

INTERSTATE COMMERCE COMMISSION
WASHINGTON

INVESTIGATION NO. 3145
ELGIN, JOLIET & EASTERN RAILWAY COMPANY
REPORT IN RE ACCIDENT
NEAR EOLA, ILL., ON
NOVEMBER 23, 1947

SUMMARY

Railroad: Elgin, Joliet & Eastern
Date: November 23, 1947
Location: Eola, Ill.
Kind of accident: Collision
Trains involved: Freight : Freight
Train numbers: Extra 718 East : Extra 742 West
Engine numbers: 718 : 742
Consists: 72 cars, caboose : 30 cars, caboose
Estimated speeds: 15 m. p. h. : Standing
Operation: Timetable and train orders
Track: Single; tangent; 0.66 percent
ascending grade eastward
Weather: Cloudy and dark
Time: 5:25 p. m.
Casualties: 1 killed; 2 injured
Cause: Train being erroneously reported
into clear
Recommendation: That the Elgin, Joliet & Eastern
Railway Company establish an
adequate block system on line
on which accident occurred

INTERSTATE COMMERCE COMMISSION

INVESTIGATION NO. 3145

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

ELGIN, JOLIET & EASTERN RAILWAY COMPANY

January 22, 1948

Accident near Eola, Ill., on November 23, 1947, caused
by a train being erroneously reported into clear.

REPORT OF THE COMMISSION¹

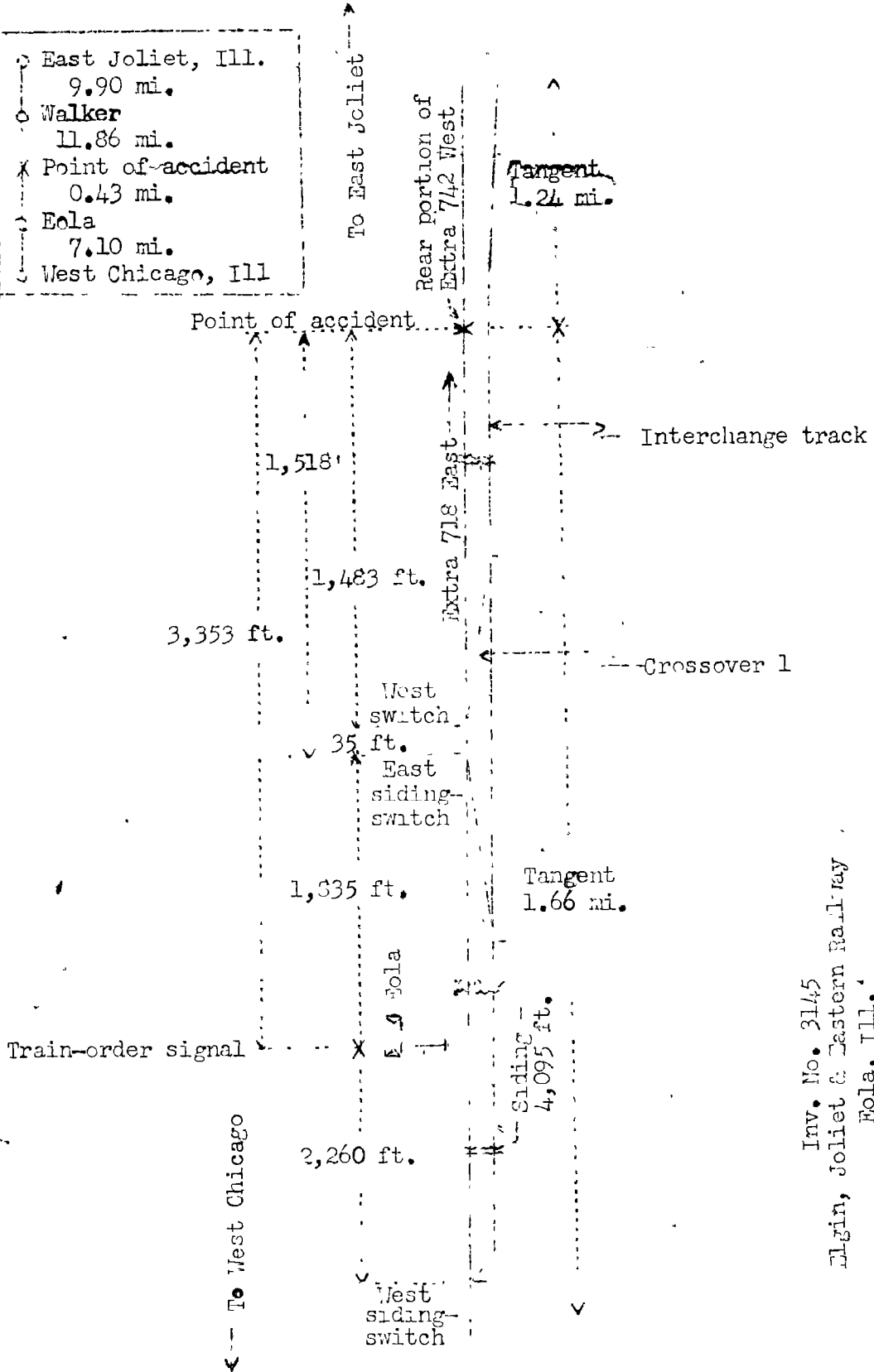
PATTERSON, Commissioner:

