

Inv-2350

INTERSTATE COMMERCE COMMISSION
WASHINGTON

REPORT OF THE DIRECTOR
BUREAU OF SAFETY

ACCIDENT ON THE
ANN ARBOR RAILROAD

McBAIN, MICH.

May 18, 1959

INVESTIGATION NO. 2350

SUMMARY

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Inv-2350

Railroad: Ann Arbor
Date: May 18, 1939
Location: McBain, Mich.
Kind of accident: Collision
Equipment involved: Freight train : gasoline tank truck
Train number: Extra 2480
Engine number: 2480
Consist: 39 cars and : tractor hauling
caboose : tank trailer
Speed: 30-40 m.p.h. : 5-10 m.p.h.
Operation: Timetable and train orders
Track: Single; 3° curve to the right; grade
practically level
Highway: Tangent 5 miles; crosses the tracks
at an angle of 42° 30'
Weather: Clear
Time: About 9:05 a.m.
Casualties: 1 killed; 3 injured
Cause: Truck driven upon railroad crossing
at grade in front of approaching
train

July 11, 1939.

To the Commission:

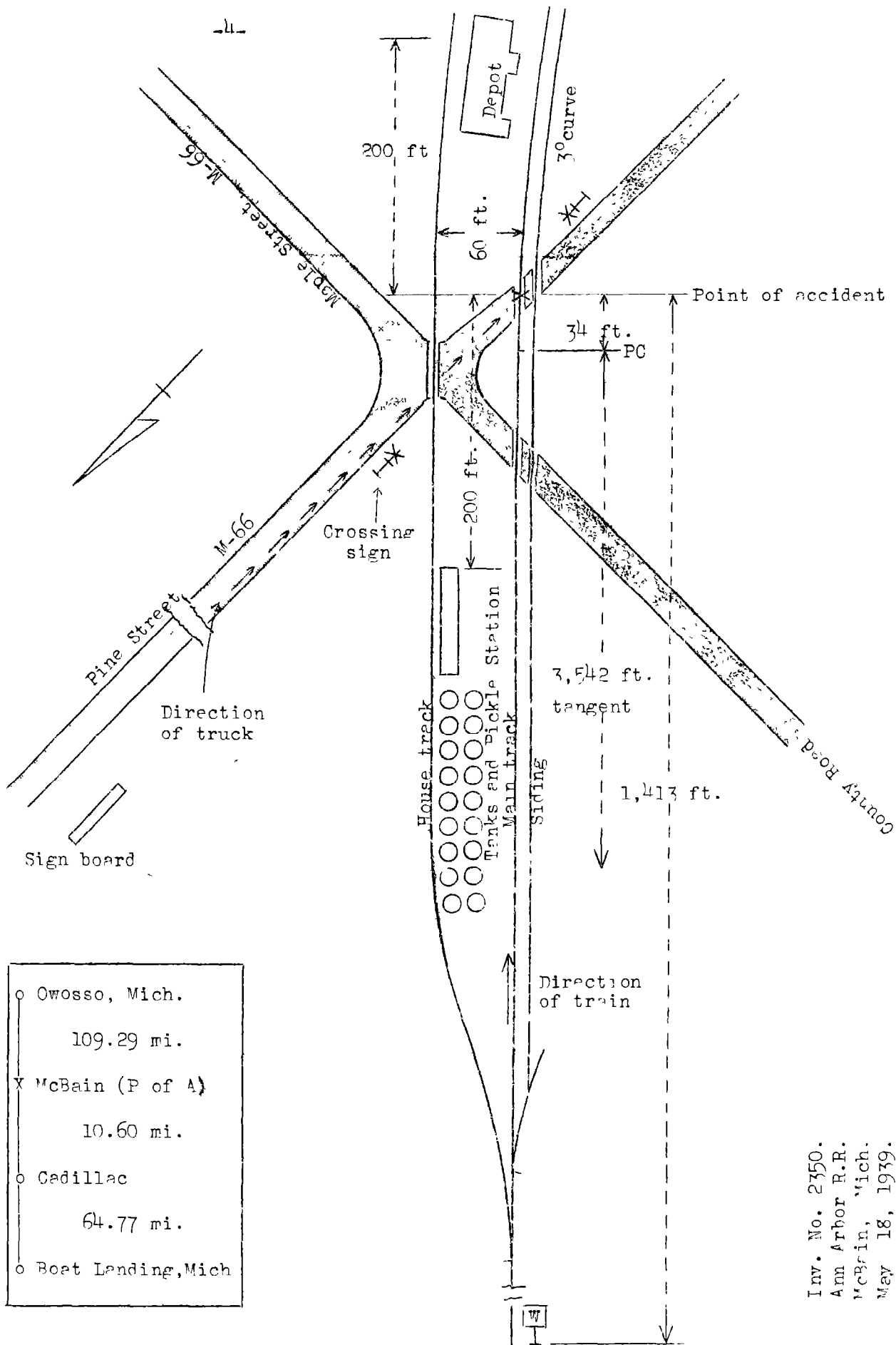
On May 18, 1939, there was a collision between a freight train and an automobile tank-truck at a highway grade crossing on the Ann Arbor Railroad at McBain, Mich., which resulted in the death of the driver of the truck and the injury of three railroad employees.

