

INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN RE
INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE
LOUISVILLE AND NASHVILLE RAILROAD AT TRAFFORD, ALA ,
ON JANUARY 20, 1930.

March 7, 1930.

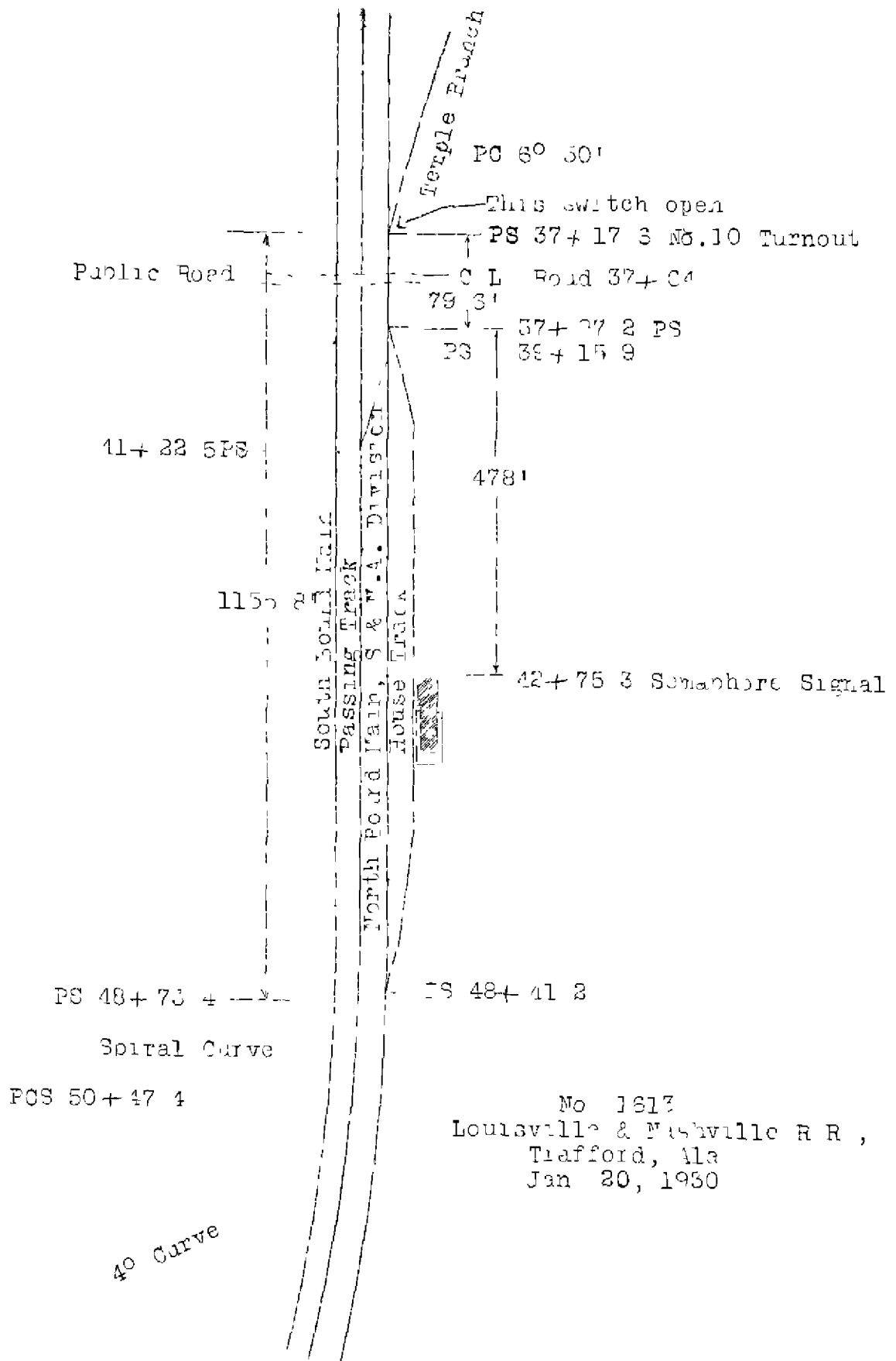
To the Commission:

On January 20, 1930, there was a derailment of a passenger train on the Louisville and Nashville Railroad at Trafford, Ala , resulting in the death of 1 employee and 1 trespasser, and the injury of 47 passengers, 3 mail clerks, 1 express messenger, 1 trespasser, and 3 employees. The investigation of this accident was made in conjunction with a representative of the Public Service Commission of the State of Alabama.

Location and method of operation

This accident occurred on that part of the South and North Alabama Division extending between Birmingham and Decatur, Ala., a distance of 84.51 miles. In the vicinity of the point of accident this is a double-track line over which trains are operated by time-table and train orders, no block-signal system being in use. There are four tracks opposite the station at Trafford, these tracks, from east to west, being as follows: house track, northbound main track, passing track and southbound main track. Just north of the station there is a trailing-point crossover connecting the northbound main track with the middle or passing track, the north crossover switch being 359 feet north of the train-order signal at the station, the north house-track switch connects with the northbound main track at a point 118 feet north of this north crossover switch, and 79.6 feet north of the house-track switch there is a switch leading to what is known as the Temple branch, this switch being the one involved in the accident, which actually occurred on the Temple branch track at a point about 467 feet from the main track.

