

INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN RE
INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON
THE GRAND TRUNK RAILWAY SYSTEM AT BELSAY, MICH.,
ON MAY 28, 1930.

June 25, 1930.

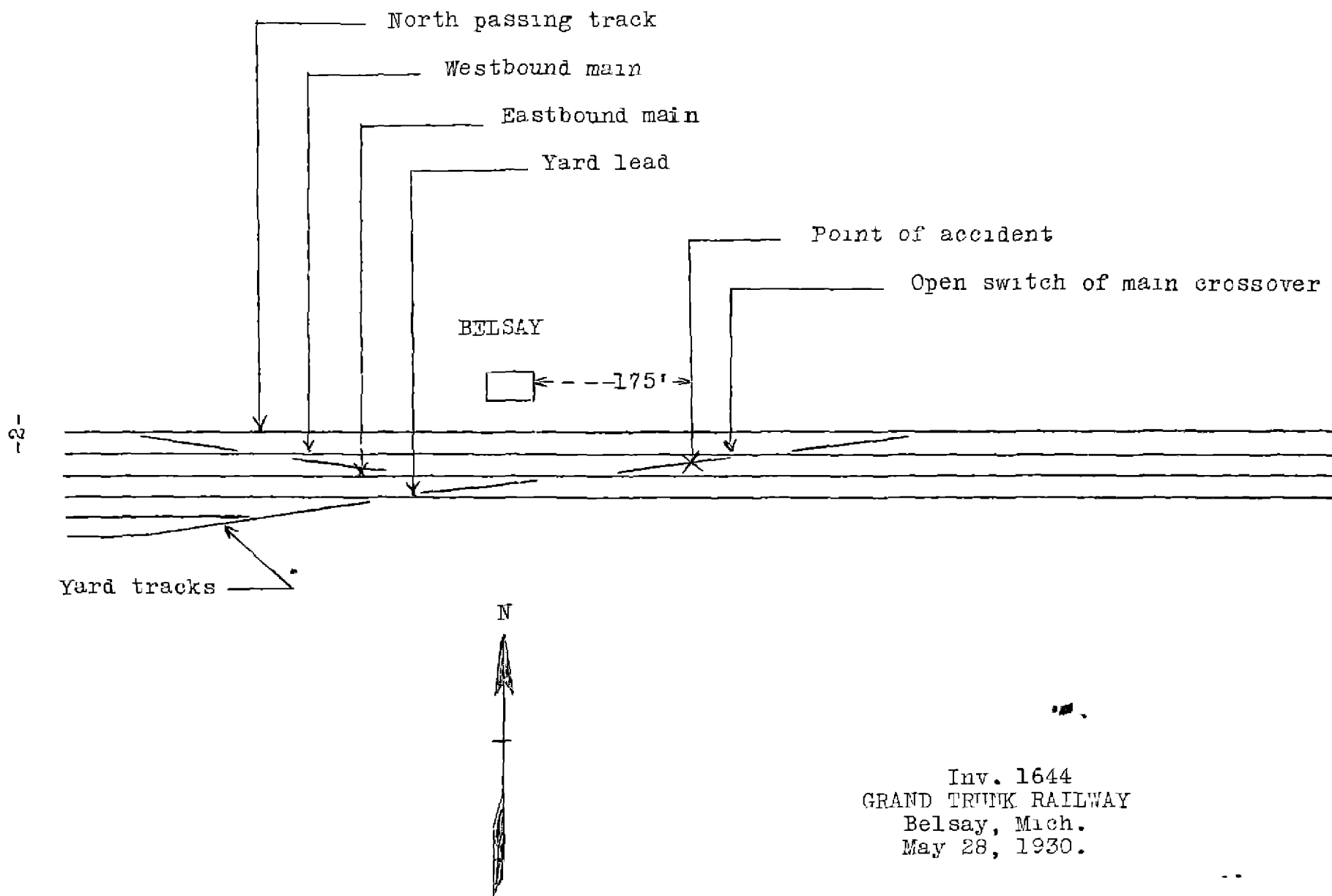
To the Commission:

On May 28, 1930, there was a derailment of a passenger train on the Grand Trunk Railway System at Belsay, Mich., which resulted in the death of two employees and the injury of five passengers, four employees and three persons carried under contract.