Location and Method of Operation

This accident occurred on the Second Division, which extends between Owosso and Boat Landing, Mich., a distance of 184.66 miles. In the vicinity of the point of accident this is a single-track line over which trains are operated by timetable, and train orders, no block-signal system being in use. The accident occurred on the main track at Pine Street crossing, located 200 feet west of the station at McBain. Approaching from the west on the railroad there is a tangent 3,542 feet in length, followed by a 3° curve to the right which extends 34 feet to the point of accident and 1,016 feet beyond. The grade is practically level at the point of accident.

A house track, 1,309 feet in length, parallels the main track on the north side at a distance of 60 feet and a siding, 2,392 feet in length, parallels the main track on the south side at a distance of 13 feet. Pine Street, which is a part of State Highway No. M-66, extends north and south and crosses these three tracks at an angle of 42° 30'. This street is paved with concrete and is 20 feet in width to a point about 6 feet north of the north rail of the house track. From this point southward it is surfaced with stone screenings and cinders and is 16 feet wide. The crossing at the house track is 49 feet wide and those at the main track and the siding are 16 feet wide; the crossings are constructed of 4 by 10-inch oak planks. Just north of the house track crossing, Highway M-66 diverges to the east on Maple Street. The grade on Pine Street is generally ascending southward, the total rise being about 3 feet in a distance of 352 feet just north of the house track crossing. From this crossing to the main track crossing, a distance of 98 feet, the total rise is about 2.5 feet. The grade is somewhat irregular but is fairly well maintained.

The crossing involved is protected by two cross-buck signs, which are furnished by the State Highway Department and bear the words "RAILROAD CROSSING 3 TRACKS" in reflector buttons. One sign is located 25 feet west of the center-line of Pine Street and 168 feet north of the center-line of the main track, or 70 feet north of the center-line of the house



o	Owosso, Mich.
	109.29 mi.
X	McBain (P of A)
	10.60 mi.
o	Cadillac
	64.77 mi.
o	Boat Landing, Mich

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track; the other sign is located south of the siding and east of the street. The tops of these signs are about 11 feet above street level.

At a point 300 feet north of the main track, the driver of a south-bound vehicle could have an unobstructed view of an approaching east-bound train a distance of 950 feet. Between 300 and 210 feet the view is obstructed by a sign-board 15 feet high by 51 feet wide, located 57 feet west of the center-line of the street. From 210 to 100 feet the view is unobstructed a distance of 1,250 to 1,390 feet. A pickle-station building, 30 feet wide, 75 feet long, and 18.5 feet high, located 200 feet west of the crossing and 29 feet north of the main track, obstructs the view from 100 feet to 49 feet north of the main-track crossing. At 49 feet the view is unobstructed a distance of 750 feet; at 33 feet the view is unobstructed a distance of 3,600 feet; between 33 and 25 feet a pole line obscures the view, and from 25 feet to the main track the view is unobstructed a distance of 3,600 feet.

Rules 14(1) and 31(A) of the transportation department provide that when approaching public crossings at grade engineers shall at all whistling posts sound two long and two short blasts on the engine whistle and continue the signal until the crossing is reached.

The whistle post for east-bound trains is located 1,413 feet west of Pine Street crossing.

Section 41 of the motor carrier rules and regulations of the Michigan Public Utilities Commission reads in part as follows:

***"No driver of any motor vehicle under certificate or permit from this Commission, shall drive such vehicle across railroad tracks at grade without first bringing the vehicle to a full stop at a point where he has a clear view of the railroad track in either direction, and without having looked in both directions and ascertained that there are no approaching trains, and without having shifted the gears of the vehicle to low speed before proceeding across such tracks."

The maximum authorized speed for freight trains in this vicinity is 45 miles per hour.

The weather was clear at the time of the accident, which occurred about 9:05 a.m.

Description

Extra 2480, an east-bound freight train, consisted of 39 loaded cars and a caboose, hauled by engine 2480, of the 2-8-2 type, and was in charge of Conductor Crossen and Engineman Byerly. This train departed from Boat Landing, 75.37 miles west of McBain, at 6:15 a.m., according to the train sheet, passed Cadillac, the last open office, 10.60 miles west of McBain, at 8:45 a.m., and, when approaching McBain station, struck a gasoline motor-truck at Pine Street crossing while traveling at a speed estimated to have been between 30 and 40 miles per hour.

