INTERSTATE COMMERCE COMMISSION

WASHINGTON

REPORT NO. 3740

THE PEORIA AND EASTERN RAILWAY COMPANY
AND
CHICAGO, MILWAUKEE, ST. PAUL AND PACIFIC
RAILROAD COMPANY

IN RE ACCIDENT

AT WALZ, ILL., ON

MARCH 8, 1957

SUMMARY

Date:	March 8, 1957	
Railroads:	Peoria and Eastern	: Chicago, Milwaukee, St. Paul and Pacific
Location:	Walz, Ill.	
Kind of accident:	Side collision	
Trains involved:	Freight	: Freight
Train numbers:	No. 95	: No. 77
Locomotive numbers:	Diesel-electric units 5619, 5616, and 5617	: Diesel-electric units 80D, 72B, and 75A
Consists:	94 cars, caboose	: 118 cars, caboose
Speeds:	36 m. p. h.	: 7 m. p. h.
Operation:	Interlocking	
Tracks:	Single; tangent; level	: Single; tangent; level
Weather:	Clear	
Time:	6:53 a. m.	
Casualties:	5 injured	
Cause:	Failure to operate the P.& E. train in accordance with signal indications	

INTERSTATE COMMERCE COMMISSION

REPORT NO. 3740

IN THE MATTER OF MAKING ACCIDENT INVESTIGATION REPORTS
UNDER THE ACCIDENT REPORTS ACT OF MAY 6, 1910.

THE PEORIA AND EASTERN RAILWAY COMPANY
AND
CHICAGO, MILWAUKEE, ST. PAUL AND PACIFIC RAILROAD COMPANY

May 20, 1957

Accident at Walz, Ill., on March 8, 1957, caused by failure to operate the Peoria and Eastern train in accordance with signal indications.

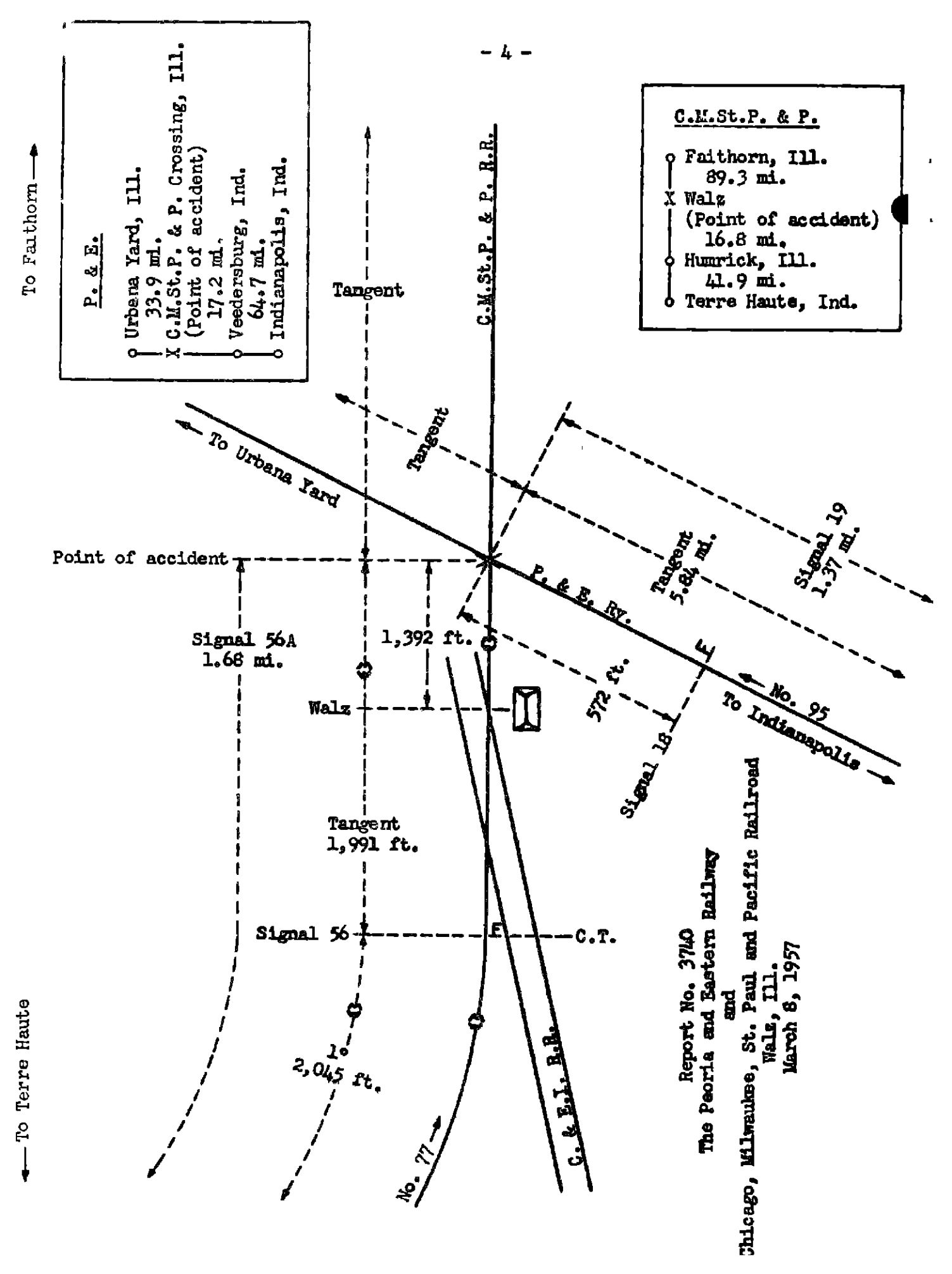
REPORT OF THE COMMISSION[1]

