#### INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN RE INVESTIGATION OF AN ACCIDENT WHICH OCCURRED OF THE PENTSYLVANIA RAILROAD AT CONEWAGO, PA., ON JULY 25, 1931.

September 21, 1971

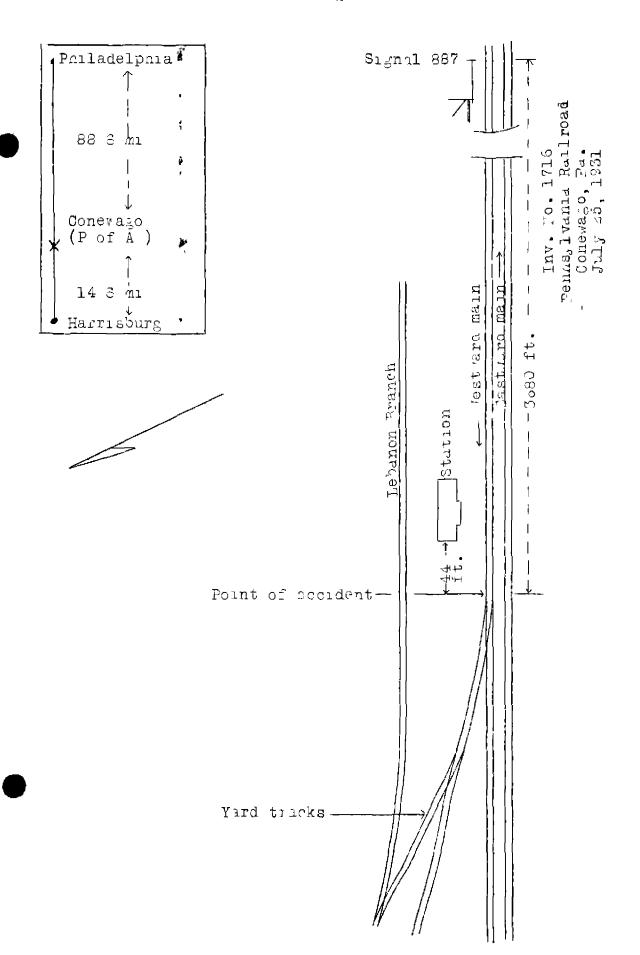
To the Commission:

On July 25, 1931, there was a derailment of an express train on the Pennsylvania Railroad at Conewago, Pa., which resulted in the death of 2 employees, and the injury of 1 employee and 1 express messenger. The investigation of this accident was made in conjunction with a representative of the Public Service Commission of Pennsylvania.

## Location and method of operation

This accident occurred on that part of the Philadelphia Division extending between Lancaster and Royalton, Pa., a distance of 25.4 miles. This is a double-track line over which trains are operated by time-table, train orders, and an automatic block-signal system. The accident occurred on the westbound track, at a facing-point switch leading to Conewago Yard, at a point 44 feet west of the station. Approaching this point from the east, the track is tangent for a distance of more than 1 mile, this targent extending for some distance beyond the point of accident. The grade for westbound trains is 0.7 per cent descending at the point of accident.

The main track is laid with 130-pound rails, 39 feat in length, with 22 ties to the rail-length, fully tie-plated, and ballasted with rock. The track is well maintained. The main track switch is laid with a No. 10 turnout and leads off the main track to the right. The switch is equipped with a New Century stand, located on the right or north side of the track; it is a low-type stand, equipped with a switch-target lamp, the centers of the lens being 19½ inches above the ties. A Hayes sliding type derail, located at the clearance point on



the yard track, is operated in conjunction with the switch. The last automatic block-signal is located at a point 3,680 feet east of the switch.

The weather was clear at the time of the accident, which occurred about 10.29 a.m.

### Description

Westbound express train extra 5409, which was being operated as a passenger extra, consisted of 3 express refrigerator cars, 10 express cars, and a caboose, hauled by engine 5409, and was in charge of Conductor Rees and Engineman McCormick. This train passed Landisville, 13.8 miles east of Conewago, at 10.03 a n., and was derailed upon entoring the open switch while traveling at a speed estimated to have been to miles per hour.

The engine, tender, first nine cars and the forward truck of the tenth car were decailed. The engine stopped on its left side at a point 375 feet from the main track switch with its front and resting on the yard track and the rear end near the westbound main track. The tender remained in an upright position parallel with and on the westbound track, the first two cals stopped on their sides on the yard tracks, while the other decailed cars remained practically in upright positions at various angles to the yard track. The engine, tender and first eight cars were badly damaged, while the ninth and tenth cars were slightly damaged. The employees killed were the enginement and fireman, and the employee injured was the conductor.

