

INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN RE INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE TEXAS & PACIFIC RAILWAY AT EAGLE FORD, TEX., ON OCTOBER 12, 1930.

November 8, 1930.

To the Commission:

On October 12, 1930, there was a derailment of a passenger train on the Texas & Pacific Railway at Eagle Ford, Texas, resulting in the death of one employee, and the injury of one passenger and one employee, also two travelers on the highway who were in an automobile at a grade crossing waiting for the train to pass, they being injured as a result of the derailment.

Location and method of operation

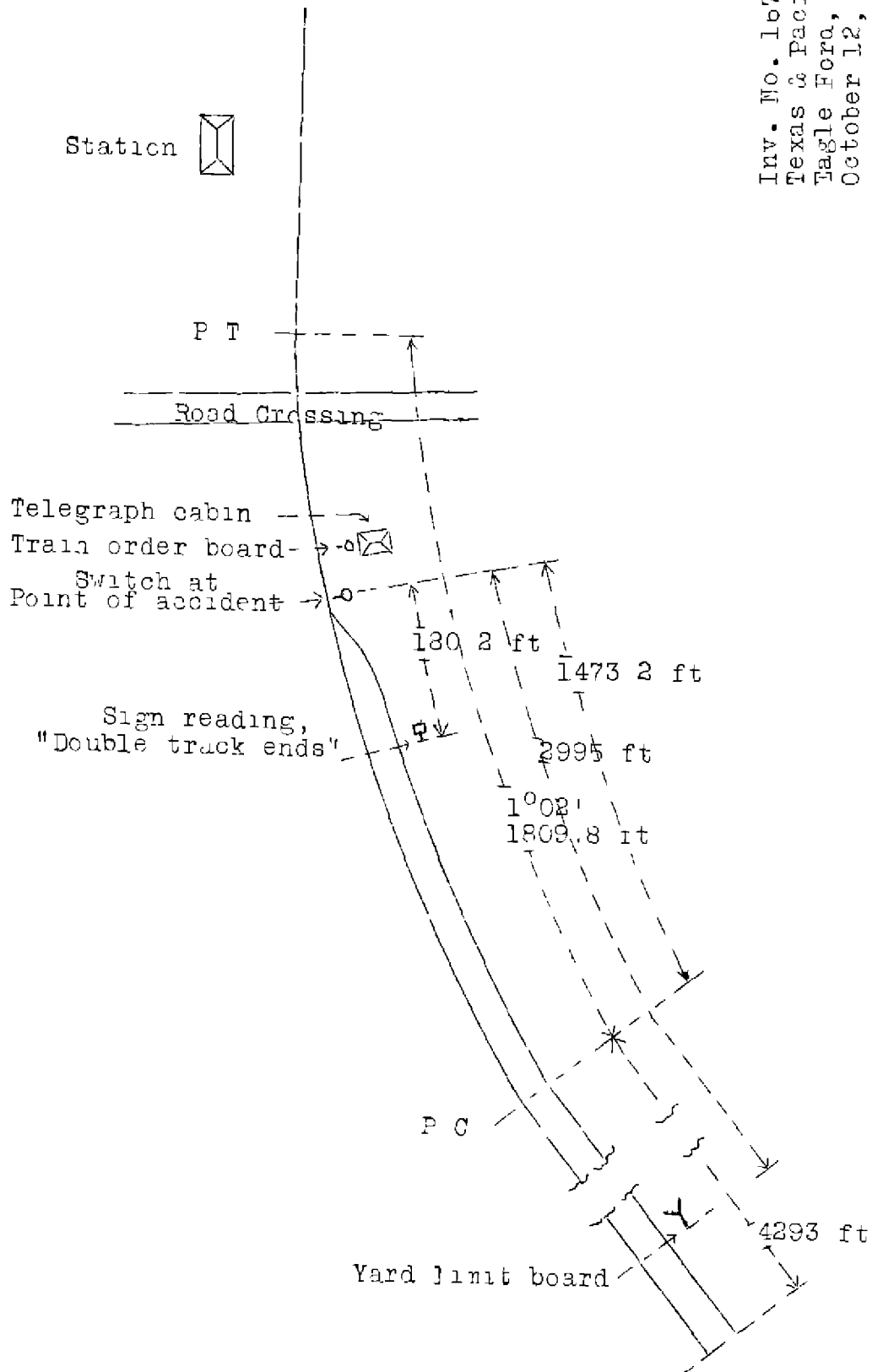
This accident occurred on that part of the Dallas Sub-division of the Fort Worth Division, extending between Lancaster Yard, located 5.3 miles west of Fort Worth, and Union Terminal, Dallas, Texas, a distance of 33.3 miles. Work of constructing double-track between Fort Worth and Dallas has been in progress during the past year and at the time of the accident the double-track portion of the line was open from Lancaster Yard to Eagle Ford, a distance of 31.4 miles; Grand Prairie is located 7 miles west of Eagle Ford and on the double-track between Grand Prairie and Eagle Ford, trains were being operated by time-table, train orders, and a manual block-signal system, this method of operation being covered by superintendent's bulletin No. 120, issued under date of June 8, 1930, and reading as follows:

