INTERSTATE COMMERCE COMMISSION WASHINGTON

REPORT OF THE DIRECTOR
BUREAU OF SAFETY

ACCIDENT ON THE ST. LOUIS-SAN FRANCISCO RAILWAY

WINFIELD, KANS.

JULY 20, 1937

INVESTIGATION NO. 2188

SUMMARY

Inv-2138

Railroad: St. Louis-San Francisco

Date: July 20, 1937

Location: Winfield, Kans.

Kind of accident: Rear-end collision

Trains involved: Freight : Mixed-2nd class

Train numbers: Extra 1239 North: No. 630

Engine numbers: 1220 : 1284

Consist: 25 cars and : 32 freight cars, 1

caboose baggage car, l coach

Speed: Standing : 12-25 miles per hour

Track: 6º11' left curve; level at

immediate point of accident.

Weather: Clear, sun shining

Time: 7:10 p.m.

Casualties: 1 killed, 2 injured

Cause: Failure to operate under proper control

within yard limits.

September 8, 1937.

To the Commission:

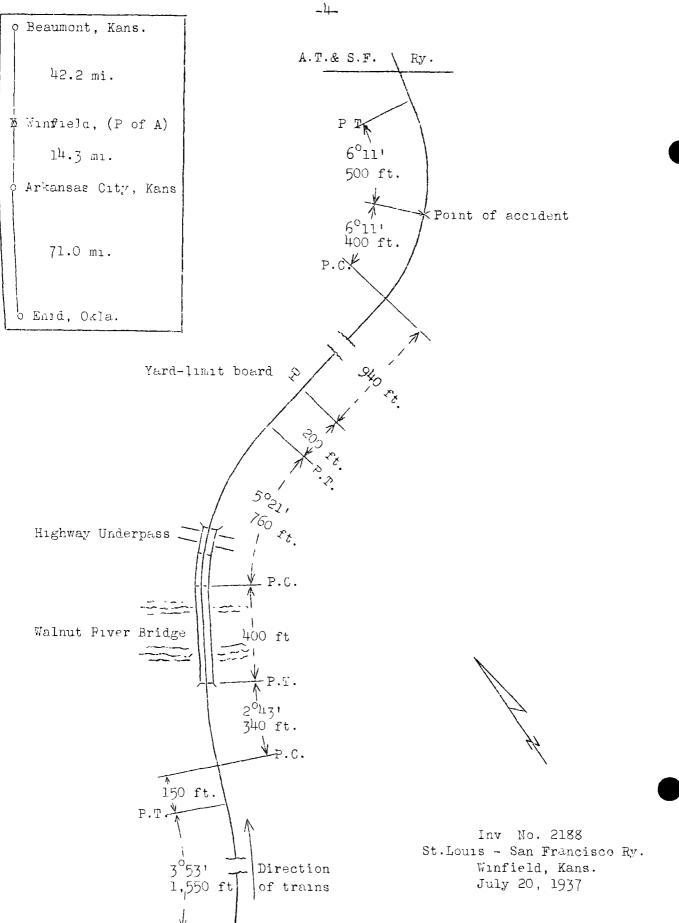
On July 20, 1937, there was a rear-end collision between a freight train and a mixed train on the St. Louis-San Francisco Railway at Winfield, Kans., which resulted in the death of one employee and the injury of two employees.

Location and method of operation

This accident occurred on the Beaumont Sub-division of the Western Division, which extends between Enid, Okla., and Beaumont, Kans., a distance of 127.5 miles, and is a singletrack line over which trains are operated by timetable and train orders, no block-signal system being in use. accident occurred within yard limits at a point 1,530 feet north of the south yard-limit board at Winfield. Approaching the point of accident from the south, the track is tangent for a distance of 400 feet, followed by a 5021' curve to the right 760 feet in length, 1,140 feet of tangent and then a 6011' curve to the left 900 feet in length; the accident occurred on the latter curve at a point 400 feet from its southern end. Looking across the inside of this last-mentioned curve through a space between some large trees on the west side of the track, a continuous view of the approximate point of the accident may be had from the fireman's side of a north-bound train beginning at a point 1,496 feet south thereof, but the exact point of accident could not have been seen until the distance had been reduced to about 616 feet. The grade for north-bound trains is practically 1 percent descending for a distance of about 3,000 feet and is then level for 600 feet to the point of accident.