# Summary of evidence

Conductor Rees, of extra 5409, stated that approaching Conewago the train was traveling at a speed of 60 miles per hour and he was sitting on the locker seat in the caboose when there was a heavy impact. He had not heard any whistle signal sounded, nor was an application of the brakes made just prior to the accident. One of the rear cars stopped on the switch, though none of the trucks was on the switch point, and the switch was lined for a movement from the westbound main track to the vard. Conductor Rees stated that he had known Engineman McCormick for several years, that he was a very capable engineman, and appeared to be in normal condition when he talked with him before their departure from Manuatton Transfer.

Flagman McGarrity stated that the train was traveling at a speed of 60 miles per hour when he felt an application of the air brakes and at the same time the train came to a sudden stop, resulting in four very severe joints. He made no examination of the switch as he went back to flag immediately after the occurrence of the accident.

Passenger Brakeman Smith stated that on the day of the accident he was acting with the authority of assistant vardmaster at Conevago, in charge of temporary organization to handle and expedite the movement of troop trains on the Lebanon Branch in and out of Ms. Grathy Camp grounds of the Pennsylvania Mational Guard, this temporary organization consisted, in adultion to the assistant yardmaster, of 2 assistants, 2 car inspectors, 1 track formum, and 1 track laborer. A troop train was expected from the east, and sometime ofter 10 am. the operator informed him that the troop train unich they were expecting rad passed Lancastor, 20.7 miles east of Conewago, at 10.14 ..m. Yard water Srith then instructed the men as to their respective duties and told Brakeman File to watch for this train, which was to be divorted to the Lebanon Branch, giving him the names of the engineman and conductor, the engine number and the number of cars. After issuing his instructions, Yardurster Smith entered the telegraph office and at the time of the accident was engaged in conversation with the block operator concerning another train. Yardmaster Smith staged that the operator told him in the presence of the orders, including Brakeman File, that the troop than was following train No. 49, although he did not report that information to Brakeman File when he gave the probonan the instructions regarding the troop train. He did not know that train No. 49 was operating as extra 5409. Yardmister Smith further stated that he did not give Brake or File any specific instructions es to the handling of the main track switch, as no had worked with him on provious occasions and Brakaman File had always performed his duties properly and no considered him thoroughly competent. Yurdarstor Saith had wean connected with the handling of troop trian movements at Conewago for the past six summers.

Brakeman File, who was assigned to assist Acting Assistant Yaldmarter Suitu in Landling the movement of troop tains at Concergo, stated that about 10.20 a.m. Yard aster Smith eams to the men at the cabin car, located on one of the yard tracks, told them that a troop train was on its way from the east and had bassed Lancaster at 10.14 a.m., and instructed him to go to the main track switch and let that train into the yard. Brakeman File than left the cabin

car, which was located about 350 feet from the main track switch, and just as he arrived at the switch he saw a train passing the signal east of Conewago, when the train had renched the crossover switch, or about 764 feet cost of the station, he opened the meir track switch as he say that the train was carrying white flags and thought it was the troop train. After throwing the switch he walked up on the station platform about 30 or 40 inet from the switch, giving the engineman a signal to slow down, but he sold he received no response from the enginemen. When the train reached a point about 100 feet from the syntch, he then discovered that it was not the troop train and started toward the syntch, but on realizing that he was too late to close it before the train reached it, he then ran to get out of the may. Brakeman File stated that as the train approached he sou the engireman stting on his seat box, with his aim resing on the window ledge, and he aid not appear to notice the open switch in front of hir, nor did he see him make any rove to sound the whistle or apply the brakes. Brakeman File clearly understood for what train he was to open the switch, as he had been given the engine number, the number of cars in the train, the names of the conductor and engineman, and the time at which it passed Lancaster, he figured that it would probably arrive at Conevago about 10.39 a.m., or 25 minutes after passing Lancaster Biskeman File further stated that about seven or eight minutes elapsed after receiving his instructions from Yardmaster Smith, until the time he reached the switch, but he did not look at his watch then he saw the approaching train as he assumed that it ms the troop train. It further speeared that while he did not know that the troop train was following extra 5409, he was aware of the fact that passenger extras might be run at any time and he had seen several pags on the day of the accident.