ALL TRAIN AND ENGINEMEN:
Fort Worth Division:

Effective 2.30 P.M., June 9th, 1930, double track operation extended from east end of middle siding, Grand Prairie, Mile Post 224.6, to switch at Mile Post 220.25, approximately five hundred (500) feet west of depot at Eagle Ford.

Dual-control switch machines installed on the three switches at east end of middle siding, Grand Prairie, and automatic block signals at this location changed to correspond to the new arrangement of switches.

Inv. No. 1671
Texas & Pacific Ry.,
Tagle Ford, Texas
October 12, 1930.



Telegraph and train order office, east end Grand Prairie, discontinued.

Telegraph and train order office, Eagle Ford, moved from present location in depot to cabin opposite switch at end of double track.

Switch at end of double track, Eagle Ford, will be handled by operators. Normal position of this switch will be lined for westward track; eastward trains must not pass clearance point at end of double track until switch is lined for eastward movement.

Movement of eastward trains under the Manual Block System between Grand Prairie and Eagle Ford will be governed by the controlled automatic block signals at east end of middle siding, Grand Prairie. These signals are controlled by the operator at Arlington, who will not display a proceed signal for an eastward train to leave Grand Prairie unless the block from Grand Prairie to Eagle Ford is clear.

See special instructions in current time table governing double track operation and the use of dual-control switches.

The accident occurred at the switch located at the end of double track, within yard limits, at a point 2,995 feet east of the west yard-limit board. The switch is a trailing-point switch for eastbound trains, which move through a No. 9 turnout from double track to single track. Approaching the switch from the west, the track was tangent for a distance of 4,293 feet, followed by a $1^{\circ} 02'$ curve to the right 1,309.8 feet in length, the switch being located on this curve at a point 1,473.2 feet from its western end. The grade is slightly undulating, being 0.32 per cent descending for eastbound trains at the switch. The track is laid with 110-pound rails, 39 feet in length, with about 22 ties to the rail-length, fully tie-plated, single-spiked, except around the turnout, which is double-spiked, and ballasted with crushed rock to a depth of 12 inches; anti-creeper are also used. The track is well maintained.

The switchstand is of the high, single-target type, with a switch lamp mounted on top of the mast, and is located on the south side of the track; the normal position of the switch is for the westbound track, when the switch is lined for the eastbound track, a red indication is displayed by the target and lamp. At a point 180.2 feet

west of the switch and on the south side of the tracks, about 10 feet away, there is a sign reading as follows: "DOUBLE TRACK ENDS." This sign is painted white with black lettering, about 3 inches high, the sign is about 3 feet in length, 14 inches in height, and is fastened to the top of a post about 12 feet in height. The telegraph cabin is also located on the south side of the track, about 25 feet east of the switch and about 15 feet from the track; the train-order board is located in front of the cabin and about 13 feet from the track. The view of the sign marking the end of double track, and of the switch target and the train-order board, is totally obscured from view from the engineman's side of an eastbound engine until a point about the center of the curve is reached, at the top of an 0.43 per cent ascending grade, from which point the grade descends to the switch, after starting down the grade, the view is somewhat obscured on account of looking through a maze of telegraph poles, wires and foliage, and a clear view is not obtainable of the sign, switch target, and train-order board, until within 850 feet of them.