TUGGLE, Commissioner:

On March 8, 1957, there was a side collision between a freight train on the Peoria and Eastern Railway and a freight train on the Chicago, Milwaukee, St. Paul and Pacific Railroad at Walz, Ill., which resulted in the injury of five train-service employees. This accident was investigated in conjunction with a representative of the Illinois Commerce Commission.

---

[1] Under authority of section 17 (2) of the Interstate Commerce Act the above-entitled proceeding was referred by the Commission to Commissioner Tuggle for consideration and disposition.



Report No. 3740
The Peoria and Eastern Railway
and
Chicago, Milwaukee, St. Paul and Pacific Railroad
Walz, Ill.
March 8, 1957

Location of Accident and Method of Operation

This accident occurred at the intersection of the Peoria and Eastern Railway and the Chicago, Milwaukee, St. Paul and Pacific Railroad at Walz, Ill. The crossing is designated as C.M.St.P.& P. Crossing by the P.& E., and as Walz by the C.M.St.P.& P. The designation Walz is used in this report. The crossing is located on that part of the P.& E. extending between Indianapolis, Ind., and Urbana Yard, Ill., 115.8 miles, and on that part of the C.M.St.P.& P. extending between Terre Haute, Ind., and Faithorn, Ill., 148.0 miles. Walz is 81.9 miles west of Indianapolis and 58.7 miles north of Terre Haute. In the vicinity of the point of accident the P.& E. is a single-track line, over which trains are operated by timetable, train orders, and a manual block-signal system. The C.M.St.P.& P. is a single-track line, over which trains are operated by timetable and train orders. There is no block system in use. The tracks intersect at an angle of 63°35'. The track of the P.& E. is tangent throughout a distance of 5.84 miles immediately east of the crossing and a considerable distance westward. From the south on the C.M.St.P.& P. there is a 1° curve to the left 2,045 feet in length and a tangent 1,991 feet to the crossing and a considerable distance northward. The grade on both lines is practically level.

Movements over the crossing are governed by interlocking signals. Approach signal 19 and interlocking signal 18, governing west-bound movements on the P.& E., are located, respectively, 1.37 miles and 572 feet east of the crossing. Approach signal 56A and interlocking signal 56, governing north-bound movements on the C.M.St.P.& P., are located, respectively, 1.68 miles and 1,991 feet south of the crossing. Signals 19 and 56A are of the one-arm upper-quadrant electrically-operated semaphore type, and signals 18 and 56 are of the two-arm upper-quadrant mechanically-operated semaphore type. Aspects applicable to this investigation and the corresponding indications and names are as follows:

Signal	Aspect	Indication	Name
19	Diagonal	Proceed, prepared to stop at intervening switches and next signal. Trains exceeding medium speed must at once reduce to that speed.	

