INTERSTATE COMMERCE COMMISSION WASHINGTON

REPORT NO. 3567

ILLINOIS CENTRAL RAILROAD COMPANY

IN RE ACCIDENT

AT VAN BUREN STREET,

CHICAGO, ILL., ON

APRIL 25, 1954

SUMMARY

Date ·

April 25, 1954

Railroad:

Illinois Central

Location:

Van Buren Street, Chicago, Ill.

Kind of accident

Rear-end collision

Trains involved:

Passenger

Passenger

Train numbers:

901

205

Consists.

2 electrically · 4 electrically propelled passenger

propelled

units

passenger units

Estimated speeds,

4 m. p. h.

10 m. p. h.

Operation

Timetable and operating rules,

yard limits

Tracks.

Three, tangent; level

Weather

Cloudy

Time

12 33 а. п.

Casualties

102 injured

Cause:

Failure to operate following train

in accordance with special

instructions governing movements at designated points within yard

limits

INTERSTATE COMMERCE COMMISSION

REPORT NO. 3567

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

ILLINOIS CENTRAL RAILROAD COMPANY

June 7, 1954

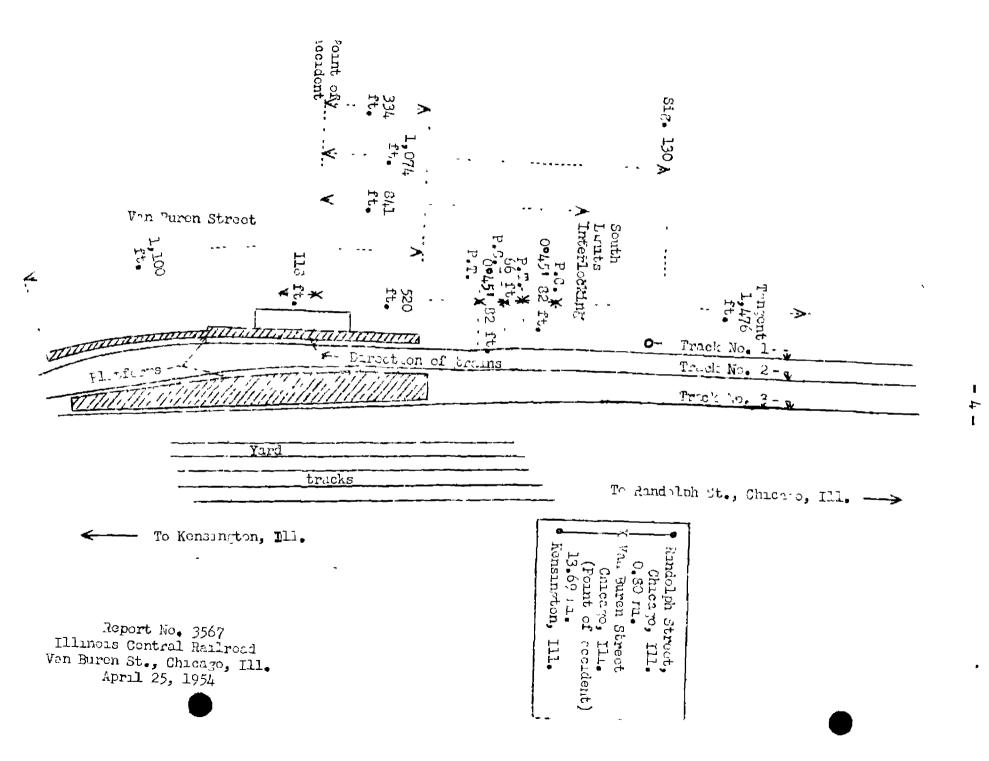
Accident at Van Buren Street, Chicago, Ill., on April 25, 1954, caused by failure to operate the following train in accordance with special instructions governing movements at designated points within yard limits.

REPORT OF THE COMMISSION

CLARKE, Commissioner.