The maximum speed permitted by time-table is 65 miles per hour, however, through the turnout involved the speed is restricted to 15 miles per hour.

The weather was clear at the time of the accident which occurred about 5.06 p.m.

Description

Eastbound passenger train No. 10 consisted of five baggage cars and two coaches, in the order named, hauled by engine 903, of the 4-8-2 type, and was in charge of Conductor Phillips and Engineman Petty. The first, second, and fourth cars were of all-steel construction, while the remainder were of steel-underframe construction. This train passed Arlington, 6.2 miles west of Grand Prairie, at 4.51 p.m., according to the train sheet, five minutes late, and was derailed at Eagle Ford while passing from double to single track at a speed as shown by the speed-recorder tape on the engine to have been 52 miles per hour.

Engine 903, its tender, the first three cars, and the forward truck of the fourth car, were derailed to the north and came to rest in line with the track. The engine was on its left side, just east of the grade crossing, with its front end 385.8 feet east of the switch; the tender was behind the engine. The derailed cars remained practically upright. The employee killed was the fireman, while the employee injured was the engineman.

Summary of evidence

Engineman Petty stated that while he had worked over the track between Fort Worth and Dallas, on the Fort Worth Division, for about 30 years, and was acquainted with the general conditions, yet this was the first trip he had made over it for the last 12 months prior to this trip; having worked west of Fort Worth, his seniority rights were on the Rio Grande Division. It also appeared from his statements that if an engineman does not make a trip over a part of the division for six months, it is required that he make a trip before running over such track. About 10 a.m. the day of the accident, he was called for service on train No. 10, at which time he claims he notified the engine dispatching foreman that he had not made a trip over the east end in over a year and suggested that someone be used who was better posted on the later changes in the road between Fort Worth and Dallas, the engine dispatching foreman informed him that he would see if this could be arranged and would let him know later, also notifying the engineman to remain at home where he could be reached at any time, which he did, and about 3 p.m. the engine dispatching foreman called again and told him that it was necessary for him to make the trip. Engineman Petty accepted, although he said it was his privilege to have declined when he was not qualified, but inasmuch as he had been called the second time he decided to go, feeling confident that he was perfectly capable of making a successful trip and that if the fireman was an experienced man on the run, he could go anywhere with a man that knew the road, he did not request that a pilot be furnished. After registering and checking time, he looked over the bulletin book, reading over what bulletins he could that pertained to the east end, but before he got to bulletin No. 120 the train arrived from the west, and the result was that he never did see this bulletin. While engines were being changed, he asked the fireman if he was acquainted with the run and the fireman said it was his second trip, that he did not know one place from another only in the time card. Engineman Petty also talked with the conductor who told him about various changes which had been made, but did not say anything about the location of the end of double track. After departing from Fort Worth the trip was made without incident to Grand Prairie, which point he thought was the end of double track, it being shown as ending there in the current time-table, No. 44, effective October 5, 1930. On arrival at that point, however, he noticed that it did not end there, so he asked the fireman if he knew where it did end and the fireman informed him, in a very positive way, that it was just west of Dallas, and the engineman took it for granted that such

