

INTERSTATE COMMERCE COMMISSION
WASHINGTON

INVESTIGATION NO. 5224
CHICAGO & EASTERN ILLINOIS RAILROAD COMPANY
REPORT IN RE ACCIDENT
AT OAKLAWN, ILL., ON
DECEMBER 31, 1948

SUMMARY

Railroad: Chicago & Eastern Illinois

Date: December 31, 1948

Location: Oaklawn, Ill.

Kind of accident: Collision

Equipment involved: Engine with cars : Engine with car

Engine numbers: Diesel-electric : Diesel-electric
yard engine 110 units 1504B
and 1409A

Consists: 2 cars, cabooses : Caboose

Estimated speeds: 5 m. p. h. : 30 m. p. h.

Operation: Timetable, train orders and automatic
block-signal system; yard limits

Tracks: Double; tangent; 0.07 percent
descending grade southward

Weather: Clear; dark

Time: 5:43 p. m.

Casualties: 2 killed; 3 injured

Cause: Failure properly to control speed of
Diesel-electric units 1504B-1409A
within yard limits

INTERSTATE COMMERCE COMMISSION

INVESTIGATION NO. 3224

IN THE MATTER OF MAKING ACCIDENT INVESTIGATION REPORTS
UNDER THE ACCIDENT REPORTS ACT OF MAY 3, 1910.

CHICAGO & EASTERN ILLINOIS RAILROAD COMPANY

March 11, 1949

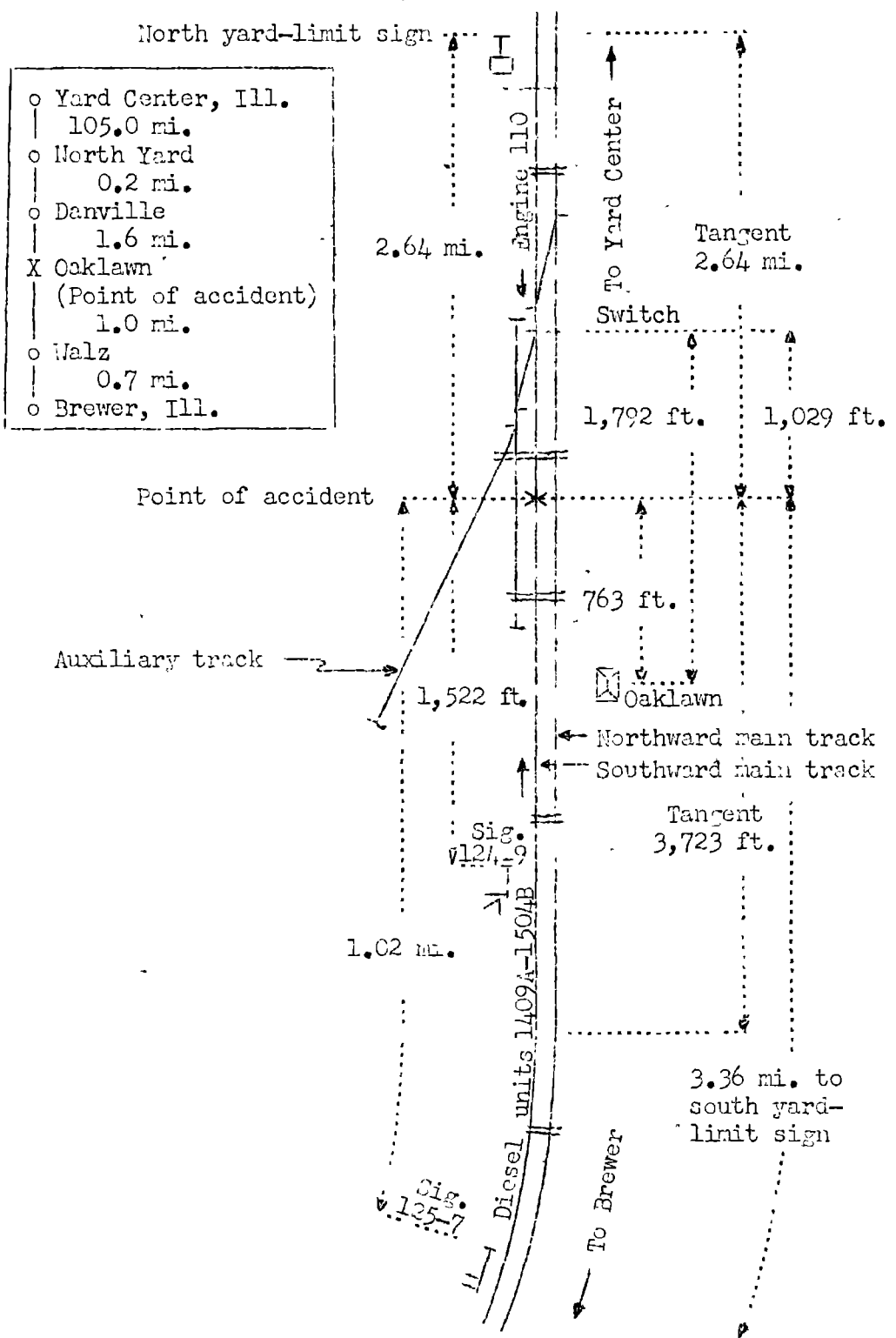
Accident at Oaklawn, Ill., on December 31, 1948, caused
by failure properly to control the speed of Diesel-
electric units 1504B-1409A within yard limits.