Approaching the point of accident from the south, there is a 4° curve to the left which is 789 feet in length, and then the track is tangent to the Temple branch switch, a distance of 1,153 feet, and for some distance beyond. The Temple branch is tangent from the turnout switch for ap-



proximately 89 feet, followed by a 6° 30' curve to the right on which the accident occurred. The grade is 0.43 per cent descending to the Temple branch switch, continuing to descend on the Temple branch for about 450 feet, at which point a 1.04 per cent ascent begins. The Temple branch switch is laid with a standard No. 10 turnout in the main track connection. The first curve in the branch track has an elevation of 2 inches and is maintained in good condition for a speed of about 20 miles per hour, while the main track is well maintained and in condition for high speed.

The Temple branch switch and the north house-track switch are equipped with New Century stands, with the center of the lens 20½ inches above the ties. Green indications are displayed when the switches are closed and red when they are open.

The weather was clear at the time of the accident, which occurred about 9.33 p.m.

Description

Northbound first-class train No. 4 consisted of one mail car, one baggage and express car, three coaches, six Pullman sleeping cars, one dining car, all of steel construction, hauled by engine 404, and was in charge of Conductor Kaminsky and Engineman Harrison. This train left Birmingham at 8.58 p.m., according to the train sheet, eight minutes late, passed Trafford at 9.33 p.m., seven minutes late, and almost immediately thereafter, while running at an estimated speed of from 45 to 50 miles per hour, entered the open switch leading to Temple branch and was derailed.

The engine, first eight cars and forward truck of the ninth car were derailed. The engine came to rest on its left side in a badly-damaged condition, the first car was overturned and practically destroyed, the next four cars were badly damaged, and the remaining derailed cars remained upright in line with the track and were only slightly damaged. The employee killed was the engineman.

Summary of evidence

Conductor Kaminsky, of train No. 4, stated that the train approached Trafford at 45 or 50 miles per hour and the first intimation he had of anything wrong was when he was thrown from his seat in the third car in the train by an application of the air brakes, which

occurred at about the time the engine turned in on the branch. His examination of the switch almost immediately after the occurrence of the accident disclosed it to be lined and locked for the Temple branch, and the lamp not lighted, the switch points fitted closely and there was no evidence of tampering. It was Conductor Kaminsky's opinion that it would be difficult for the engineman to stop the train if the Temple switch were found to be in the wrong position after rounding the curve approaching the point of accident.

Flagman Epperson, of train No. 4, stated that they approached Trafford at a speed of about 45 or 50 miles an hour and that he noticed nothing wrong prior to the accident. He went back to flag immediately afterward, at which time he did not notice the condition of the switch. Upon examining it after his return, however, he found the switch open and locked for the branch and the lamp not lighted. The statements of Train Porter Baker, of train No. 4, brought out nothing additional of importance, while on account of the physical condition of the fireman and baggageman of train No. 4, who were confined to the hospital with injuries, it was impossible to obtain statements from them.

Operator Barefield, on duty at Trafford at the time of the accident, stated that as the rear of the train passed the office he saw fire flying from the wheels and notified the dispatcher that something had happened. About 10 or 15 minutes after the derailment, he noticed that the switch was thrown and locked for the Temple branch and that the lamp was not burning, his attention being called to this condition by Conductor Kaminsky, he had not noticed the condition of the switch lamp at any other time during the evening. Operator Barefield further stated that southbound local freight train No. 21, which arrived at Trafford at 6.08 p.m. on the day of the accident, had been the last train to use the northbound main track in the vicinity of Temple branch. This train had approached the station on the passing track, cut off all except one car at a point north of the road crossing, which is located between the Temple branch switch and the north house-track switch, and the engine and remaining car then approached the station on the passing track and unloaded freight, after which they backed up north of the station to pick up cars which the crew thought were on the Temple branch. They returned in about five or eight minutes, after having discovered that the cars were not on the branch, proceeded southward on the northbound main track, picked up cars on the south end of the house track, returned to the balance of the train on the passing track, and departed at 6.48 p.m.

Engineman Leonard, of train No. 21, stated that after unloading the freight at the station at Trafford from the passing track, he backed up into the Temple branch for the loaded cars which he usually finds there. Not finding them there he returned to the passing track, but upon discovering that the cars were on the house track, he again backed through the crossover, pulled ahead on the northbound track to the south end of the house track, backed in and picked up the cars, and returned to the train via the same route. He did not see the Temple branch switch at any time, due to its being located on the left side of his engine. It further appeared from the statements of Engineman Leonard that in his opinion the engineman of a northbound train would be unable to distinguish between the Temple branch switch and the north house-track switch until about opposite the train-order signal.

