

## INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY CONCERNING AN  
ACCIDENT ON THE ATCHISON, TOPEKA & SANTA FE RAILWAY  
AT SAN BERNARDINO, CALIF., ON DECEMBER 29, 1933.

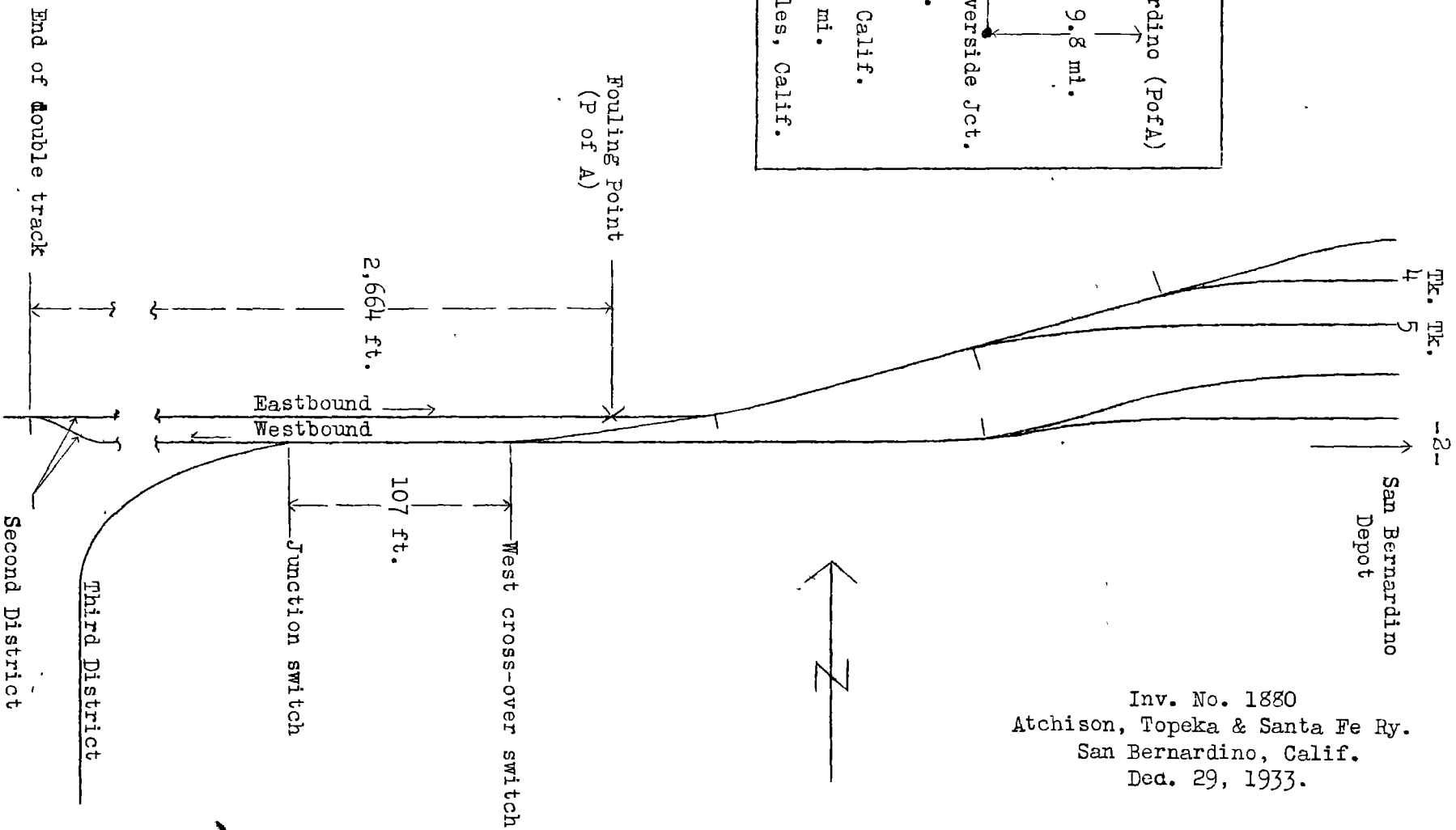
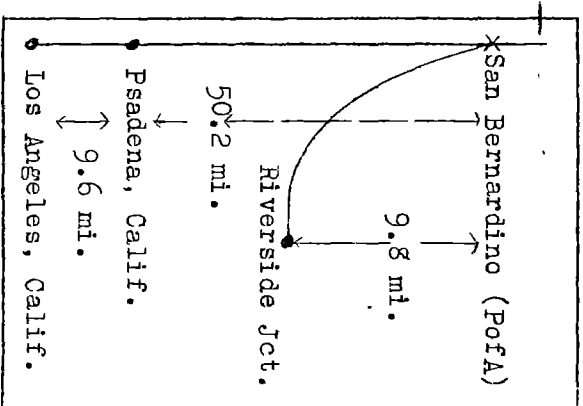
April 5, 1934.