The motor truck involved was a 1934 model A-4, 6 cylinder, International tractor equipped with an enclosed cab constructed of steel, and was hauling a Fruehauf semi-trailer equipped with a four-compartment gasoline tank which was loaded with about 3,040 gallons of gasoline. The tractor was equipped with two auxiliary gasoline tanks, each having a capacity of 25 gallons, which contained gasoline for the operation of the vehicle. The total length of the tractor and the trailer was about 36 feet. The rear axle of the tractor and the axle of the trailer were equipped with dual wheels having 4-inch double-line "BK" power brakes. The light weights of the tractor and the trailer were 7,300 and 8,290 pounds, respectively, and the gross weight was 35,350 pounds. The truck was owned by the Rumsey Trucking Company of Holland, Mich., and was being driven by Edward H. Bliss. It left Falmouth, Mich., located about 7 miles north of McBain, shortly after 8 a.m., and was proceeding over the main track at the latter point at a speed estimated to have been between 5 and 10 miles per hour when the trailer was struck by Extra 2480.

The tank exploded and gasoline which became ignited was sprayed over the locomotive and the train. The tractor was thrown to the south and stopped on the siding 95 feet east of the crossing. The trailer was thrown to the north of the main track and stopped with the rear end 65 feet west of the crossing and its front on top of an automobile, which was destroyed. An oil house, located 100 feet east of the crossing, also was destroyed. The engine, with all cars remaining coupled, stopped 1,200 feet east of the crossing with its front end badly damaged by the collision and the interior of the cab destroyed by fire. Some of the first 24 cars of the train were badly burned and the others were scorched. The driver of the truck was killed. The employees injured were the engineman, the fireman and the head brakeman.

Summary of Evidence

Engineman Byerly stated that an air-brake test was made at Boat Landing and the brakes functioned properly en route. At a point about one mile west of McBain he made an application of the air brakes, reducing the speed of the train to about 40 miles per hour. Approaching the point of accident he was looking ahead and was using a drifting throttle. The engine bell was ringing and he was sounding the engine whistle signal for the crossing. When the engine was a short distance west of Pine Street the fireman and the brakeman called warnings. This was the first intimation he had of the truck being driven upon the track, and he immediately applied the brakes in emergency, then the collision occurred. He and the other two members of the crew jumped from the right side of the engine at a point just east of the depot. He went to the point where the engine stopped and observed that the bell was still ringing.

The statements of Fireman McKeller and Brakeman McKeller, who occupied the left seat-box, corroborated that of the engineman in all details, except that they estimated the speed of the train as about 35 miles per hour at the time of the accident. The first they know of the truck approaching the crossing was when it came into view from behind the pickle-station building, and it appeared to be barely moving as though it was being stopped. At this time the engine was not over 40 or 50 feet from the crossing.

Conductor Crossen stated that the weather was clear and the visibility was good. Approaching McBain he occupied the left side of the cupola of the caboose. He estimated that the train was traveling at a speed of about 40 miles per hour when the air brakes became applied in emergency. This was followed by an explosion and flames. He said that the train stopped at 9:06 a. m., with the twenty-eighth car of the train standing on the crossing.

The statement of Rear Brakeman Hansen brought out no additional information of importance.

Section Foreman Geeseman, located at McBain, stated that he inspected the crossing involved about one hour prior to the accident and found the planks to be firmly in place and in good condition. The roadway was free from ruts and chuck holes.

Roadmaster Holmberg inspected this crossing on May 12 and rode over it on a train on May 15 and found it to be in good condition.

E. C. Constable, of McBain, Mich., stated that he was walking westward on the north side of Maple Street and saw the freight train approaching and heard the engine whistle sounded. He then saw the truck approaching from the north on Pine Street and when it passed him, at a speed of about 5 miles per hour, he observed that the driver was sitting erect. The truck did not stop at any time but passed over the house track and continued on toward the main track, at which time the train was about 200 feet west of the crossing and the engine whistle was still being sounded. He stated that there were no indications that the driver had observed the train, although there was nothing to prevent him from seeing it.

Harry S. Ellens, of McBain, Mich., employed as a truck driver, stated that he stopped his truck about 40 feet west of the main-track crossing, at which time the train was about 150 feet west of the crossing. He saw the truck approaching from the north on Pine Street and when it was about 50 feet north of the crossing involved he ran toward the truck and tried to attract the attention of the driver by calling to him and waving his hand. He estimated that the truck was traveling at a speed of about 10 miles per hour. He said that the driver was looking ahead and made no attempt either to reduce speed or to stop. He said that at the time there were no other vehicles in this vicinity and, except for the pickle-station building, there was nothing to obstruct the driver's view of the approaching train.

