

INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY CONCERNING AN
ACCIDENT ON THE LINE OF THE SOUTHERN PACIFIC COMPANY
NEAR MONTEREY, CALIF., ON OCTOBER 26, 1933.

February 8, 1934.

To the Commission:

On October 26, 1933, there was a rear-end collision between a passenger train and a freight train on the line of the Southern Pacific Company near Monterey, Calif., which resulted in the injury of three employees. The investigation of this accident was held in conjunction with a representative of the Railroad Commission of the State of California.

Location and method of operation

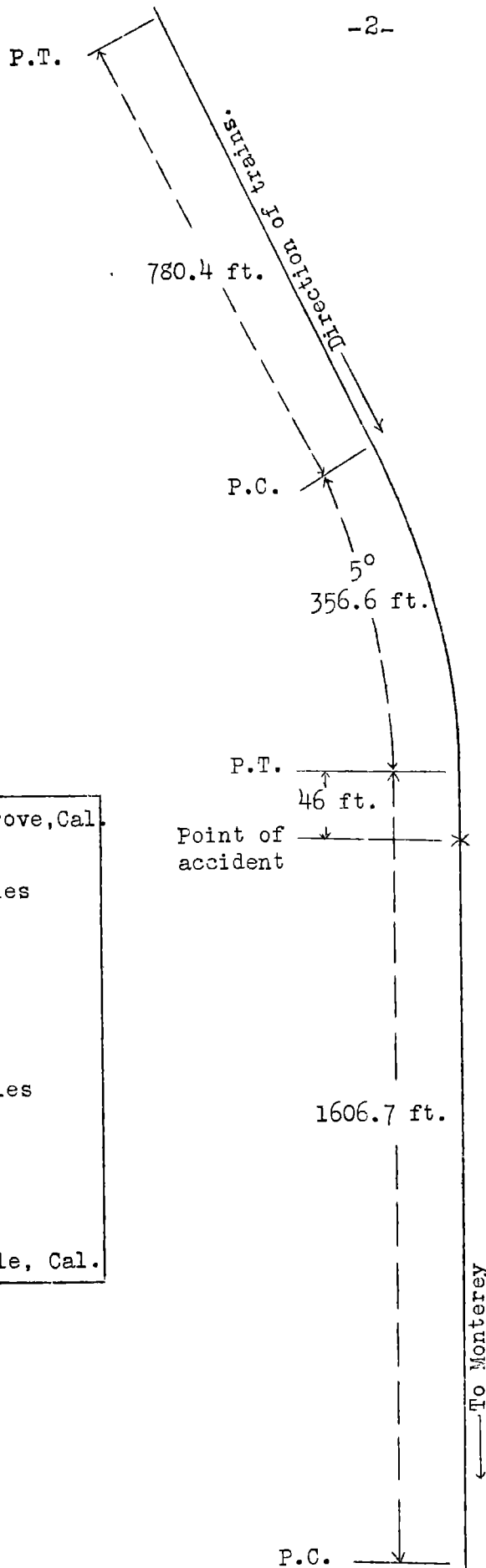
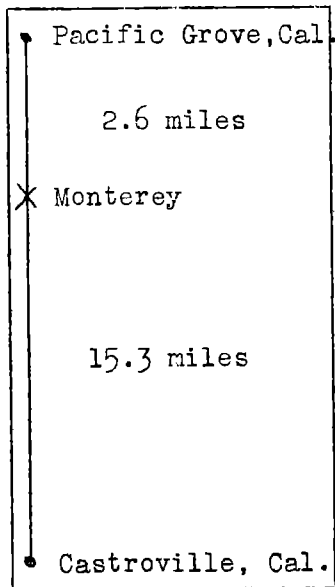
This accident occurred on the Monterey Branch on the Salinas Subdivision of the Coast Division, which extends between Castroville and Pacific Grove, Calif., a distance of 17.9 miles, and is a single-track line over which trains are operated by time table and train orders, no block-signal system being in use. The accident occurred at a point more than 1 mile east of Monterey; approaching this point from the east, the track is tangent for a distance of 780.4 feet, followed by a 5° curve to the right 356.6 feet in length, and then tangent track for a distance of 1,606.7 feet, the accident occurring on this latter tangent 46 feet from its eastern end. The grade at the point of accident is 0.81 per cent ascending for west-bound trains. Owing to the curve, an embankment and buildings, a full view of a caboose standing at the point of accident, from the engineman's side of a west-bound train, was limited to a distance of about 300 feet.

A high fog prevailed at the time of the accident, but the ground visibility was not interfered with to any extent, and it was daylight at the time of the accident, which occurred about 5:03 p.m.