To the Commission:

On December 29, 1933, there was a side collision between a passenger train and the equipment of a Union Pacific passenger train at San Bernardino, Calif., which resulted in the injury of 5 passengers, 9 mail clerks, 7 dining-car employees, 2 porters, and 3 train employees. The investigation of this accident was held in conjunction with a representative of the Railroad Commission of California.

Location and method of operation

This accident occurred within yard limits, just east of the junction point of the Second and Third Districts of the Los Angeles Division, at the western end of the station. All east-bound trains are required by special rule in the time table to stop at the junction of the Second and Third Districts, which also is the end of automatic block-signal territory, unless a proceed signal is received from the switch tender, this signal being given with a green flag or light to trains approaching on the Second District and with a yellow flag or light to trains approaching on the Third District; the various switches in the immediate vicinity are hand operated and not connected with the block signal system west of the station. There is no superiority of trains between the junction and a point near Fifth Street tower, 3,203 feet farther east, all trains and engines being required to move at restricted speed within these limits. There are two main tracks extending a short distance west from the station, trains running with the current of traffic keeping to the left, and the point of accident was at the fouling point of a cross-over between these tracks, the west switch of the cross-over being located 107.3 feet east of the junction switch. Approaching this point from the west on the Second District, the track is tangent for a distance of 5,500 feet, while the grade for 1,400 feet west of the point of accident is 1.22 percent descending for east-bound trains.



Inv. No. 1880  
 Atchison, Topeka & Santa Fe Ry.  
 San Bernardino, Calif.  
 Dec. 29, 1933.

The weather was slightly hazy at the time of the accident, which occurred about 12:12 a.m.

#### Description

East-bound Union Pacific passenger Train No. 22, operated over the Atchison, Topeka & Santa Fe tracks as Train No. 223, consisted of 2 mail cars, 1 baggage car, 1 coach, 1 business car, 2 coaches, 2 Pullman sleeping cars, and 1 observation car, all of steel construction except the business car, which was of steel-underframe construction, hauled by engine 7859, and was in charge of Conductor Baugh and Engineman Bailey. This train arrived on track 4 at San Bernardino terminal, having moved via the Third District, at 12:02 a.m., December 29, 5 minutes late. Yard engine 1962, headed west, in charge of Foreman Sommerville and Engineman Ochoa, coupled to the rear end and pulled the three rear cars back so as to clear the switch leading to track 5, and in doing so engine 1962 headed through the cross-over to the west-bound track; then they went in on track 5 and picked up a dining car and pulled back through the cross-over preparatory to coupling this cut of cars to the balance of the train on track 4, but before this latter movement could be started the cars were struck at the fouling point of the cross-over by Train No. 20.

East-bound passenger Train No. 20 consisted of 3 mail cars, 1 combination car, 1 Pullman sleeping car, 1 dining car, 2 Pullman sleeping cars, and 1 observation car, all of steel construction, hauled by engine 3722, and was in charge of Conductor Hull and Engineman Gillette. This train departed from Pasadena, 50.2 miles west of San Bernardino, on the Second District, at 11:05 p.m., 5 minutes late, passed Rialto, 3.3 miles from San Bernardino, at 12:08 a.m. on time, and was approaching the station at San Bernardino when it collided with the cars being handled by engine 1962 while traveling at a speed estimated to have been between 15 and 20 miles per hour.

Engine 3722 and its tender were derailed but remained upright; the engine was considerably damaged. The left side of the forward end of the observation car, in the cut handled by engine 1962, was scraped for a distance of approximately 30 feet, and the sleeping car ahead of it was considerably damaged on its rear end, left side, for a distance of 15 feet. The two sleeping cars and the dining car were separated from the observation car and moved ahead a distance of 83 feet. The train employees injured were the engineman and the flagman of Train No. 20.

