

**IN RE INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON
THE LINE OF THE SOUTHERN PACIFIC COMPANY NEAR
JACKSON, UTAH ON FEBRUARY 5, 1916.**

On February 5, 1916, there was a rear end collision on the line of the Southern Pacific Company near Jackson, Utah, between a passenger train and an extra freight train, which resulted in the death of one person carried under contract, and the injury of one employee and four passengers. After investigation of this accident the Chief of the Division of Safety reports as follows:

The Montello sub-division of the Salt Lake Division of this company, extending from Montello, Nevada, to Ogden, Utah, a distance of 120.4 miles is alternately single and double track. The part of this sub-division between Lucin, Utah, and Lakeside, Utah, a distance of 54.8 miles, upon which section this accident occurred, is single track, the entire division being equipped with automatic block signals. Train movements are governed by time-card and train orders. Approaching the point of accident from the west the track is tangent for about nine miles, on a descending grade of .3 per cent for eastbound trains. The weather was very foggy at the time of the accident.

Eastbound extra 3202 consisted of 43 loaded cars and a caboose, hauled by locomotive 3202, and was in charge of Conductor Card and Engineman Vandy. This train left Montello at 12:40 a. m., after having received a copy of train order No. 47 reading as follows:

No. 6, engine 2408, ran 55 minutes late Montello to Lemay and wait at Lemay until 2:35 a. m.; Newfoundland until 2:42 a. m.

Extra 3202 passed Lucin, Utah, the last open telegraph office, 13.4 miles west of Jackson, at 1:23 a. m., where the crew in charge received a copy of train order No. 2, reading as follows:

No. 6, engine 2408, will wait at Lucin until 2:28 a. m.; Pigeon until 2:31 a. m.; Teak until 2:37 a. m.; Jackson until 2:43 a. m.; Rappe until 2:49 a. m.; Lemay until 2:55 a. m.

Extra 3202 arrived at Teak, Utah, 4.4 miles west of Jackson, at 1:55 a. m., and was delayed there until 2:40 a. m. on account of having to repair a hot journal box on the eighteenth car in the train. It then proceeded toward Jackson and was heading in at the west switch of the siding at that place when its rear end was struck by train No. 6, at about 3:03 a. m.

Eastbound passenger train No. 6 consisted of eleven cars, nine of which were of steel construction, hauled by locomotive 2408, and was in charge of Conductor Grass and Engineer Gudmundson. It left Montello at 2:13 a. m., after having received a copy of train order No. 47, previously quoted, and arrived at Lucin at 2:39 a. m., where the crew received a copy of train order No. 2. Train No. 6 left Lucin at 2:43 a. m., 18 minutes later than the time specified in train order No. 2, and ran the distance of 13.4 miles between Lucin and the point of accident in twenty minutes, passing intermediate block signal No. 6908, located about 8,000 feet west of the point of collision, in the stop position, and collided with the rear of extra 3202 about 4,500 feet west of the station at Jackson, while running at a speed of

thirty-five miles an hour.

The force of the collision badly damaged the locomotive hauling train No. 6 and demolished the caboose and the last five cars of extra 3208, the wreckage being consumed by fire.

Conductor Card, of extra 3208, stated that his train left Montello at 12:40 a. m., and stopped for several minutes about one mile west of Teek, although he did not know for what purpose. It then proceeded to Teek, coming to a stop with the caboose just clear of the west switch of the north siding and close to the east switch of the south siding. The first eighteen cars were then backed in on the north siding until the eighteenth car was opposite the caboose, for the purpose of putting a new brass into a journal box of that car. He stated that when the repairs had been completed and his train again coupled together, he remarked to his brakeman that they had spent an hour at Teek, although he stated he did not remember the exact time of the arrival of his train at that place, but thought it was about 1:55 a. m. He further stated that his train was ready to proceed at about 2:35 a. m., and that he knew that, according to train order No. 2, which he had received at Lucin, train No. 6 was due at Teek at 2:37 a. m. He then signaled the engineer to proceed, expecting to have him move the train clear of the east switch of the south siding and then back into clear for train No. 6. There was no reply to his signal and, supposing that it had not been observed at the head end, inasmuch as he himself could not see that part of the train, he instructed his brakeman to signal with a fusee, hoping in that manner to signal the engineer. He stated