Description

East-bound freight Train Extra 2764 was in charge of Conductor Fulton and Engineman Brown. When this train arrived at Castroville, train order 37 was received, which read as follows:

"Eng 2764 works extra ten forty 1040 AM until seven one 701 PM between Castroville and Pacific Grove not protecting against extra trains except protect against extra 2644 west after ten forty 1040 AM."



Inv. No. 1863
Southern Pacific Co.
Monterey, Calif.
Oct. 26, 1933

This train left Castroville at 11:10 a.m. and upon its arrival at Pacific Grove it performed switching in that vicinity. After receiving a clearance card it started back on the west-bound trip at 4:35 p.m. and was stopped on the main track at Monterey in order to do some switching, and had been standing at this point about 20 minutes, with 17 cars and the caboose in the train, when its rear end was struck by Train No. 195.

West-bound passenger Train No. 195 consisted of 1 gas-electric motor car and 1 combination passenger and baggage car, and was in charge of Conductor Johnson and Engineman Christian. The first car was of steel construction, while the second was of wooden construction with steel platforms. This train departed from Pacific Grove at 5 p.m., on time, and was still on time when it collided with Extra 2764 at Monterey while traveling at an estimated speed of between 20 and 22 miles per hour.

The caboose was of steel-underframe construction, but its superstructure was practically demolished; the front end of the motor car was only slightly damaged, although the forward truck was shoved back about 15 feet by the underframe of the caboose. The employees injured were the engineman, conductor and brakeman of Train No. 195.

Summary of evidence

Engineman Brown, of Extra 2764, stated that his train stopped at the point of accident at 4:42 p.m., and was left standing on the main track while cars were being picked up, and at 4:55 p.m., just before coupling them to the head end, he inquired of the conductor if the flagman was out and the conductor replied that he was and that the train would proceed to Monterey ahead of Train No. 195. The train was then coupled and as soon as the brake-pipe pressure was pumped up he started ahead, opening the throttle lightly and then closing it; at about the time the throttle was closed the train broke in two, about 4:56 p.m. At about 5:01 p.m. the fireman informed him that the flagman was not back but was coming forward along the left side of the train, and Engineman Brown then sounded the whistle for flag protection, the collision occurring about 2 minutes later. He said he was familiar with rule 87-d, which requires that outside of block-signal limits an inferior train must clear the time of a superior train not less than 10 minutes and must be clear by the time it is due to leave the last station in the rear where time is shown, and he knew that his train should have been protected against Train No. 195 after 4:50 p.m.

Fireman McCabe, of Extra 2764, said that when he learned of the amount of switching to be performed at Monterey he told the engineman it could not be done in time to clear the time of Train No. 195, as prescribed by rule 87-d, and at 4:43 p.m. he reminded the engineman of the time and the engineman asked him to watch the time carefully. At 4:50 p.m., the time his train was required to be into clear for the superior train or protected by flag,

the switching had not been completed and he called the time to the attention of the engineman, who said that as soon as he reached the location of the conductor he would inquire about protection and when this inquiry was made, at 4:54:48 p.m., the conductor stated that the flagman was out and that they would move ahead of Train No. 195. The train was then coupled and after it started and had moved a distance of about one-half car length the brakes applied in emergency, stopping the train. He looked back and observed that the train had parted and at the same time saw the flagman running from the direction of the caboose towards the point where the break-in-two had occurred. He immediately notified the engineman that the flagman was not out and the engineman whistled the flagman back, but the latter continued ahead and passed through the train where it had parted; he did not see the flagman again prior to the accident. Fireman McCabe did not check the time the train broke in two, but thought it occurred about 4:56 or 4:57 p.m.

Conductor Fulton, of Extra 2764, stated that the flagman remained in the caboose while he went ahead and assisted with the switching, and after this work was completed and the train coupled he was located about one block ahead of the engine. He heard the noise of the brakes applying after the break-in-two and immediately hurried back toward that point to re-couple the train, thinking the flagman was out, and when he was within three car lengths of where the train was broken in two he saw the flagman and for the first time realized that the flagman had not gone out; he at once shouted to him to hasten back and protect the train. The flagman started back, getting just beyond David Street, about 200 feet from the caboose, and Conductor Fulton thought the crew of the approaching train saw the flagman and the rear end about the same time. Conductor Fulton further stated that he held no conversation with his engineman concerning flag protection because the train was coupled and started ahead at 4:52 p.m. and he thought they would be into clear at Monterey before 5 p.m., the time Train No. 195 was due to leave Pacific Grove, although he said the flagman should have been out at 4:50 p.m., under the requirements of rule 87-d; he took no steps, however, to see whether his train was protected after 4:50 p.m. Afterwards he said that the engineman might have inquired about flag protection, but if so the conductor did not remember it. He knew the flagging rules and also the rule requiring conductors to know that their subordinates are competent, and said he had previously worked with the flagman and considered him competent, in addition to which the flagman had passed on the rules when he went to work; the only conversation he had with the flagman when leaving Pacific Grove was to mention to him that Train No. 195 was due out at 5 p.m. He also understood that the rules require that conductors must not let other duties interfere with protection of trains, but said that the reason he was not at the rear end to see that protection was afforded was that there were only two brakemen in the crew and he was performing the work of a brakeman.