On April 25, 1954, there was a rear-end collision between two passenger trains on the Illinois Central Rail-road at Van Buren Street, Chicago, Ill., which resulted in the injury of 99 passengers and 3 train-service employees. This accident was investigated in conjunction with a representative of the Illinois Commerce Commission.

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



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Location of Accident and Method of Operation

This accident occurred on that part of the Chicago Terminal Division extending between Randolph Street, Chicago, and Kensington, Ill., 14.49 miles. Trains of the Chicago, South Shore and South Bend Railroad regularly are operated over this portion of the Illinois Central Railroad. In the vicinity of the point of accident this is a threetrack line, over which trains moving with the current of traffic are operated by timetable and operating rules. There 1s no block system in use in the immediate vicinity of the point of accident. A catemary system is provided for the electric propulsion of trains. From west to east the main tracks are designated as No. 1, southward, and Nos. 2 and 3, northward. Yard limits extend between Randolph Street and 11th Place, 1.15 miles south of Randolph Street, on these tracks. At Van Buren Street, 2,660 feet south of the station at Randolph Street, a platform 1,100 feet long is provided for passenger traffic on track No. 1. This platform is located on the west side of the track. A retaining wall and the station structure extend along the west side of the platform. A canopy type roof is provided. The accident occurred within yard limits on track No. 1 at a point 334 feet south of the north end of the station platform at Van Buren Street. From the north on track No. 1 there are, in succession, a tangent 1,476 feet in length, a 0°45' curve to the left 82 feet, a tangent 66 feet, a 0°45' curve to the right 82 feet, and a tangent 520 feet to the point of accident and 118 feet southward. The grade is level at the point of accident. In the vicinity of Van Buren Street, yard tracks parallel the main tracks on the east.

Interlocking limits extend between Randolph Street and a point 841 feet north of the point of accident Interlocking signal 130, governing south-bound movements on track No. 1, is located 1,074 feet north of the point of accident. The aspect applicable to this investigation and the corresponding indication and name are as follows:

<u>Aspect</u> <u>Indication</u> <u>Name</u>

Yellow PROCEED AT RESTRICTED RESTRICTING. SPEED.

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The controlling circuits are so arranged that when the route is lined for a south-bound movement on track No. 1 the signal indicates Restricting whether the track immediately south of the south limits of the interlocking is occupied or unoccupied.

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

DEFINITIONS.

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

Timetable special instructions read in part as follows

93. Yard limit

Randolph Street to 11th Place Tracks 1, 2 and 3

All trains must move prepared to stop unless the main track is seen or known to be clear through yard limits as described above.

* # *

1205. Electric trains must come to a complete stop at least 100 feet to the rear of standing train on same track before proceeding at restricted speed * * *

There is no prescribed maximum authorized speed for passenger trains in the vicinity of the point of accident.

Description of Accident

No. 901, a south-bound first-class Chicago, South Shore and South Bend passenger train, consisted of two electrically propelled passenger units in multiple operation. Both units were of all-steel construction, and both were power units. This train was being operated from unit 28, the first unit of the train. It departed from station track No. 9 of the upper level at Randolph Street at 12:30 a. m., on time, was routed to track No. 1, proceeded to Van Buren Street, and stopped in the vicinity of the center of the station platform to load passengers. It started from this station at 12:32 a, m., on time. A few seconds later, while moving at an estimated speed of 4 miles per hour, the rear end was struck by No. 205 at a point 334 feet south of the north end of the station platform.

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No. 205, a south-bound first-class Illinois Central passenger train, consisted of four electrically propelled passenger units in multiple operation. These units were of all-steel construction. The first and third were power units, and the second and fourth were trailers. This train was being operated from the control compartment at the front of unit 1117, the first unit of the train. It departed from station track No. 6 of the lower level at Randolph Street at 12:31 a. m., on time, was routed to track No. 1, passed signal 130, which indicated Restricting, and while moving at a speed of between 10 and 15 miles per hour it struck the rear end of No. 901.