that the brakeman gave a proceed signal with a fusee and the train proceeded two car lengths and came to a stop. Both he and the brakeman then gave back-up signals but the engineman whistled ahead and the train started, at about 8:40 a. m. Conductor Card stated that when he noticed that his train was proceeding he looked back, saw that the westbound block signal in the rear of his train, which would indicate whether or not a train was in the block, was clear, and when his brakeman asked him whether he should "pull the air," he replied that he thought extra 3802 could get into clear at Jackson sooner than at Teek, inasmuch as Jackson was only four miles distant and the track straight, and therefore closed the switch and ran to his caboose. When his train reached the west switch of the siding at Jackson it was not brought to a stop, the head brakeman having run forward and opened the switch while the train was moving. He stated that when the speed decreased approaching the siding, and the noise of the train subsided, his brakeman remarked that he heard train No. 6 approaching, at the same time getting a fusee, lighting it and going back to protect his train. Conductor Card stated that at that time he was sitting at his desk and did not hear train No. 6, but that after the brakeman had gone back some distance he heard him shout that train No. 6 was coming. He then went to the rear door of the caboose, saw the fusee and the headlight of the approaching train and, realizing that it was very close, he stepped off the caboose just before the collision. He further stated that he was familiar with rule No. 99 which required him to immediately send a flagman back to protect his train, but failed to do so at the

time his train stopped a short distance west of Teek, or during the entire period of delay at Teek to repair the defective car, or when his train almost stopped preparatory to taking the siding at Jackson. He also stated that although he knew that at 2:40 a. m., when his train was leaving Teek, it should already have been into clear at least ten minutes for train No. 6, or the time when that train was due to leave Pigeon, the last station in the rear, and that, considering the fact that his train was moving from Teek to Jackson on the time of train No. 6, he should have left a flagman at Teek to protect that movement, he made no effort to protect his train, stating that he depended entirely upon the block signals to furnish protection, and that he was watching them to see whether or not train No. 6 was approaching. He further stated that at no time did the engineman whistle the signal for the flagman to protect the train and that he had no understanding with his engineman in regard to a meeting point with train No. 6. Conductor Card stated that the trainmaster had frequently reminded him of the rules and had emphasized their importance, and that he failed to obey them in this instance in an effort to expedite the movement of his train. He stated that although the weather was foggy, he thought the block signals could be seen a distance of about 200 yards.

Hear Brakeman Lavin, of extra 3202, stated that when his train came to a stop for a few minutes a short distance west of Teek, as well as when his train was at Teek and the defective car was being repaired, he failed to go back and protect his train. He stated that he felt that his conductor desired his assistance in making the repairs, although the conductor did not tell him to

protect his train, he was familiar with the rule requiring him to go back at least half a mile for this purpose. He said that he knew this to be his duty whether or not he was instructed to do so, and that he depended entirely upon the block signals to protect his train. He further stated that the engineman did not sound the whistle signal for him to go back with flag in either of the delays at Teek. After leaving Teek, knowing that his train was on the time of train No. 6, he noted the position of the signals as his train passed them, to see whether or not train No. 6 was approaching. He knew that that train would have to run by a ~~stop~~ stop signal before the signals would indicate to him that it was approaching and that trains did not customarily run by stop signals. He stated that he did not drop off any fuses between Teek and Jackson, although he was positive that train No. 6 would have heeded them had he done so. When the speed of his train was reduced approaching the siding west of Jackson, he heard the whistle of train No. 6 being sounded, took a fuse, lighted it and started back to flag that train, and had gone back about four or five car lengths when it passed him. Brakeman Levin further stated that he knew it was his duty to protect his train whenever delayed, and that he did not know why he had not done so on this trip, admitting that he had been taking a chance.

Engineman Gudmundson, of train No. 6, stated that his train left Lucin, at 2:43 a. m., eighteen minutes late on order No. 2, and passed Teek at 2:56 a. m., at a speed of about 30 miles an hour. He stated that after leaving Teek his train encountered a light fog which gradually grew heavier, and that, owing to the slightly descending grade, he was not compelled to work

enough steam to keep the smoke from trailing down by the cab window. He stated that he realized that the trailing smoke would make it difficult for him to see the signals, and when some distance east of Teek, he stepped across the locomotive and told the fireman to keep a close lookout for signals, the latter replied that he was doing so and that he had a clear view. He stated that he was able to see only the bases of signal poles, depending on the fireman to observe the indications. He further stated that while he knew that the intermediate signal between Teek and Jackson was about two miles east of Teek, he did not see even the base of that signal and that he was unable to tell just when he would reach it, because the mile-posts were covered with snow and the nature of the surrounding country was such as to furnish no landmarks. He stated that he knew extra 3202 was ahead of his train, but did not think it was so close, and expected it to be protected by a flagman if delayed. He did not look at his watch on leaving Teek to see about when he would pass the intermediate signal between Teek and Jackson. It suddenly occurred to him that possibly he had passed that signal and he was considering stopping his train in an effort to determine his exact location when he saw the lights on the caboose of extra 3202 and someone lighting a fuse and swinging it once, his train colliding with the extras instant later. He stated that he had made an emergency application of the brakes when he saw the fuses being lighted. Engineman Gudmundson stated that he was familiar with the rule requiring him to take extraordinary precautions to notice signals during foggy weather, but was depending on the fireman to observe the signals. He fur-