Brakeman Sherer, of Extra 2764, stated that at 4:52:20 p.m., while the engine and cars picked up at Monterey were about $1\frac{1}{2}$

blocks from the train, he notified the conductor of the train due to leave Pacific Grove at 5 p.m., and after consulting his watch the conductor said they would couple to the train and move to Monterey; nothing was said about flag protection but Brakeman Sherer supposed that such protection was being provided. When the train started for Monterey he was on the leading car, there being two cars ahead of the engine to be set out at that point, but when the train broke in two, about 4:57 p.m., he immediately got off and started back, and when he reached a point near the rear of the engine he saw the flagman cross through the train where it had parted, give a back-up signal, and then start towards the rear end; at that time the conductor was on the bank beside the track going toward the rear end, and was about three car lengths behind the engine.

Rear Brakeman Dyer, of Extra 2764, stated that before leaving Pacific Grove the conductor informed him there was one car to be picked up between that point and Monterey and that the train would clear for Train No. 195 at Monterey. The conductor did not instruct him to provide flag protection in the event of any unforeseen delay, but he was familiar with the departing time of Train No. 195 at Pacific Grove and understood it was his duty to protect against that train. He said he was flagging in the cut behind the caboose while the train was standing at Monterey, and was 10 or 15 feet from the caboose when the train was ready to depart at 4:45 or 4:46 p.m. When his train broke in two, about four car lengths ahead of the caboose, he ran to where it was parted, closed the angle cock, and then ran back eastward without giving any back-up signals and estimated that he reached a point approximately 150 feet behind the caboose when the collision occurred. At the time he closed the angle cock the conductor was about seven or eight car lengths from him, towards the head end of the train, and he did not hear the conductor tell him to flag Train No. 195, neither did he hear the engine whistle sounded for flag protection, although he said it might have been sounded before he closed the angle cock, the noise of the escaping air preventing him hearing it. Brakeman Dyer further stated that he was examined on the rules about 2 years prior to the date of the accident, but he did not remember having been examined on rule 87-d, requiring that outside of block-signal limits an inferior train must clear the time of a superior train not less than 10 minutes and must be clear by the time it is due to leave the last station in the rear where time is shown, and he did not have this understanding until he looked through the rule book after the accident, saying he had never worked except where there were block signals. He thoroughly understood rule 99, however, which required that when a train stops under circumstances in which it might be overtaken by another train, the flagman should go back immediately with flagman's signals a sufficient distance to insure full protection; the reason he failed to comply with this rule was that he relied on the statement of the conductor that their train would clear the main track at Monterey, and he thought there would have been time to do so ahead of Train No. 195 if his own train had not broken in two.

Engineman Christian, of Train No. 195, stated that a terminal test of the brakes was made before leaving Pacific Grove and a running test at a speed of about 15 miles per hour was made after leaving that point. He sounded the whistle for two road crossings approaching Monterey and the train was traveling at a speed of approximately 22 miles per hour when he observed the caboose of Extra 2764 about three car lengths distant as his train was rounding the curve east of the point of accident. He immediately removed his hand from the brake-valve handle, which automatically cut in the dead-man feature and applied the brakes in emergency, and he then from force of habit also placed the brake-valve in emergency position, but on account of the rails being wet the speed was not reduced to any considerable extent before the collision occurred. He looked at his watch very shortly after the accident and it was then 5:04 p.m., indicating that the collision occurred a few seconds after 5:03 p.m. He did not see a flagman at any point while his train was approaching the point of accident and it was his opinion that had a flagman been east of the point of accident he would have seen him. He also said that the visibility was good enabling him to see plainly for a distance of 1 mile, and that he was keeping a close lookout ahead, but the embankment on the inside of the curve together with houses and fences adjacent to the right of way prevented him from looking across the curve and seeing the rear end of Extra 2764 any sooner than he did.