On November 23, 1947, there was a collision between a freight train and the rear portion of another freight train on the Elgin, Joliet & Eastern Railway near Eola, Ill., which resulted in the death of one employee, and the injury of two 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 Patterson for consideration and disposition.

- East Joliet, Ill. 9.90 mi.
- Walker 11.86 mi.
- ✕ Point of accident 0.43 mi.
- Eola 7.10 mi.
- West Chicago, Ill



Inv. No. 31145
 Elgin, Joliet & Eastern Railway
 Eola, Ill.
 November 23, 1947

Location of Accident and Method of Operation

This accident occurred on that part of the Joliet Division extending between West Chicago and East Joliet, Ill., 29.29 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. There is no block system in use. At Eola, 7.1 miles east of West Chicago, a siding 4,095 feet in length parallels the main track on the south. The west switch and the east switch of this siding are, respectively, 2,260 feet west and 1,835 feet east of the train-order signal located in front of the station. An interchange track, which extends generally eastward from the east end of the siding and practically parallels the main track on the south, is connected to the main track by a crossover, designated as crossover 1. The west crossover-switch is 35 feet east of the east siding-switch, and is facing-point for east-bound movements. The accident occurred on the main track 3,353 feet east of the train-order signal and 1,518 feet east of the east siding-switch. At the point of accident the distance between the centerlines of the main track and the interchange track is 17.5 feet. The main track is tangent throughout a distance of 1.66 miles immediately west of the point of accident and 1.24 miles eastward. The grade is 0.66 percent ascending eastward.

The train-order signal at Eola is of the three-indication semaphore type. The involved night aspect and corresponding indication and name are as follows:

<u>Aspect</u>	<u>Indication</u>	<u>Name</u>
Yellow	CAUTION; REDUCE SPEED TO RECEIVE ORDERS OR MESSAGE AND/OR CLEARANCE.	CAUTION SIGNAL.

This carrier's operating rules read in part as follows:

DEFINITIONS.

Train.--An engine or more than one engine coupled, with or without cars, displaying markers.

19. The following signals will be displayed to the rear of every train, as markers, to indicate the rear of the train:

* * *

Rear of train by night * * * Lights * * *
showing green to the front and side and
red to the rear.

S-87. * * *

Extra trains * * * will be governed by train
orders with respect to opposing extra trains.

S-88. At meeting points between extra trains,
the train in the inferior time-table direction
must take the siding, unless otherwise provided.

* * *

S-89 (a). * * *

At train order meeting points, the train
holding the main track must stop clear of the
switch used by the train to be met in going
on siding, unless the train to be met is clear
of the main track and switch is properly lined.

104. * * *

* * *

Where trains or engines are required to be
reported clear of main track such report must not
be made until switch has been secured in its
normal position.