Fireman Stratter, of train No. 21, stated that he noticed the indication of the Temple branch switch and knew the lamp was burning when his train was approaching Trafford on the passing track, and also when entering and leaving the Temple branch with the one car. From that time until the departure of the train, however, he did not notice the switch lamp or its indication. He did not know whether the switch was handled when they pulled out of it after having failed to find the cars on the branch, nor did he notice, while making the back-up movement down the northbound main track in order to clear the crossover after having picked up the cars from the house track, whether the cars went up the Temple branch or the main track.

Head Brakeman Daniels said that as his train pulled in to Trafford on the passing track, the headlight of his engine shone on the Temple branch switch lamp and made it appear to be burning and displaying a green indication. After unloading freight from the passing track, he went south to protect his train while it was using the northbound track, remaining there until picked up as his train was departing.

Conductor Drake, of train No. 21, stated that while standing on the road crossing near the switch leading to the branch, he saw Fear Brakeman Jenkins line the north switch of the crossover and the Temple branch switch for the back-up movement into the branch, and he also saw him throw the Temple branch switch after the engine and car had pulled out on the main track. Conductor Drake then walked southward to the station, in which vicinity he was engaged until just before leaving Trafford, at which time he boarded the caboose at a point about four or five car-

lengths south of the Temple branch switch. He looked at all the switches from the caboose platform as the train was leaving, and said that they displayed green indications. Inasmuch as he was positive the branch switch had been properly set, it was his opinion that it had been tampered with, and he stated that Flagman Bennett had called his attention to a man who was standing in that vicinity who had aroused his suspicions.

Rear Brakeman Jenkins, of train No. 21, said that he rode the south end of the box car into the branch, that he lined the switch for the movement of the engine and car in on the branch, and also operated it again after the engine and car had moved back out on the main track. He stated that the switch lamp was burning each time he operated the switch, and that when the cars were backed northward in order to clear the crossover, when returning to the passing track, they were backed down the northbound main and not the Temple branch, and at this time he saw the green indication still displayed at the Temple branch switch.

Swing Brakeman Strain, of train No. 21, stated that he rode the north end of the box car while the movement was made into Temple branch. He did not notice whether the switch lamp was burning, but saw Rear Brakeman Jenkins get off at the switch when pulling out of the branch, he did not, however, notice him handling the switch at that time.

Flagman Bennett, of train No. 21, stated that he did not notice the Temple branch switch while engaged in work at Trafford, that after boarding the caboose as the train pulled by the station, on the passing track, he observed that all switches showed green indications, although he did not count them, and was not sure he would have noticed the absence of a light.

Lampighter Padgett, stated that the Temple branch switch is equipped with an eight-day Adlake lamp, that the lamp was in good condition when he cleaned, filled and lighted it two days before the accident occurred, and that when he was in the vicinity at about 5:15 p.m. the evening of the accident he noticed no lamps that were not burning. It was his opinion that some one had taken the oil from the lamp, there having been instances of oil having been taken from switch lamps in the vicinity, although this particular lamp had never before been involved.

Supervisor Busby stated that he noticed that the lamp was burning about 5:16 p.m. the day of the accident.

He arrived on the scene 10 or 15 minutes after the derailment, and found the switch thrown and locked for the Temple branch, with the light out, but found no indications of tampering. His testimony and that of his helper, Motor Car Chauffeur Caldwell, indicated that when the lamp was examined several hours later there was still a little oil in it, and as there was plenty of wick, they did not think the light had gone out through lack of oil. Mr Caldwell further stated that at this time he made two attempts to light the lamp, but that on each occasion it went out before he had moved more than 5 feet away from it, the wick seemed to be turned too high and the lens of the lamp was smoked. He refilled the cup and cleaned the wick, and the lamp then burned properly. He did not notice any indications of tampering.

Lieutenant of Railroad Police Goad stated that he tested the lock of the switch with a key, and found that he could remove the key without locking the lock, but when locked it could not be jerked open. He further stated that a resident of Trafford had reported to him that at 8 p.m. the lamp was not burning and that this resident had noticed it out on other occasions.

Conclusions

This accident was caused by an open switch.

An examination of the switch by the crew of train No. 4 and other employees of the railroad disclosed it to be lined and locked for the Temple branch, and the lamp not burning; there was no evidence of tampering. The last train to use this switch was train No. 21, which performed switching in vicinity of the switch about three hours previous to the accident. Conductor Drake and Rear Brakeman Jenkins stated that the switch was thrown by the rear brakeman after they pulled out of the branch, while Swing Brakeman Strain said he saw Rear Brakeman Jenkins get off at the switch but did not see him throw it, none of the other members of the crew had any knowledge as to whether the switch was handled at that time. The conductor, rear brakeman and firemen were positive the lamp was lighted at the time of the movement, and the conductor and flagman said all indications displayed at the time of their departure from Trafford were green. It is apparent that either the crew of train No. 21 failed to close the switch, in which event the responsibility would rest on Conductor Drake, or it was opened by some one in possession of a switch key after the train had departed.

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All of 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.