was the case. Approaching Eagle Ford he sounded the station signal on the engine whistle, when in the vicinity of the mile board, located 851 feet west of the yard-limit board, and permitted the train to drift around the curve; he then sounded the engine whistle for the train-order board and received a clear indication; he was not familiar with the changes made in this vicinity, however, and did not see the end of double track until the train was close to it, and he also saw that the switch target was red, which indicated that the switch was lined for an eastbound movement. Engineman Petty stated that he applied the air brakes in emergency as soon as he saw the end of double track, when just a few hundred feet from the switch, about 300 or 400 feet away, at which time he estimated the speed to have been about 55 miles per hour, saying that the brakes took hold properly and that the speed was reduced slightly by the time the switch was reached. Engineman Petty understood that he was required to familiarize himself thoroughly with all bulletins, and said that about one month prior to the accident, Engine Dispatching Foreman Wilkins told him he wanted him to qualify between Fort Worth and Dallas and he told the engine foreman that he would, but between that time and the trip on which the accident occurred, he had not made a trip east of Fort Worth. He figured that the end of double track would be at Browder, located 3.3 miles east of Eagle Ford, he did not notice the sign indicating the end of double track, he thought, until about the time he passed it, and said he did not see any other signs of warning when approaching the end of double track.

Conductor Phillips personally delivered a train order, clearance card, and register check to Engineman Petty, and conversed with him before leaving Fort Worth, and from this conversation the conductor was satisfied that Engineman Petty was qualified to run on this district and was acquainted with road conditions, and thought that inasmuch as Fireman Short had been over this territory recently, the fireman was reasonably acquainted with it. Conductor Phillips was riding in the sixth car approaching Eagle Ford; he heard the station signal sounded on the engine whistle, after which the signal was sounded for the train-order board, and he got up and started forward, but the accident occurred before he reached the door of the car. He said that he was not concerned about the speed as the train rounded the curve, and that he could not tell the exact location of the train, nor did he have an opportunity to judge the rate of speed at the time the engine whistle was sounded for the train order board, although he thought the train was right close to it at that time. Conductor Phillips was familiar with the contents of bulletin No. 120. Statements of Flagman Clay, Joint Express-Baggage man Jeffries, Express-Baggage Messenger Helper Hastings, and Train Porter Hyde, developed nothing additional of importance.

Engine Dispatching Foreman Wilkins had charge of the callers, handled bulletins, and positions of enginemen and firemen, and both yard and road enginemen were required to lay off and return to service through him, and he stated that he is charged with the responsibility of knowing that men are qualified for the run for which they are called. During the morning, the engineman who was to make the run on train No. 10 called and asked to get off, in connection with a court case, and the foreman agreed. Foreman Wilkins then called Engineman Petty, in order to relieve the first engineman, saying that Engineman Petty had told him some time previously that he was going to qualify for this run; the foreman maintained that he asked Engineman Petty whether he was qualified and was told that he was, but that owing to a court case, the same case the first engineman was concerned with, he would rather that the foreman get some one else, provided it could be arranged. Foreman Wilkins then called a third engineman, but this particular engineman was not qualified. Master Mechanic Nolan then came into the office and Foreman Wilkins explained the situation to him and the master mechanic told the foreman to let Engineman Petty make the trip and that if necessary it could be arranged to relieve him for court. Foreman Wilkins then called Engineman Petty and informed him that he was elected, saying that the engineman made no protest, nor did he ask for a pilot. Foreman Wilkins maintained that Engineman Petty told him that he was qualified, and that at the time the foreman called him in the morning, the engineman did not say anything about not having been over the district between Fort Worth and Dallas for approximately one year, and Superintendent Knightlinger stated for the benefit of the record that Wilkins simply took the engineman's word for the fact that he was qualified.

Master Mechanic Nolan stated that he was in the round house office about 1 p.m., October 12, and that Foreman Wilkins mentioned the fact that the first engineman was off, therefore, the master mechanic inquired as to who would be used for the trip and the foreman said that he had two other qualified men. When the foreman said they were qualified, the matter passed out of the mind of the master mechanic and he told the foreman that he had better use Engineman Petty, as he was the oldest man. Master Mechanic Nolan further stated that a record is kept as to what men are qualified and over what portion of the road they are qualified, however, he did not know whether Foreman Wilkins referred to the record to determine whether Engineman Petty was qualified, as the foreman did not say, the foreman only saying that Engineman Petty was qualified. Mr. Nolan also stated that there was no record of Engineman Petty having qualified in the territory in question.