220. Train orders once in effect continue so
until fulfilled, superseded or annulled. Any part
of an order specifying a particular movement may
be either superseded or annulled.

* * *

222. Operators must promptly record and report
to the train dispatcher the time of arrival and
departure of all trains and the direction of extra
trains. They must observe trains and report at
once to the train dispatcher if the proper signals
are not displayed.

FORMS OF TRAIN ORDERS.

* * *

S-A.

Fixing Meeting Points for Opposing Trains.

(1) * * *

* * * Extra 652 east meet Extra 231 west
at B.

* * *

Trains receiving these orders will run with respect to each other to the designated points and there meet in the manner prescribed by the rules.

G.

Extra Trains.

(1) Eng 99 run extra A to F.

* * *

Time-table special instructions provide that east-bound trains are superior to trains of the same class in the opposite direction.

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

Description of Accident

Train order No. 53, addressed to engine 742 at East Joliet, 22.19 miles east of Eola, was made complete at 3:10 p. m., and read in part as follows:

Eng 742 run extra East Joliet to Eola * * *

Extra 742 West, a west-bound freight train consisting of engine 742, 30 cars and a caboose, departed from Walker, 12.29 miles east of Eola, at 4:22 p. m., and stopped immediately east of the east siding-switch at Eola at 4:50 p. m. About 2 minutes later, when this train started to enter the siding at the east switch the front coupler of the twenty-ninth car failed and the train became separated at a point 1,518 feet east of the east siding-switch. The first twenty-eight cars were then moved to the siding, and the rear two cars and the caboose remained on the main track. The engine was detached from the front portion of the train, entered the main track at the west siding-switch, moved eastward to crossover 1, thence through the crossover to the interchange track. About 5:25 p. m., the west end of the rear portion of Extra 742 West was struck by Extra 718 East.

Train order No. 62, addressed to engine 718 at West Chicago, was made complete at 4:42 p. m., and read in part as follows:

Eng 718 run extra West Chicago to East
Joliet meet Extra 742 West at Eola * * *.

Extra 718 East, an east-bound freight train consisting of engine 718, 72 cars and a caboose, departed from West Chicago at 5:02 p. m. At Eola the members of the crew of this train received copies of train order No. 63, which was made complete at 4:54 p. m., and read as follows:

Extra 742 West has arrived Eola.

Extra 718 East passed the train-order signal at Eola, which displayed a yellow aspect, about 5:22 p. m., passed the east siding-switch, and stopped at the west switch of crossover 1, which was lined for entry to the interchange track. After a member of the crew had lined the switch to normal position, this train proceeded and was moving at an estimated speed of 15 miles per hour when it collided with the rear portion of Extra 742 West.

The twenty-ninth and thirtieth cars of Extra 742 West were derailed and considerably damaged. The engine and the first three cars of Extra 718 East were derailed. The engine stopped in reverse direction across the main track and the interchange track and at an angle of 50 degrees to them, with the front end on the interchange track and 18 feet east of the point of collision. The cab was demolished and the engine was otherwise badly damaged. The tender was torn loose and stopped on its left side, down an embankment, north of the main track and at an angle of 70 degrees to it. The sides and frame were badly damaged. The first car was badly damaged, and the second and third cars were slightly damaged. At the time of the accident, engine 742 was moving westward on the interchange track and the first car of Extra 718 East struck the right side of the tender. The rear truck of the tender was derailed and the right side of the tender was badly damaged.

The fireman of Extra 718 East was killed, and the engineer and the flagman of this train were injured.

It was cloudy and dark at the time of the accident, which occurred about 5:25 p. m.

During the 30-day period preceding the day of the accident, the average daily movement in the vicinity of the point of accident was 23 trains.