Rule 93 reads as follows: "Yard limits will be indicated by 'yard limit' boards. Within yard limits the main track or tracks may be used, protecting against first-class trains. Second and inferior class and extra trains must move within yard limits prepared to stop unless the main track is seen or known to be clear". On April 6, 1937, rule 93 was supplemented by general order No. 20, reading as follows: "When view is obstructed by fog, storms or other weather conditions, trains stopped within yard limits must protect under usual flagging rules, but this does not relieve approaching train of responsibility for having train under control and prepared to stop."

The weather was clear and the sun was shining at the time of the accident, which occurred at about 7:10 p.m.



Description

Extra 1829, a north-bound freight train, consisted of 25 cars and a caboose, hauled by engine 1229, and was in charge of Conductor Burnett and Engineman Casey. This train, after having received an order authorizing it to run ahead of Train No. 630, Arkansas City to Beaumont, departed from Arkansas City, 14.3 miles south of Winfield, at 6:10 p.m., and arrived at Winfield at 7:00 p.m., according to the train sheet. At this point water was to be taken and in order to avoid blocking the A.T.& S.F. Ry. crossing as well as a street crossing, the train was stopped with the engine south of both crossings, and with the caboose 1,530 feet north of the south yard-limit board, and the engine proceeded light to the water tank. About 10 minutes after the train had stopped, and before the engine had returned to the train, the rear end was struck by Train No. 630.

Train No. 630, a north-bound second-class mixed train, consisted of 32 freight cars, I baggage car and I coach, in the order named, hauled by engine 1284, and was in charge of Conductor Kelly and Engineman Reese. After receiving a copy of the order referred to above, this train departed from Arkansas City at 6:30 p.m., according to the train sheet, passed the south yard-limit board at Winfield and collided with the rear end of Extra 1229 while traveling at a speed variously estimated to have been between 12 and 25 miles per hour.

The caboose and two rear cars of Train Extra 1229 were demolished. Engine 1284 stopped on its left side to the left of the track; the first two cars of Train No. 630 were derailed and considerably damaged; none of the other cars of either train was derailed or damaged. The employee killed was the engineman of Train No. 630, and the employees injured were the fireman and head brakeman of that train.

Summary of evidence

Conductor Burnett, of Train Extra 1229, stated that a train order received at Arkansas City authorized his train to run ahead of Train No. 630 from Arkansas City to Beaumont. He said that his train stopped at Winfield at 6:50 p.m.; the engine was just south of the A.T.& S.F. Ry. crossing and the rear end of the train was about 1,400 feet north of the south yard-limit board. The engine was detached from the train and advanced to the water tank, during which time the conductor and rear brokeman, one on each side, walked forward and inspected the train; the rear brakeman stopped at the A.T.& S.F.

Ry. crossing while the conductor continued northward to a point about half way between the crossing and the water tank to ascertain what was delaying the engine. The engine was at the water tank when the accident occurred, at 7:10 p.m. Conductor Burnett said that no rear-end protection was given his train for the reason that it was not required under rule 93, since the weather conditions were good and there were no first-class trains due at Winfield. The statements of Rear Brakeman Harris corroborated those of the conductor in all essential details. Engineman Casey and Fireman Parker were on the engine at the water tank and Head Brakeman Hoy was at the A.T.& S.F. Ry. crossing at the time of the accident and their statements developed nothing additional of importance.

Fireman Jenkins, of Train No. 630, stated that he did not know whether an air brake test was made at Arkansas City but the brakes operated satisfactorally en route. He had read, and had seen the engineman reading the order authorizing Extra 1229 to run ahead of No. 630 to Beaumont. During the descent of the grade which starts at a point approximately two miles south of Winfield, the engineman made a couple of brake applications to control the speed of the train and at the time they approached the south end of Walnut River bridge, located approximately 2,900 feet south of the point of accident, the speed was about 20 miles per hour. At about that point the engineman made a heavy brake application which was released after the train had proceeded 600 or 700 feet farther. The speed had increased to 20 or 25 miles per hour when the fireman saw the caboose of Extra 1889 five or six car lengths ahead; he immediately warned the engineman who made an emergency application of the brakes which did not seem to be properly effective. Shortly after the emergency application, the fireman jumped from the engine; at that time the speed was about 25 miles per hour and the collision occurred almost immediately. Fireman Jenkins further stated that during the trip the engineman appeared normal in every respect, and that approaching the point of collision the head brokeman was riding on top of the third or fourth car from the engine, but if the brakeman called any warning he did not hear it.