Location and method of operation

This accident occurred on that part of the Flint Sub-division of the Chicago Division which extends between Port Huron and Battle Creek, Mich., a distance of 159.3 miles, and is a double-track line over which trains are operated by time-table, train orders, and a manual block-signal system. The accident occurred within yard limits at a crossover between the main tracks about 175 feet east of the station. Approaching this crossover from the east the track is tangent for a distance of 3,132 feet, this tangent extending for some distance beyond the point of accident. The grade is practically level. The main tracks are paralleled on the north by a westbound passing track approximately 2 miles in length and on the south by a running or switching track which extends about 1/2 mile east of the station and a short distance west of the station where it becomes a lead track from which the various yard ^{tracks} branch off.

The east switch of the crossover involved in this accident is a facing-point switch for westbound trains and is of the ground-throw type. The switch-stand is located between the westbound main track and the north passing track. The switch has an oval, 6 x 10 inch, red banner, which shows only when set for diverging movements. The lamp has a 4 1/4 inch lens showing green for straight movements and red for diverging movements. Approaching from the east the



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lamp and stand of this switch when set for a diverging movement are in line with the east switchstand of this crossover located 229 feet 8 inches to the east, and the view is also interfered with by the west switchstand of another crossover which has a 10 inch round banner, standing slightly higher and located 27 feet 8 inches east thereof. There were four other crossovers in this vicinity, connecting passing tracks with main tracks.

The weather was cloudy at the time of the accident, which occurred about 2.20 p.m.

Description

Westbound passenger train No. 17 consisted of one mail car, one baggage car, one dining car, four coaches, one Pullman car, one parlor car, one Pullman car, and one dining car, in the order named, hauled by engine 5632, and was in charge of Conductor Thomaszeski and Engineman Norden. The first, second, fifth and seventh cars were of steel construction, while the remaining cars were of steel underframe construction. This train departed from Port Huron, 61.71 miles east of Belsay at 1 p.m., 40 minutes late, passed Davison, the last open office, 5.01 miles from Belsay, at 2.15 p.m., 42 minutes late, and was derailed at an open switch at Belsay while traveling at a speed estimated to have been between 40 and 60 miles per hour.

The train entered the crossover between main tracks and traveled a short distance when it became derailed. The engine with tender behind it and the first car came to rest on their left sides parallel to each other but diagonal to the line of the main tracks, on the first two yard tracks at a point about 610 feet beyond the initial point of derailment. The second car was tilted toward the left practically parallel with the first car and the third car came to rest on its left side south of the yard lead track. The next 5 cars were also derailed but remained upright, in line with the three remaining cars which were not derailed, the rear truck of the 10th car stopping on the open switch points. The employees killed were the engineman and fireman.

The first mark of derailment was on the north rail of the crossover at a point about $15\frac{1}{2}$ feet west of the frog and indicated a wheel had climbed the rail and dropped off on the north side of the crossover track. The following mark was a wheel flange mark on a tie just north of the north rail about $21\frac{1}{2}$ feet west of the frog. Beginning at a point about 4 feet west of the mark on the tie the tracks were completely torn out for a distance of over 250 feet.

Summary of evidence

Conductor Thomaszeski, of train No. 17, stated that he was riding in the second car and the first notice he had of the impending accident was a crash when the engine left the track; he did not know whether the air brakes were applied before the train entered the crossover. He estimated the speed at the time of the accident to have been between 40 and 50 miles per hour. Conductor Thomaszeski examined the crossover about 10 minutes after the occurrence of the accident and found the east switch set for a crossover movement and locked, the rear truck of one of the cars stood on the switch points so that the switch could not be thrown. He further stated that the air brakes had been properly tested. Other employees on this train estimated the speed from 45 to 60 miles per hour. Rear Brakeman Savage stated that when he got off from the next to the last car the switch indication was red.

