, and each time Engineman Christopher would say that he did not think he had been operating his train too fast.

Rear Brakeman Baxter, of extra 1727, stated that he was riding on the right side of the cupola when they passed the yard-limit board, traveling at a speed of about 30 miles per hour. A slight brake-pipe reduction was made at that point, and when he felt the air brakes apply in emergency he thought the train was traveling between 25 and 35 miles per hour.

General Yardmaster Crimmins stated that it has been customary to switch the White Eagle Refinery every day, except Sunday, at about the same time as on the date of the accident. Under the rules, all second-class and inferior trains should pass through the yard limits under control.

Several days after the occurrence of the accident, a vision test was conducted to determine the distance the switch target at White Eagle Refinery could be seen from an approaching westbound train. An engine of the type involved in the accident was used, at the same hour and under the same weather conditions, and it was found that the target of this switch was plainly visible to both the engineman and fireman for a distance of 2,387 feet.

Conclusions

This accident was caused by the failure of Engineman Christopher, of extra 1727, properly to control the speed of his train within yard limits.

The rules provide that second and inferior class trains must move within yard limits prepared to stop unless the main track is seen or known to be clear. Engineman Christopher said he reduced the speed of his train from 25 to 20 miles per hour after passing the yard-limit board, and that when within 30 car-lengths of the White Eagle Refinery the head brakeman and fireman called that everything was clear. The speed then increased to 25 miles per hour, and it was not until he was within 10 or 15 car-

lengths of the switch that he saw the red target and applied the air brakes in emergency, and it was his opinion that the speed of his train had been reduced to 15 or 18 miles per hour when the engine entered the spur track. The statements of other members of the crew of extra 1727, as well as those made by the switchman and fireman of engine 2120, were to the effect that the speed was between 30 and 35 miles per hour. None of the members of the crew of extra 1727 felt any reduction in speed after passing the yard-limit board except Rear Brakeman Howell, who stated that he felt a slight reduction, while Head Brakeman Minor denied saying that everything was clear, nor did he hear the fireman say anything of the kind. It is quite evident that Engineman Christopher was not operating his train under control, as required by the rules, and in view of the favorable weather conditions and the unrestricted view of the switch target for a distance of 2,387 feet, Engineman Christopher is directly responsible for the occurrence of this accident.

The employees involved were experienced men, and at the time of the accident none of them had been on duty in violation of any of the provisions of the hours of service law.

Respectfully submitted,

W. P. BORLAND,

Director.