18	Horizontal-over-horizontal	Stop.	
18	Vertical-over-horizontal	Proceed.	
56A	Diagonal	Proceed prepared to stop at next signal. Train exceeding medium speed must at once reduce to that speed.	Approach signal.
56	Horizontal-over-horizontal	Stop.	Stop signal.
56	Vertical- over-horizontal	Proceed.	Clear signal.

Within interlocking limits at Walz a double-track line of the Chicago & Eastern Illinois Railroad crosses the line of the C.M.St.P.& P. at a point 1,392 feet south of the P.& E. crossing. The interlocking station is in the northeast angle of the intersection of the C.& E.I. and the C.M.St.P.& P. The interlocking machine is of the mechanical type and consists of 15 working levers. Mechanical, route, and time locking are provided. The mechanical locking and control circuits are so arranged that after a signal has been displayed for the movement of a train through the interlocking, a route cannot be lined for a conflicting movement until the train for which the signal was displayed has passed through the interlocking limits or until a predetermined time interval has elapsed after the indication of the signal has been changed to Stop.

Operating rules of the P.& E. read in part as follows:

> 34. The engineman and fireman must, and when practicable the trainmen will, communicate to each other the indication of all signals affecting the movement of their train.

SIGNAL DEFINITIONS

> Medium Speed.--A speed not exceeding thirty miles per hour.

The maximum authorized speeds were 50 miles per hour for the P.& E. train and 40 miles per hour for the C.M.St.P.& P. train.

Description of Accident

No. 95, a west-bound second-class P.& E. freight train, consisted of Diesel-electric units 5619, 5616, and 5617, coupled in multiple-unit control, 94 cars, and a caboose. This train passed Veedersburg, Ind., 17.2 miles east of Walz, the last open office, at 6:21 a. m., 3 hours 11 minutes late. It passed signal 19, which indicated Proceed-prepared-to-stop-at-intervening-switches-and-next-signal, passed signal 18, which should have indicated Stop, and while moving over the crossing at Walz at a speed of 36 miles per hour, as indicated by the tape of the speed-recording device, the side of the locomotive was struck by No. 77.

No. 77, a north-bound second-class C.M.St.P.& P. freight train, consisted of Diesel-electric units 80D, 72B, and 75A, coupled in multiple-unit control, 118 cars, and a caboose. This train departed from Humrick, Ill., 16.8 miles south of Walz, the last open office, at 5:44 a. m., 3 hours 54 minutes late, passed signal 56A, which indicated Proceed-prepared-to-stop-at-next-signal, and stopped at signal 56, which indicated Stop. Several minutes later the indication of the signal changed to Proceed. The train then started forward, and while moving at a speed of 7 miles per hour, as indicated by the tape of the speed-recording device, it struck the locomotive of No. 95.

The rear truck of the second Diesel-electric unit, the third Diesel-electric unit, and the first 23 cars of No. 95 were derailed. The first two Diesel-electric units stopped with the front of the first unit approximately 540 feet west of the crossing. The third unit stopped on its right side in the northwest angle of the intersection and parallel to the P.& E. track. The derailed cars stopped in various positions on or near the track. The third Diesel-electric unit and 14 of the derailed cars were badly damaged, and the second Diesel-electric unit and the other derailed cars were somewhat damaged. The twenty-fourth car was slightly damaged. The Diesel-electric units, the first three cars, and the front truck of the fourth car of No. 77 were derailed. The first two units stopped a short distance west of the crossing, across the P.& E. track and at right angles to it. The third unit stopped across the C.M.St.P.& P. track a short distance south of the crossing. The derailed cars stopped in various positions on or near the track. The Diesel-electric units and the first three cars were badly damaged.

The engineer and the swing brakeman of No. 95 and the engineer, the fireman, and the front brakeman of No. 77 were injured.

The weather was clear and the sun was shining at the time of the accident, which occurred at 6:53 a. m.

The Diesel-electric units of No. 95 were of the road-switcher type.