REPORT OF THE COMMISSION¹

PATTERSON, Commissioner:

On December 31, 1948, there was a collision between a yard engine with cars and an engine with a car on the Chicago & Eastern Illinois Railroad at Oaklawn, Ill., which resulted in the death of two employees, and the injury of three employees.

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.



- o Yard Center, Ill. 105.0 mi.
- o North Yard 0.2 mi.
- o Danville 1.6 mi.
- X Oaklawn (Point of accident) 1.0 mi.
- o Walz 0.7 mi.
- o Brewer, Ill.

Inv. No. 3224
 Chicago & Eastern Illinois Railroad
 Oaklawn, Ill.
 December 31, 1948

Location of Accident and Method of Operation

This accident occurred on that part of the railroad designated as the Danville District, which extends between Yard Center and Brewer, Ill., 108.5 miles. In the vicinity of the point of accident this is a double-track line, over which trains moving with the current of traffic are operated by timetable, train orders and an automatic block-signal system. At Oaklawn, 106.8 miles south of Yard Center, the north switch of an auxiliary track is located in the southward main track 1,792 feet north of the station. This switch is facing point for south-bound movements. Yard limits extend 2.78 miles north of and 3.22 miles south of Oaklawn. These limits are marked by yard-limit signs. The accident occurred within yard limits on the southward main track at a point 763 feet north of the station at Oaklawn. The main tracks are tangent from the north yard-limit sign to the point of accident and 3,723 feet southward. The grade is 0.07 percent descending southward at the point of accident.

Automatic block signal 124-9 and interlocking signal 125-7, governing movements on the southward main track, are located, respectively, 1,522 feet and 1.02 miles south of the point of accident. Signal 124-9 is a single-unit, color-light signal, and it is continuously lighted. This signal displays three aspects. The involved aspects and corresponding indications and names are as follows:

<u>Aspect</u>	<u>Indication</u>	<u>Name</u>
Yellow	Proceed preparing to stop at next signal. Train exceeding medium speed must at once reduce to that speed.	Approach
Red	Stop; then proceed at restricted speed.	Stop and Proceed

Signal 124-9 is the southward approach signal to Walz interlocking, and it normally indicates Approach. When the block of signal 124-9 is occupied, that signal will indicate Stop and Proceed.

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

DEFINITIONS

Fixed Signal--A signal of fixed location indicating a condition affecting the movement of a train or engine.