### Summary of evidence.

Engine Foreman Sommerville, in charge of yard engine 1962, stated that it is a daily occurrence to switch a dining car into Train No. 222 and not unusual to stop Train No. 20 while this switching is being performed. On the morning of the accident he had picked up the dining car on track 5 and then pulled through the cross-over far enough for the cut of four cars to clear the switch leading to track 4. He walked around the east end of the dining car to see if the switch had been opened and it was then that he first observed Train No. 20 approaching with the switch tender hurrying towards it on the engineman's side of the east-bound track giving stop signals with both green and white lights; while he could not determine how far away the train was at the time, its headlight was so bright that he knew it was close and he did not attempt to have the cut of cars moved, with the result that they were standing at the time of the accident. He did not hear the switch tender's signals acknowledged and from his position at the switch he could not determine whether the brakes were applied on the approaching train before the collision occurred. Engine Foreman Sommerville also said that these switching movements are made over the cross-over every night without regard to approaching trains, as the rules provide proper protection for such movements.

Switchman Snyder, of engine 1962, stated that he got off at the switch and as soon as the cars stopped he started towards the engine, being about one-half car length from the switch when he stepped away from the cut so that he could see signals around the curve, and at that time he saw the switch tender giving stop signals with green and white lights from a point which he thought was west of the junction switch.

Switchman LaGette, of engine 1962, stated that after picking up the dining car he threw the switch as soon as the cars cleared it and then heard some one on the opposite side of the cut shout a warning, followed almost immediately by the collision.

Engineman Ochoa, of engine 1962, stated that about the time his engine entered the cross-over while pulling the dining car off of track 5, he observed Train No. 20 approaching somewhere east of the double-track switch, which is 2,664 feet west of the point of accident; he could not estimate its speed at that time, although he thought that the engine passed his own engine

at a speed of about 15 miles per hour; he did not see or hear anything to indicate that the brakes had been applied. Engineman Ochoa further stated that before his engine stopped on the west-bound track he saw the switch tender walking westward on the east-bound track and when Train No. 20 was approximately 1,000 feet from him the switch tender gave an easy cross-over signal and then gave violent stop signals with both lanterns, but he did not hear these signals acknowledged. The headlight of his engine was burning and thinking that possibly it was blinding the engineman of the approaching train he extinguished it when that train was between 800 and 1,000 feet from his engine so that that engineman could get a clearer view of the switch tender's signals.

Engineman Gillette, of Train No. 20, stated that he was running as an extra engineman on the night of the accident, although he had previously operated this train as well as other east-bound trains and was thoroughly familiar with the rules governing train movements within the yard limits at San Bernardino. His train passed Rialto on time and was traveling about normal speed approaching San Bernardino, passed west yard tower, located 3,770 feet west of the point of accident, under a clear signal indication and with the brakes applied lightly, and while approaching the home signal, 863 feet east of the tower, which was also displaying a clear indication, he made a further brake-pipe reduction, these signals not being connected with the cross-over switches. He noted that he had about 3½ minutes in which to stop at the station on time and then looked for the switch tender with a green light, as prescribed by the rules, and saw him standing between the rails in about his usual position but not giving any signals. Thinking that perhaps a proceed signal had been given and had not been seen he continued to watch for another signal before releasing the brakes, and upon reaching a point about 300 feet or more from the switch tender, the latter raised his green and white lanterns and, expecting to receive a proceed signal, Engineman Gillette accepted this motion of the lights upward as such a signal, answered it, and released the brakes. Very shortly afterwards he discovered that the switch tender was giving stop signals and he again applied the brakes and as soon as he saw the cars fouling the main track he moved the brake valve to emergency position; he estimated the speed at the time the brakes were released at 15 miles per hour and fixed the time of the accident at 12:30 a.m. Engineman Gillette had seen the headlight of the switch engine on the west-bound track, but when it was extinguished it aided in leading him to believe that the track was clear and when he first saw the cars on the cross-over he thought they were being switched on track 3. The brakes on his train had been tested before leaving Los Angeles, the initial

terminal, had functioned properly en route, and he was positive that his train would have stopped short of the junction switch had he not misinterpreted the switch tender's signals and released the brakes.