Machinist Wright, assigned to the maintenance of Motor Car No. 4 of Train No. 195, stated that he makes occasional trips to check its performance and was on the car at the time of the accident. Shortly before the collision occurred he went to the forward end of the car and as it was moving around the curve he stepped behind the engineman and saw the rear end of a freight train about three or four car lengths ahead; the engineman at the same time let go of the dead-man control, which applied the brakes immediately, and Machinist Wright in turn pulled the control cables closing the fuel valve and then entered the engine room and opened the main switch in order to prevent fire as a result of collision. He estimated the speed at the time the caboose first appeared at 20 miles per hour, but was unable to estimate how much this speed was reduced at the time of the accident as he was engaged in protecting the motor car from fire. It was his opinion that the engineman saw the train ahead as soon as possible and did everything in his power to stop his train in time to avert the accident.

Conductor Johnson, of Train No. 195, thought that the speed just prior to the accident was 20 miles per hour and did not think it had been operated at more than the maximum permissible speed of 25 miles per hour at any point en route. When he got off the train after the accident there was no member of the crew of Extra 2764 in sight.

Conclusions

This accident was caused by failure of Rear Brakeman Dyer and Conductor Fulton of Extra 2764 to provide proper flag protection when standing on the main track on the time of a following superior train.

Rule 87-d requires that outside of block-signal limits an inferior train must clear the time of a first-class train not less than 10 minutes, but must be clear at the time the superior train is due to leave the next station in the rear where time is designated; rule 99 requires that when a train stops under circumstances in which it may be overtaken by another train the flagman must go back immediately with flagman's signals a sufficient distance to insure full protection. Flagman Dyer stated that he was unfamiliar with rule 87-d, not having worked in territory where block signals were not in use; he did, however, understand the rule requiring flag protection and knew the time Train No. 195 was scheduled to leave Pacific Grove, but he said the reason he did not go back and protect was that he depended on what the conductor told him about clearing at Monterey for the superior train and further that when his own train started ahead, just before breaking in two, he thought there was sufficient time to get into clear before Train No. 195 was due. Train No. 195 was due out of Pacific Grove at 5 p.m., less than $1\frac{1}{4}$ miles from the point of accident, and under such circumstances it was necessary for Brakeman Dyer to be out far enough to furnish full protection by that time; it is quite apparent, however, that Brakeman Dyer did not start back until after 5 p.m., and was only three or four car lengths from his caboose when Train No. 195 passed him.

Conductor Fulton, of Extra 2764, is at fault for his failure to know definitely that the train was being protected. He said he considered Brakeman Dyer to be a competent man and thought he would provide protection, and the reason the conductor was not at the rear end to see to it that proper protection was afforded was that he was performing the work of a brakeman, which necessitated his being at the head end of the train in order to handle the switching. The weight of evidence indicates that the train broke in two about 4:56 p.m. and that Conductor Fulton had not reached the rear of his 17-car train when the accident occurred, 7 minutes afterwards; he said the train broke in two at 4:52 p.m., instead of 4:56 p.m.; in that event he had 11 minutes at his disposal in which he could have found out that his train was not being protected and could have taken action accordingly. Conductor Fulton is further at fault for not instructing the engineman to whistle out a flag especially when the time began to get short; had this action been taken, even after the train broke in two, it probably would have caused the brakeman to go back and provide the protection necessary to prevent the accident.

Engineman Brown apparently was concerned about the time, had instructed his fireman to watch the time closely, had been kept

informed by the fireman accordingly, and should have whistled out a flag instead of failing to take such action until informed by the fireman that the flagman had not gone out.

Rear Brakeman Dyer was employed on this division on April 19, 1927; he said that previous to this he had been employed in yard service on the Illinois Central and Northern Pacific, prior to 1917, and that he also had been employed in main-line service on the Union Pacific but not in territory where there were no block signals. It further appeared that in 1933 he did not make any trips until August, during which month he made eight trips, while he also made seven trips in September and seven during the first half of October. Apparently he did not know of the existence of the rule applicable to the clearing of superior trains in non-block signal territory until after the occurrence of the accident and the investigation developed that when he took the rules examination this particular rule was not covered. When the new book of rules came out in 1930 a pamphlet was issued containing a resume of important changes in the rules, and the requirements of rule 87-d which formerly had appeared as a part of rule 86, were pointed out in that resume, Brakeman Dyer signing the form by which he acknowledged that he had received and understood the rules and the resume of important changes therein. This was his second trip on the branch on which this accident occurred and he said he had been through the examination car about 2 years previously.

It is not clear from the record just why or how Brakeman Dyer came to be assigned to a train operating in territory under rules with which he was not familiar and on which it does not appear that he had been examined by any one in authority; in fact, his answers to some of the questions put to him, coupled with his ignorance of the rule above mentioned, make it evident that he was not qualified to perform the duties of the position to which he was assigned.

Respectfully submitted,

W. P. BORLAND

Director.