ther stated that all other signals had been observed on this run, either by himself or by his fireman, and that the only reason he could give for the failure to see the intermediate signal between Teck and Jackson was that his train passed it when he stopped across to tell the fireman to be extremely watchful for signals. He said that his train was running late and he was trying to make up some of the lost time, although he was familiar with the rule forbidding him to do so in foggy weather.

Fireman Ware, of train No. 6, stated that on leaving Teck the weather was very foggy and the smoke was trailing by the window on his side of the engine as heavily as on the engineman's side, making it very difficult for him to see signals any distance. Some distance east of Teck he noticed that the engineman was not working as much steam as before and he eased up on the firing valve. At that time the engineman stepped over and asked if he had seen the intermediate signal and he replied that he had not. He stated that he saw the westbound signal, which is 2,000 feet east of the eastbound intermediate signal, and inasmuch as the engineman had asked him whether he had observed the latter signal, he thought the engineman had seen it, merely asking him as a matter of safety. He stated that he did not tell the engineman that he had a clear view of the signals and did not think the engineman was depending entirely upon him to observe the signals. He stated further that when he saw the markers on the end of the extra, and the fuses being lighted, he shut off the firing valve, and leaped through the window, the speed of his train at the time being about 30 miles an hour. Fireman Ware stated that

the engineman had always been very careful about signals, and that the engineman told him after the accident that he thought he had passed the intermediate signal when he stepped over to tell him to look for the signals. He stated that he thought that he missed the signal on one of the occasions of his having to attend to the fireman's valve. He further stated that it had previously been his experience that all flagging rules had always been strictly observed on this railroad, and also that he considered himself equally responsible with the engineman for having failed to observe the intermediate signal between Teek and Jackson.

The direct cause of the accident was extra 5202 occupying the main track on the time of a superior train without proper protection, for which Conductor Card and Engineman Veasy are responsible. Rules 86 and 99 of the Rules and Regulations of the Southern Pacific Company read as follows:

"86. An inferior train must clear the time of a superior train, in the same direction, not less than ten minutes; but must be clear at the time a first-class train, in the same direction, is due to leave the next station in the rear."

"99. When a train stops or is delayed under circumstances in which it may be overtaken by another train the flagman must go back immediately with stop signals a sufficient distance to insure full protection. * *"

Extra 5202 left Teek at 8:40 a.m., at which time, under rule 86, it should have been into clear ten minutes at that place for train No. 6 which, according to train order No. 2, was due to leave Pigeon, the first station in the rear, at 2:31 a.m. Regardless of this, however, extra 5202 did not go into clear at Teek, but proceeded to Jackson without protection.

A contributing cause of this accident was the failure

of Engineman Gudmundson and Firemen Ware of train No. 6 to observe and obey the signal indication of intermediate signal No. 8908 between Teek and Jackson. The weather was very foggy on the morning of the accident, which made it difficult to see signals. However, all other signals had been noticed on this trip and, from their own statements, it is evident that this intermediate signal was passed during a moment of inattention on the part of these men. The fact that the weather was foggy and that the engineman had for a while lost his location should have prompted both to be extremely watchful for signals, as required by rules 304 and 305 reading as follows:

"304. In foggy or stormy weather enginemen must approach both Distant and Home Signals with great care, and have their trains under control."

"305. Firemen as well as enginemen must watch signals closely, as frequently the first view can be had from the fireman's side."

Engineman Gudmundson knew that the intermediate signal was about two miles east of Teek and he should have been able to tell about when his train would pass the signal, and upon noting that it had been traveling a sufficient period of time to have done so, and not having seen it, he should have stopped his train and determined his location.

The purpose of the automatic block signal system is to provide a space interval between trains and in this manner protect train movements. But when signals are performing their function properly and employees fail to observe and obey them, accidents such as this may be expected to occur.

All of the employees involved in this accident were experienced men with good records, and at the time of the accident

Conductor Card and Brakeman Lavin had been on duty 13 hours and 48 minutes; engineman Teasy had been on duty 9 hours and 45 minutes in the 24-hour period ending at the time of the accident, and Engineman Gudmundson and Fireman Ware had been on duty 7 hours.