Discussion

As No. 95 was approaching the point where the accident occurred the enginemen were in the control compartment of the first Diesel-electric unit, the front brakeman and the swing brakeman were in the control compartment of the second Diesel-electric unit, and the conductor and the flagman were in the caboose. The enginemen said that signal 19 indicated Proceed prepared-to-stop-at-intervening-switches-and-next-signal and that they called the indication. The engineer said that when the locomotive reached a point about 400 feet east of signal 19 he saw that signal 18 indicated Proceed, and after the locomotive passed signal 19 he called the indication and the fireman answered him. The fireman said that as the locomotive passed signal 19 he saw the indication of signal 18 change from Stop to Proceed. Neither of the enginemen saw No. 77 until their locomotive was closely approaching the crossing. The fireman then saw the train and called a warning. The collision occurred almost immediately afterward. Neither the front brakeman nor the swing brakeman was acquainted with the physical characteristics of the railroad in the vicinity of the point of accident, and neither of them saw the indication of either signal. They said they could see that the enginemen were in their respective positions in the control compartment of the first Diesel-electric unit before the accident occurred, and the front brakeman said that the fireman appeared to be talking with the engineer. Neither of these employees saw No. 77 before the accident occurred. According to the tape of the speed-recording device the speed of the train was approximately 34 miles per hour as the locomotive passed signal 19 and approximately 36 miles per hour at the time of the collision.

When No. 77 stopped at signal 56 the enginemen and the front brakeman were in the control compartment at the front of the locomotive. The conductor and the flagman were in the caboose. After the train stopped, a C.& E.I. locomotive with cars moved over the crossing. The indication of signal 56 then changed to Proceed, and the train was started forward.

As the locomotive passed the interlocking station the engineer received a message from the train dispatcher. He read the message and then handed it to the front brakeman. When the brakeman reached for the message he saw No. 95 approaching. He warned the engineer, and the engineer immediately closed the throttle and made an emergency brake application. The collision occurred immediately afterward.

The operator at Walz said that a south-bound C.& E.I. yard locomotive with cars cleared the interlocking limits at 6:40 a. m. and he then lined the route for the movement of No. 77. After the front of the locomotive passed signal 56 he restored the signal to Stop position and then descended to the ground to inspect the train as it passed. After the locomotive and several cars had passed him he heard No. 95 approaching. His attention was attracted by the fact that the train was in the vicinity of signal 19 and the sound of the exhaust indicated that the Diesel engines were still working under load, and he returned to the second floor of the interlocking station and watched the train approach. He said that when signal 18 indicates Proceed the top of the semaphore is visible from the interlocking station, and that the signal did not indicate Proceed as No. 95 approached and passed it. He said that the route had not been lined for a west-bound P.& E. train during his tour of duty.

The signal maintainer at Walz was in the interlocking station when the accident occurred. He said that after the operator lined the route for the movement of No. 77 none of the levers of the interlocking was moved with the exception of restoring signal lever 56 to normal position. He saw No. 95 approach and pass signal 18, and he said that at that time the signal did not indicate Proceed. After the accident occurred the route levers of the interlocking were in position for the movement of No. 77.

The pipe lines of the interlocking in the vicinity of the crossing were demolished by derailed equipment. The acting chief engineer of the Signals and Communications Department of the C.M.St.P.& P. examined the interlocking on the day after the accident occurred. He found damage to the pipe line and connections which indicated that before the accident occurred the pipe line was intact between the interlocking station and the point at which it was struck by derailed equipment. He also found broken castings and other damage at signal 18 which indicated that the signal arm had been moved to Proceed position with considerable force at the time the pipe line was struck, and from this it appears that the signal could not have been in Proceed position at the time No. 95 passed it. The pipe line and connections of signal 3,

which governs east-bound P.& E. movements over the crossing, were damaged in a similar manner. The undamaged portions of the interlocking were tested after the accident occurred and were found to function as intended.

Cause

This accident was caused by failure to operate the P.& E. train in accordance with signal indications.

Dated at Washington, D. C., this twentieth day of May, 1957.

By the Commission, Commissioner Tuggle.

(SEAL)

HAROLD D. McCOY,

Secretary.