Brakeman Garrett, also assigned to assist Acting Assistant Yardmaster Smith, stated that Yardmaster Smith told then that a marrenger extra carrying trooms had passed Lancaster at 10.14 a.m., that the troop train was following train No. 49 out of Frezer. Yardwester S ith instructed each one as to that they were to do when this train orrived. Brakeman Garrott was to handle the train after it entered the yard, and after receiving his instructions he went into the cabin car to get a drink of water and he saw Brakeman File leave on the way to the main trick switch. Braheman Garrett said he was walking through the cabin car to the vest end then he heard an approaching train, looke at hir watch and saw that it was 10.38 a.m., and instartly looked toward the main track switch and saw by the red indication that it was open, the train was then about 25 feet east of the switch. It had been about one minute since Brakeman File left the cabin car, but he did not see Brake an File

near the switch, nor did no see nim at any time until semetime after the accident. Brakeman Garrett further stated that he did not hear a whistle sounded or an application of the brakes.

Car Oiler Heminger and Car Inspector Hassinger stated that they were in the cabin car when Yardmaster Smith announced that the troop train had passed Lancaster at 10.14 a.m., and Car Inspector Hassinger heard his say that the train would arrive to reabout 10.40 a.m. Car Oiler Hamminger than walked westward and was standing in the yard about 700 feet west of the main track switch when he saw the train approaching and heard a blast of the whistle, followed instantly by the decard in the Car Inspector Hassinger had not yet left the cabin car then he heard the roar of the train, and on looking out all he could see was flying dirt.

Track Foreman Sweigart stited that he was standing on the platform of the old firs at station, about 500 feet from the main track switch in a he saw extra 5409 sust after it had parsed the consecrer station. He saw Brakeman File make a dash toward the switch, the train then being about 60 feet from it, but before the brakeman got to the switch the train and reached it and the brakeman jumped away. Track Foreman Steinart did not see Brakeman File when he opened the switch, nor did he notice the target indication until after the consumence of the accident, at thich time it was displaying a red indication, and he also said he did not mean any thistle cipial sounded. The statements of Track Laborer Hoover brought out nothing additional of importance.

Operator Spink, on duty at Conseago, stated that after the train dispatcher notified him that the troop train had passed Frazer tover at 9.20 a.m., he went to the cabin car and told Yardmaster Smith that the troop train had passed Frazer on time, 13 minutes behind train No. 49, and that it would follow train No. 49, also giving the yardmaster the necessary information relative to the troop train. He also had received the report from the train dispatcher that the troop train passed Lancaster at 10.14 a.m. Later when he was sitting at his desk in the telegraph office, talking to Yardmaster Smith, he looked out of the window and saw engine 5409 turn over. He had not heard the train approaching, a whistle signal sounder, nor an application of the brakes.

### Conclusions

This accident was caused by an open switch, for which Brakeman File is responsible.

A temporary organization consisting of relacted men. experienced in this kind of work, was stationed at Conewago on the day of the accident to facilitate and expedite the mandling of passenger extras carrying thoops to the National Guard camp grounds at Mt Gretna, these trains connecting with the Lebanon Branch at Conewago. A troop train had been reported by Lancaster 30 7 miles east of Coneward at 10.14 a 4., and at 10 30 a.m Acting Assistant Yardmaster Smith, in charge of the men, instructed them as to the handling of this train, telling Brakeran File to go to the main track switch and watch for the troop train and lot it into the yard Brakeman File stated that within a very snort time ofter receiving his instructions he went to the switch and just as he releaded it he saw a train passing the last automatic signal, about 3,680 fort distart, and when it had reached a point about 780 feat from the saitch he saw the white flags, indicating a passenger extro, and thinking that it was the troop tion he or ned the statch and then welked toward the station platform 30 or 40 fest, giving the ersing in a signal to reduce speed. When the tivin was about 100 Leet from the gritch he discovered that it was not the troop ticin and he made a dash for the switch but was too late to close it. If Brakemen File di' as he stated, opening the switch when the trun was about 780 feet distant, with the train triveling at a speed of 60 miles per hour. it would have traversed that distance in 8 or 9 sacoids and it would have taken als of that time for him to have changed the position of the two lawers, the circuit control lever and the switch laver, and he would have been in plain view of the engineman thile so engaged. It is believed that Brakeman File opened the scatch immediately after extra 5409 passed the last automatic signal, and than possibly walked away from the switch out of sight of the approaching train, as it would appear that had he remained in sight of the fast-moving train he could not have failed to notice its speed and could have closed the switch in time to prevent the accident. Brakeman File was an experienced employee, and thoroughly understood his duties, having assisted in the handling of troop trains on July 11 of this year, as well as a previous year, he was fully aware of the fact that passerger extras are operated at any time and had seen several pass on the day of the accident and with the information given him concerning the troop tiein, there is no excuse for his failure to properly identify the approaching train before opening the switch.

All of the other employees were experienced men and 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.