Station Agent Watson, located at McBain, stated that he was in the waiting room of the station and heard the crossing signals sounded. Shortly afterward he went outside and heard the engine bell ringing and observed that the front of the locomotive was covered with fire.

John J. Longstreet, of McBain, Mich., a feed and grain dealer, stated that he was in the west end of his building, which is located on the north side of Maple Street about one-half block east of the railroad, and heard the engine whistle sounded.

W. C. Van Deusen, a resident of McBain, Mich., stated that he was at his home, which is located about 1,155 feet west of the depot, and heard the engine whistle being sounded as the train approached the crossing at a speed of about 30 miles per hour.

John H. De Ruiter, employed as a clerk by the Falmouth Co-operative Company, at Falmouth, Mich., said that the

driver of the truck came into his office about 9 a.m., and it was discovered that the load of gasoline had been erroneously billed and was intended for McBain. He said that he had never seen the driver before, but that he appeared to be mentally alert. He did not know whether the driver was familiar with the route to McBain, but he informed him how to reach their building at that point.

P. Rumsey, of the Rumsey Trucking Company, Holland, Mich., stated that Edward H. Bliss had been a licensed driver 6 or 7 years. He employed him about 14 months ago and informed him at that time of the requirements of the State highway laws and instructed him to obey them. He considered him a good driver; his personal habits were good and he did not believe the driver used intoxicating liquors. He held chauffeur's license No. 60025, issued by the State of Michigan for the year 1939. When Driver Bliss reported for duty at 11:55 p.m., May 17, after having been off duty 12 hours 40 minutes, his physical and mental condition appeared to be good. He was instructed to take the gasoline to Falmouth, located approximately 130 miles north of Holland, and he departed at 12:10 a.m. The driver was familiar with the route to Falmouth, but because of detours he was not thoroughly familiar with the road between Falmouth and McBain. The brakes of the tractor and the trailer were last inspected on May 17 and were found to be in good condition.

Train movements over the crossing involved covering a 30-day period showed an average daily movement of 6.9 trains.

Observations of Commission's Inspectors

A check of traffic at Pine Street crossing for a 24-hour period showed a total of 8 trains and a total of 224 motor vehicles. Of the total number of motor vehicles, 74 were trucks, including gasoline trucks, and only 7 of these stopped before crossing the track. It was also observed that between 4:15 and 5:15 p.m., May 23, McBain school bus No. 3, loaded with children, passed over this crossing without stopping. On the following day between the hours of 8:15 and 9:15 a.m., McBain school bus No. 2, with no passengers, passed over this crossing southward without stopping; on its trip northward it carried several children and again failed to stop before crossing the track. The crossing whistle-signal was sounded by the enginemen of all the trains.

Discussion

The investigation of this accident disclosed that the crossing whistle-signal was being sounded and the engine bell

was ringing as Extra 2480 approached the crossing at a speed estimated to have been between 30 and 40 miles per hour. The fireman and the brakeman called warnings to the engineman when they first saw the truck moving slowly toward the track, at which time the train was about 40 or 50 feet from the crossing. The engineman immediately applied the brakes in emergency, but this distance was insufficient in which to appreciably reduce the speed of the train.

Approaching the crossing from the north the driver's view of an approaching east-bound train was unobstructed for various distances as progress toward the crossing was made. Throughout a distance of 25 feet immediately north of the crossing the view was unobstructed a distance of 3,600 feet.

According to statements of witnesses, the truck was traveling at an estimated speed of 5 to 10 miles per hour and proceeded over the house track and upon the main track crossings without stopping. When it was within about 50 feet of the crossing involved one of the witnesses endeavored to direct the driver's attention to the approaching train by calling to him and by waving his hand. The driver had been on duty approximately 9 hours 15 minutes, most of which was during the night, prior to which he was off duty 12 hours 40 minutes. According to the evidence, the driver was not thoroughly familiar with the route between Falmouth and McBain, but the crossing involved was provided with cross-buck sign boards furnished by the State Highway Department. He had been instructed on the requirements of the State highway laws and if he had obeyed them this accident would not have occurred. It could not be determined why the driver failed either to heed the warnings or to observe the approaching train, as he was killed in the accident.

This investigation disclosed that notwithstanding existing regulations prescribed by the State Commission only a small percentage of vehicles stopped at the crossing involved. Among the vehicles that did not stop were gasoline trucks and also school busses carrying children. It is apparent that the rules and regulations of the Michigan Public Utilities Commission are not being properly enforced and obeyed.

Conclusion

This accident was caused by a gasoline tank-truck being driven upon a railroad crossing at grade directly in front of an approaching train.

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Recommendation

It is recommended that the rules and regulations governing the operation of motor vehicles at railroad grade crossings be strictly enforced.

Respectfully submitted,

W. J. PATTERSON,

Director.