Note:--The definition of a fixed signal covers such signals as * * * block, * * *, yard limit signs, * * * or other means for displaying indications that govern the movement of a train or engine.

Medium Speed.--A speed not exceeding 30 miles per hour.

Restricted Speed.--A speed not exceeding 15 miles per hour prepared to stop short of train, obstruction, or switch not properly lined and to look out for broken rail.

SIGNALS

9. * * *

Night signals must be displayed from sunset to sunrise.

24. When cars are pushed by an engine, except when shifting or making up trains in yard tracks, a trainman must ride the front of the leading car and by night must display a white light.

93. Yard limits are indicated by yard limit signs and by district instructions in time table. Within yard limits the main tracks may be used, clearing first and second class trains * * *. Third class and extra trains, road engines, yard engines and motors must move on either main track within yard limits under such control as will prevent accident and must not exceed five (5) miles per hour unless the main track is seen or known to be clear, and such movements will be made without clearing or protecting against each other. * * *

Description of Accident

Engine 110, a Diesel-electric yard engine, pushing a caboose and one car, departed southward from North Yard, 1.8 miles north of Oaklawn, about 5.10 p. m. At the auxiliary track at Oaklawn an additional car was added, which was placed immediately ahead of the engine. The southward movement then was resumed with the caboose ahead, two cars, and the engine at the rear. Shortly thereafter, and while moving at an estimated speed of 5 miles per hour, the caboose was struck by Diesel-electric unit 1504B.

Diesel-electric units 1409A and 1504B, coupled in multiple-unit control, were detached from No. 51, a south-bound second-class freight train, at Brewer, its final terminal, 1.7 miles south of Oaklawn. The caboose was coupled to the front, or south, end of unit 1409A, and this movement, in backward motion, departed northward en route to the enginehouse at Oaklawn. This movement passed Walz interlocking tower at 5:40 p. m., and proceeded against the current of traffic on the southward main track. About 3 minutes later and while moving at a speed of 30 miles per hour, as indicated by the tape of the speed recorder with which the engine was equipped, it struck the caboose of engine 110.

The north truck of Diesel-electric unit 1504B was derailed and this unit was badly damaged by fire. The caboose of yard engine 110 was demolished and the superstructure was destroyed by fire. The first car north of the caboose was derailed and somewhat damaged.

The yard conductor and a brakeman of engine 110 were killed. The engineer of engine 110, and the conductor and a brakeman of the crew of Diesel units 1504B and 1409A were injured.

The weather was clear and it was dark at the time of the accident, which occurred at 5:43 p. m.

Discussion

The rules of this carrier governing operation within yard limits provide that main tracks may be used, but first and second-class trains must be cleared. Yard engines and road engines may move on either main track under such control as will prevent accident but must not exceed a speed of 5 miles per hour unless the main track is seen or known to be clear. Yard engines and road engines may move in either direction on either track without clearing or protecting against each other. When cars are pushed by an engine on a main track, a trainman must ride the front of the leading car, and at night a white light must be displayed from this location.

Yard engine 110, pushing a caboose and one car, departed from North Yard en route to Brewer. At Oaklawn a stop was made at the auxiliary track where one car was added immediately ahead of the engine. The air-brakes of all the units of this movement were operative. The engineer and the fireman were in their respective positions in the cab of the engine. The