Discussion

The crew of Extra 742 West held copies of train order No. 53, which authorized this train to proceed from East Joliet to Eola. This train stopped on the main track immediately west of the east siding-switch at Eola about 4:50 p. m. to enter the siding. Immediately afterward when an attempt was made to start the train a separation occurred between the twenty-eighth and twenty-ninth cars, as a result of the failure of the front coupler of the twenty-ninth car. The front portion of the train, consisting of the engine and 28 cars, was then moved to the siding. The rear portion consisting of 2 cars and the caboose remained on the main track, with the front end standing 1,518 feet east of the east siding-switch. Soon afterward, the engine was moved to the main track through the west siding-switch, then it proceeded eastward to crossover 1 and thence to the interchange track. Because it was necessary to obtain a chain to be used as an emergency coupling to pull the rear portion of the train into clear, the engine proceeded eastward about 1 mile to a point where the crew could obtain a chain. About 35 minutes after the separation had occurred, engine 742 was returning westward on the interchange track and was moving in the immediate vicinity of the location of the rear portion of its train when the west end of the rear portion was struck by Extra 718 East. At the time of the accident, the flagman of Extra 742 West was about 1 mile east of the rear portion of his train providing flag protection against following trains, and the other members of the crew were in the vicinity of their engine. The crew of Extra 742 West held no train order with respect to the movement of Extra 718 East.

The crew of Extra 718 East held copies of train order No. 62, which authorized the movement of this train from West Chicago to East Joliet and established Eola as the meeting point between Extra 718 East and Extra 742 West. Extra 718 East was superior by direction, and, under the provisions of train order No. 62, it was required to stop clear of the east siding-switch at Eola unless Extra 742 West was into clear on the siding. However, at Eola the crew of Extra 718 East received copies of train order No. 63, which contained information that Extra 742 West had arrived at Eola. This train order superseded the provisions of train order No. 62 requiring the members of the crew of Extra 718 East to ascertain whether Extra 742 West was into clear at Eola. Extra 718 East proceeded eastward and stopped at the west switch of crossover 1, which was lined for entry to the interchange track. The engineer and the front brakeman said that it was unusual

for a main-track switch to be left unattended when lined for entry to an auxiliary track, but they attached no particular significance to this matter. This switch is at the eastern limit of the yard-limit territory. The front brakeman lined the switch to normal position, and Extra 718 East proceeded. As this train was approaching the point where the accident occurred the speed was about 15 miles per hour and the headlight was lighted brightly. The enginemen were maintaining a lookout ahead, the front brakeman was in the brakeman's booth on the tender, and the conductor and the flagman were in the caboose. The first any of these employees were aware of anything being wrong was when the engineer saw the rear portion of Extra 742 West occupying the main track about 150 feet distant. Then he immediately moved the brake valve to emergency position, but the collision occurred before the train could be stopped. The brakes of this train had been tested and had functioned properly en route.

The investigation disclosed that about 3 minutes after the front portion of Extra 742 West had entered the siding at Eola the operator erroneously reported to the dispatcher that Extra 742 West was into clear, and the dispatcher issued train order No. 63. The operator understood that, under the rules, before reporting to the dispatcher that a train had arrived and was into clear on the siding, he was required to observe that the train was complete. He said that it had not been customary for train crews promptly to report to him when their trains are into clear at Eola, and he usually reported the arriving time to the dispatcher only after observing by the marker lamps that a train was clear of the main track. However, in this case, because of restricted visibility he waited an interval of several minutes after he observed that Extra 742 West was entering the siding, but did not assure himself by observing the markers whether the entire train was clear of the main track. The conductor of Extra 742 West said that it was not customary on his part to report to the operator at Eola that his train was into clear until he reported for further orders at some later time. The engineer of Extra 742 West said that as his engine passed the station he called to the operator that the rear of the train was on the main track, but the operator said he did not hear the engineer give this information.

In this territory trains are operated by timetable and train orders only. If an adequate block system had been in use, the crew of Extra 718 East would have received definite information that the block was occupied.

Cause

It is found that this accident was caused by a train being erroneously reported into clear.

Recommendation

It is recommended that the Elgin, Joliet & Eastern Railway Company establish an adequate block system on the line on which this accident occurred.

Dated at Washington, D. C., this twenty-second day of January, 1948.

By the Commission, Commissioner Patterson.

(SEAL)

W. P. BARTEL,
Secretary.