Fireman May, of Train No. 20, stated that his train was approaching the junction switch with the brakes applied, moving at the customary speed of about 18 miles per hour, when the engineman called "all clear, highball" and released the brakes, but the fireman had not seen any signal given at that time although he was riding on his seatbox and was in a position to see such a signal had it been given. After the train traveled an additional distance of two or three car lengths he observed a stop signal given with a white light, but did not see any green light at any time; he immediately called a warning to the engineman, who appeared to have seen the stop signal at the same time and applied the brakes in emergency and this application reduced the speed to about 15 miles per hour by the time they both jumped off, very shortly before the collision occurred. He thought his train would have stopped with the service application previously made had the brakes not been released. Fireman May further stated that he had been on east-bound trains entering the yard at San Bernardino for more than 1 month, working on Train No. 20 five trips during that time, and that a proceed signal always was received before the trains stopped at the junction.

Switch Tender Mize stated that after signalling Train No. 222 with a yellow light to pull in from the Third District, he entered the office, put down the yellow light and procured a green light, and then walked across to the north side of the east-bound main track, where he remained until the switch engine picked up the dining car and pulled through the cross-over. About this time he observed Train No. 20 approaching near the west end of the yard and went westward to a point two or three car lengths west of the junction switch, where he began giving stop signals with a white light, and at that time the approaching train was about 15 or 20 car lengths distant. He first gave these from the engineman's side of Train No. 20 and when he noticed the train was not reducing speed he crossed over to the fireman's side and continued to give stop signals until the engine passed him, traveling at a speed of approximately 20 miles per hour. His signals were acknowledged by two short blasts of the whistle, but he saw no sparks flying from the wheels. At the time he began giving stop signals he held the

green light in his left hand and was positive that he did not move it in such a way as to give the engine crew an improper signal. He said that he had worked intermittently as switch tender for the past 2 or 3 years, and continuously for about 3 weeks prior to the accident, and during these periods trains stopped at the junction in the absence of a proceed signal, but not very frequently, as he would give proceed signals before they came to a stop providing the cross-over was not being used; in the event it was in use he always gave stop signals with a white light as an additional precaution although the rules did not require him to do so.

Relief Yardmaster James stated that on the night of the accident he was acting as assistant general yardmaster and watched the various movements of the switch engine in picking up the dining car for Train No. 222 and also saw the switch tender with green and white lights going westward on the eastbound track west of the cross-over. Then he entered the yard office, located south of the tracks opposite the cross-over, and was in the office at the time of the accident. Yardmaster James said the cross-over had been used by the switch engine in picking up the dining car for Train No. 222 since October, 1932, and that while this movement was fully protected by time table rule Train No. 20 had been delayed almost every night.

#### Conclusions

This accident was caused by an error upon the part of Engineman Gillette, of Train No. 20, in the interpretation placed by him upon a hand signal given by a switch tender.

Under special rules contained in the time table, eastward trains from the Second District are required to stop at the junction of the Second and Third Districts, unless a proceed signal is received from the switch tender given with a green flag or light; east of this point there is no superiority of trains and all trains and engines are required to move at restricted speed. According to the statements of Engineman Gillette, his train was approaching the junction with the brakes applied when he saw the switch tender; he thought a signal had been given without his having seen it, and when the switch tender started to raise his green and white lights as though to give a proceed signal, which the engineman was expecting to receive, he released the brakes. Shortly thereafter he realized that the switch tender was in the act of giving stop signals and he then started to apply the brakes, saw cars on the cross-over, and placed the brake valve in emergency position, too late to stop. The fireran had not seen a proceed signal, and when he saw the

stop signals they had already been seen and were being acted upon by the engineman.

The statements of the engineman as to when he first saw the switch tender's signals did not agree with the statements of the switch tender as to when he first began giving signals, which latter statements were corroborated by those of the engineman of the switch engine. Under the rules, however, it was not necessary for the switch tender to give stop signals at all and it is probable that the accident would not have occurred had no signals been given, for Engineman Gillette was prepared to stop until he received what he erroneously accepted as a proceed signal. Engineman Gillette was a man of long experience and of unusually high qualifications, having been assigned at times as an examiner on the operating rules, and the occurrence of such an accident under these circumstances, therefore, only serves to emphasize the necessity for providing such further safeguards as may be necessary to prevent any possibility of another accident of this character. It is therefore recommended that the railway give consideration to the need for additional protection of traffic in this locality.

Respectfully submitted,

W. J. PATTERSON

Director