fireman said that the window on his side of the cab was closed. The engineer said that he was depending on a member of the crew to maintain a lookout from the caboose and neither he nor the fireman was aware of anything being wrong before the collision occurred. He said that before yard engine 110 departed southward from the auxiliary-track switch, he observed signal 124-9 indicating Stop and Proceed and that he closed the throttle when the speed was about 7 miles per hour. He said that the aspect of the signal then changed to indicate Approach, and he assumed that the train or engine which was occupying the block had moved southward out of the block, and therefore he did not make a brake application. Under the arrangement of the signal system, signal 124-9 would change to indicate Approach as soon as Diesel-electric engine 1409A--1504B moved north of the signal. At Oaklawn the conductor and two brakemen boarded the caboose, the leading unit, at the north end, then the movement proceeded southward. The door at the south end of the caboose was closed. At that time it was dark but a light was not placed on the south end of the caboose, and no member of the crew was stationed on the caboose platform to maintain a lookout to the south. Soon after this movement departed from the auxiliary-track switch, one of the brakemen observed, through a glass panel in the caboose door, the reflection of a headlight on the curve south of the point where the accident occurred. He said that at that time he could not determine on which track the approaching engine was moving and assumed that it was on the northward main track. However, he informed the other employees in the caboose. At that time the speed of yard engine 110 was about 7 miles per hour. The brakeman then proceeded to the platform on the south end of the caboose and discovered that the approaching engine was on the southward main track. He alighted from the caboose immediately before the collision occurred. The conductor and the other brakeman were killed. The failure to provide a light at the front of the cars being pushed by engine 110 and the absence of a trainman at the front of this movement contributed to the cause of this accident.

At North Yard, the crew of No. 51, a south-bound second-class freight train, received copies of train order No. 266, dated December 31, which contained the instruction that all northward and southward first and second-class trains due to arrive at Danville before 4:45 p. m. had arrived and departed. Danville is 3.3 miles north of Brewer. This train entered a yard track at Brewer. Upon arrival at that point the engine, which consisted of Diesel-electric units 1409A and 1504B coupled in multiple-unit control, was

detached and it moved on the southward main track to the north end of the train where the caboose was detached from the train and coupled to the south end of unit 1409A. The fireman proceeded to the north end of unit 1504B and operated the switch for illumination of the back-up headlight, then he returned to the control compartment at the south end of unit 1409A. This movement, with the engine headed southward and pulling the caboose, then proceeded northward on the southward main track en route to Oaklawn. The engineer, the fireman, an Assistant Road Foreman of Engines, and a diesel instructor were in the control compartment at the south end of unit 1409A. A hostler's brake valve and a conductor's emergency valve were provided in unit 1504B and were available for use in controlling a back-up movement. The fireman said that usually he is in the leading unit during a back-up movement, but could not assign any reason why he was not so located on the trip in question. The conductor, the front brakeman and the flagman were in the caboose. The air brakes of both Diesel-electric units and the caboose were operative. This movement passed Walz at 5:40 p. m. As this movement approached the point where the accident occurred the speed was 35 miles per hour, as indicated by the tape of the speed recorder with which unit 1409A was equipped. The engineer made a brake application by use of the independent brake valve when the engine was immediately south of the point where the accident occurred to permit the conductor to alight at the switch at Oaklawn to be used in clearing the main track. This switch is located 1,029 feet north of the point of accident. The speed was reduced to about 30 miles per hour when the collision occurred. No one riding on this movement saw a light either on the caboose or on the engine of the southward movement, and no one was aware before the collision occurred that another movement was occupying the southward main track.

The investigation disclosed that it was a practice of long standing for road engines to use the southward main track for the northward movement from Brewer to Oaklawn. The conductor of No. 51 said that these movements were delayed as much as 10 minutes when using the northward main track, because a member of the crew was required to operate hand-operated switches of crossovers at Brewer and Oaklawn. These switches were equipped with electric locks. In the instant case, the movement was made against the current of traffic for the sole purpose of expediting the movement. There were no overdue superior north-bound trains at that time.

Diesel-electric units 1504B-1409A were being operated at a speed of 35 miles per hour against the current of traffic in territory where the main track was not seen or known to be clear. This was 30 miles per hour in excess of the speed permitted under the carrier's rules, and the speed had only been reduced to 30 miles per hour at the time the accident occurred. In addition, a trainman was not at the front of the movement, as required by the rules.

Cause

It is found that this accident was caused by failure properly to control the speed of Diesel-electric units 1504B-1409A within yard limits.

Dated at Washington, D. C., this eleventh day of March, 1949.

By the Commission, Commissioner Patterson:

(SEAL)

W. P. BARTEL,
Secretary.