On the date of this accident there were several trains, switch engines and railway motor cars passing and working in the vicinity of Belsay. The investigation disclosed that the last crossover switch was last used by Lineman DeLaVergne, who had charge of a motor car. He stated that after working with his gang of men in the vicinity of Belsay he went back to Davison for dinner, returning to Belsay on the west-bound main track about 1 p.m. He unloaded men and supplies at the east switch of the north passing track and accompanied by Laborer Culver he proceeded westward with the motor car, pushing two trailers, to the crossover between main tracks at the east end of Belsay yard where he gave his switch key to Laborer Culver and

instructed him to open the switch. After entering the crossover he stopped the motor car clear of the switch points, Laborer Culver had relined the switch, but had not locked it. He told Laborer Culver to lock the switch, but he did not look back at it again nor did he look at the target. He then proceeded toward the west switch which Laborer Culver also opened and locked after the motor car passed through onto the eastbound main track. Lineman DeLaVergne said they then proceeded eastward on the eastbound main track until they reached a point just beyond the east end of the south passing track where they met another motor car, in charge of Insulating Joint Foreman Warner. Lineman DeLaVergne backed his own car clear of the switch so this other motor car could enter the south passing track and he paid no further attention to that car. He continued toward Davison and did not learn of the accident until some time after its occurrence. Lineman DeLaVergne had worked for this railroad intermittently since August 1925. He had been in charge of a motor car for about a year and at the time he was put in charge Foreman McConkey showed him a book of rules, he had not seen one since that time, but he did have a card covering the regulations governing the use and operation of motor cars and push cars, and said he was familiar with these instructions.

The statements of Laborer Culver corroborated those of Lineman DeLaVergne as to their movement through the main crossover at Belsay about 1 p.m. He said that after opening and closing the east switch the lineman told him to lock it, which he did, and he said he took particular notice to see if they were lined all right; he looked at the rails but did not look at the target. This statement was made to the trainmaster on the evening of the accident, but when the investigation of this accident was conducted several days later Laborer Culver had disappeared and could not be located.

Line Gang Foreman McConkey stated that on the morning of the accident he separated the 18 men into two gangs, one gang was working east of Davison and the other, in charge of Lineman DeLaVergne, was working between Davison and Belsay. Foreman McConkey was working with the gang east of Davison and did not arrive at Belsay until after the accident.

Conclusions

This accident was caused by an open switch.

The crossover involved was last used by Lineman DeLaVergne when he operated his motor car with two trailers through it from the westbound to the eastbound track, and while he said he told Laborer Culver to lock the east switch after he saw that it had been lined for the main track, he did not again look back at the switch or the target. The regulations governing the use and operation of motor cars and hand cars provide that when necessary to use switches, they are to be turned only under the supervision of the foreman who is held responsible for seeing that they are left properly set and locked. Under the circumstances Lineman DeLaVergne was responsible for use of this crossover, but it is apparent that neither he nor Culver took sufficient precaution to know that the switch was properly lined and locked after they had used it.

Laborer Culver said he lined and locked the east switch, that he looked at the rails but he did not look at the target. The fact that Laborer Culver could not be located after making his statement on the night of the accident indicates some doubt in his own mind as to the position of the switches. Had either Lineman DeLaVergne or Laborer Culver looked at the target, it no doubt would have been discovered that this switch had not been properly set and locked and this accident would not have occurred.

In approaching these switches from the east on the westbound main track, it was found that with all the other switches set in normal position and the east switch of the crossover between main tracks open, a portion of the red banner could be distinguished in cloudy weather for a distance of approximately 800 feet from the engineman's side of the engine cab, but a clear view of the banner could not be had until a point about 100 feet east of the switch had been reached. It could be definitely determined that the points were open at a distance of 380 feet.

It is recommended that the switchstands in the vicinity of the point of accident be so arranged that the lamp lenses and switch targets will be plainly visible from approaching trains.

An automatic block-signal system is in operation from Chicago to Belsay Yard and is being extended to Port Huron. It is expected this signal system will be in operation at Belsay within a period of 45 days. Had this signal system been in operation at the time, this accident would no doubt have been prevented.

Lineman DeLaVergne had been in the employ of this railroad approximately 4 years from August 2, 1925 to February 23, 1929, and had been in continuous service since May 21, 1929. Laborer Culver had been in service from June 16, 1926 to February 9, 1929, and was re-employed on May 21, 1930. All of the other 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.