Superintendent Knightlinger made a statement as follows:

"Regard Time Table No. 44, effective 12.01 a.m. Sunday, October 5, 1930, showing end of double track, Grand Prairie, Mile Post 224.6

This Time Table was reissued for account M-K-T Railroad operating over the Texas & Pacific Railway between Fort Worth and Whitesboro. No schedule changes were made in Texas & Pacific trains; Time Table 44, insofar as Texas & Pacific is concerned, is a reissue of Time Table No. 43 effective 12.01 A.M. Sunday, March 16, 1930. Bulletin No. 120 dated June 8, 1930, designating end of double track at end of switch, Mile Post 220.25, approximately 500 feet west of depot at Eagle Ford, Texas, is in effect in accordance with Transportation Rule No. 592, which reads:

"Bulletin orders will be posted on the face of bulletin boards for thirty days, after which those still in force will be placed for further reference in a permanent file connected with the bulletin. Bulletin orders, unless otherwise specified, expire with the calendar year, and must be reissued if intended to remain in effect."

Conclusions

This accident was caused by train No. 10 entering upon a No. 9 turnout at the end of double track, at a too high rate of speed, due to the fact that Engineman Petty was unaware of the location of the end of double track.

There is a clear discrepancy in the statements of Engineman Petty and Engine Dispatching Foreman Wilkins; the engineman said he told the foreman he was not qualified east of Fort Worth, while according to the foreman, the engineman said he was qualified. There is, of course, no positive way of determining what conversation took place between these two men. In any event, however, the matter was settled by Engineman Petty accepting the call and attempting to operate a train in territory with which he was not familiar; he did not know where the double-track section came to an end and neither did his fireman; there was no adequate warning in the vicinity of the end of double track, and the result was that Engineman Petty approached the No. 9 turnout at a speed shown by the speed-recorder tape to have been 52 miles per hour, whereas he should have

reduced speed to 15 miles per hour, and also should have been prepared to stop in case the switch was not properly lined, which, however, happened not to be the case in this instance.

While excessive speed, due to the engineman's lack of familiarity with the road, was the immediate cause of this accident, there are three other features involved for which there is no excuse.

1. The engine dispatching foreman, assuming that his version of the conversation between himself and the engineman was correct, took the engineman's word for the fact that he was qualified, yet it was the foreman's duty to know whether this actually was the case. A record is kept of the qualifications of men in engine service, and according to the master mechanic, there was no record of Engineman Petty having qualified in the territory in question, yet in spite of this fact, and the further fact that under the practice of this railroad an engineman is not allowed to make a run when he has not been over the territory within the preceding six months, it is evident that no one took the trouble to look at the record and to know definitely whether Engineman Petty was properly qualified.

2. The end of double track had been changed from Grand Prairie to Eagle Ford, the latter station being 7 miles east of Grand Prairie, and this change was covered by superintendent's bulletin No. 120, effective June 8, 1930. The current time-table did not take effect until October 5, 1930, yet it failed to show any change in the location of the end of double track. The only reason for this failure is the fact that the time-table was merely a re-issue of the previous time-table, so far as the time of Texas & Pacific trains was concerned, being put out for the benefit of the M-K-T lines in connection with the operation of the trains of that road over certain portions of the Texas & Pacific lines not involved in this accident. While the Texas & Pacific officials may not have desired to participate in the expense incident to re-issuing a time-table, this is not an adequate excuse for the failure of the new time-table to carry correct information.

3. During the past year the company has been engaged in the work of double tracking the road between Fort Worth and Dallas, with its attendant changes in track layout, and necessitating the extension of the end of double track from its prior location at Grand Prairie. The only visible roadside warning, however, was a sign located only 180 feet from the point of switch at the end of double track. Under all the circumstances, with the view obscured, there was a situation created at Eagle Ford wherein the safe

operation of an eastbound train depended entirely on the engineman being fully acquainted with the various changes which had been made, and when, as in this case, an engineman was allowed to get out of the terminal who was not so acquainted, then the occurrence of an accident was practically inevitable. A sign indicating approach to end of double track, located braking distance from the clearance point, would have provided ample roadside warning, and would have resulted in preventing the accident.

All 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.