Head Brakeman Felton, of Train No. 630, stated that shortly before reaching the south end of Walnut River bridge, at which time the speed was 20 to 25 miles per hour, the engineman made a brake application and, after proceeding 350 to 500 feet, he released the brakes; while still on the bridge, which is 700 feet in length, another application of the brakes was made and he did not think any other release or application was made in the remaining 2,200 feet to the point of the accident. Brakeman Felton stated that from his

position on top of the leading car and while passing the yard-limit board he could see the preceding train by looking between two large trees located on the inside of the curve; he shouted to the fireman four or five times, since the latter, and not the engineman, was in position to see the train ahead, but was unable to attract the attention of the fireman, who appeared to be looking ahead, as did also the engineman. When No. 630 was within 3 or 4 car lengths of the caboose of Extra 1229, Brakeman Felton saw the fireman run over to the engineman and give stop signals. He estimated the speed just before the impact to have been 12 or 14 miles per hour.

Conductor Kelly, of Train No. 630, stated that before departing from Arkansas City he and the rear brakeman made an air test which disclosed that all brakes were working properly and the engineman was advised accordingly. He said he delivered the orders to the engineman at Arkansas City and saw the latter read them; one of these authorized Extra 1229 to run ahead of No. 630. The conductor who was in the coach noted that three applications and three releases of the brakes were made descending the hill approaching Winfield, and the brakes seemed to be applying again just before the collision; the speed at the time of the first application was about 25 miles per hour, and the speed at the time of the third application, which was made near Walnut River bridge, was about 20 miles per hour. Conductor Kelly stated that trains frequently stop in the location of Extra 1229 in this instance and said that the fireman had an unobstructed view from the south yard-limit board to the point of accident. The conductor thought it was possible that the attention of the engineman and fireman was partially directed to amusements in progress within the fair grounds located adjacent to and west of the point or the accident.

Rear Brakeman Williams, of Train No. 630, thought the speed was about 15 miles per hour at the time of passing the south yard-limit board, and stated the train was handled in the usual manner.

Roadmaster Patterson, who was standing on the rear platform of the coach of Train No. 630 from Arkansas City to Winfield, had eaten supper with Engineman Reese and said the latter appeared normal in every respect. The roadmaster said that after the train had traveled a distance of one mile on the descending grade approaching Winfield, and had attained a speed of 35 miles per hour, he felt a service application of the air brakes which had reduced the speed to about 25 miles per hour when the brakes were released; another service

application was felt when the rear of the train was near the south end of Walnut River bridge, at which time the speed was about 20 miles per hour; neither a release nor an emergency application of the brakes was observed thereafter and the speed just before the impact was about 15 miles per hour. The weather was clear and the sun was shining at the time of the collision. It was the roadmaster's opinion that Train No. 630 approached the yard limits a little faster than is customary.

Discussion

The investigation disclosed that the head brakeman of Train No. 630, who was riding on top of the first car, was the first to see the preceding train, and when it came into view he shouted four or five times to the fireman. Neither the fireman, nor the engineman, both of whom appeared to be looking forward, heard his warnings, and Train No. 630 had reached a point within 5 or 6 car lengths of the preceding train before it was noticed by the fireman of Train No. 630. Whether or not the amusements in progress, on the left side and adjacent to the curve, diverted the fireman's attention was not definitely determined.

Extra 1229 was not required to flag within yard limits since there were no first-class trains due and the weather was clear; Train No. 630, being a second-class train, was required to approach the yard limits expecting to find the track occupied. The reason for the failure of the engineman of Train No. 630 to enter the yard limits under proper control could not be determined as he was killed in the accident. The evidence indicates that the brakes functioned properly.

Conclusion

This accident was caused by the failure of Train No. 630 to be operated under proper control within yard limits.

Respectfully submitted,

W. J. PATTERSON,

Director.