No equipment of either train was derailed. No. 901 stopped with the rear end a few feet south of the point of collision. The rear unit was somewhat damaged, and the other unit was slightly damaged. No. 205 stopped with the front end about 15 feet to the rear of the preceding train. A separation occurred between the second and third units. The front end of the first unit was considerably damaged, the second unit was somewhat damaged, and the other units were slightly damaged.

The engineer, the conductor, and the flagman of No. 205 were injured.

The weather was cloudy at the time of the accident, which occurred about 12.33 a.m.

The units of No. 205 are provided with PS type electropneumatic brake equipment and an H-6 engineer's brake valve
with electric control head at each control station. A safetycontrol feature which operates in conjunction with the
controller is provided. This train consisted of two 2-unit
assemblies, each of which was made up with a power unit
and a trailer unit semi-permanently coupled. These units
are equipped with automatic connectors by which air and
electrical connections are made automatically upon impact
when coupled to similar units. The regulating devices
were adjusted to maintain main reservoir pressure of 105
pounds and brake-pipe pressure of 90 pounds.

Discussion

No. 901 departed from the upper level of the station at Randolph Street and stopped at Van Buren Street to load passengers. Escause timetable special instructions require that all trains move prepared to stop in this vicinity, rearend protection was not provided. The engineer said that it

was not raining at the time the train stopped. When the train started from this station the engineer was in the control compartment at the front of the first unit. The conductor was in the rear vestibule of that unit. The flagman was in the front vestibule of the second unit. All members of the crew said that before their train departed from Randolph Street they had observed that the fixed marker lights at the rear of the train were lighted and displayed red to the rear. None of the members of the crew saw the approaching train before the accident occurred. The conductor estimated that the train had moved southward approximately 30 to 40 feet from the point at which passengers had been loaded when the rear end was struck by No. 205.

No. 205 departed from the lower level of the station. at Randolph Street and was routed to main track No. 1. this train was approaching the point where the accident occurred the engineer was alone in the control compartment at the front of the first unit. The members of the train crew were in various locations in the train. The headlight was dimmed. The brakes of this train had been tested and had functioned properly when a running test was made after the train departed from the station platform. The poweroperated wiper on the front window of the control compartment vas in operation. Rain had fallen in the vicinity, and the rails were vet. The engineer said that he thought a light rain was falling when his train emerged from the lower level of the station. He had not seen the preceding train when it departed from the upper level. He estimated that his train did not exceed a speed of 15 miles per hour at any point between Randolph Street and the point of accident. He said that he observed the marker lights of the preceding train, and as his train approached the point at which it had' stopped he made a service application of the brakes of about 7 or 8 pounds. Immediately afterward he felt the wheels of the first unit slide. He released the brakes momentarily and then made a service application of from 7 to 12 pounds. When the wheels of the first unit again slid he became concerned and made an emergency application of the brakes. He estimated that the speed of the train was about 10 miles per hour when the collision occurred. The members of the train crew said that the operation of their train was normal and that they were unaware of anything being wrong until the brakes were applied in emergency immediately before the collision occurred.

Examination of the equipment of No. 205 after the accident occurred disclosed that the controller was in the "off" position. The handles of the automatic brake valve and the reverser had been removed and their positions at the time of the accident could not be determined. The brake valve cutout cock was closed and the electric feature plug was in position for electro-pneumatic operation of the brakes. The brake shoes of all units were found to be tight against the wheels. Later this equipment was removed to the Burnside, Ill., shops of the carrier. On April 26, 1954, after pipes and electrical connections which had been broken in the accident were repaired or plugged, the equipment was tested. The brakes functioned as intended in all tests of the brake valve in both automatic and electro-pneumatic operation. The safetycontrol feature functioned properly when tested. No defective condition was found in any of the controlling or brake apparatus. Numerous slid-flat spots, some of which were of recent origin, were found on the wheels of the equipment.

Timetable special instructions of this carrier require that all trains move prepared to stop unless the main tracks within yard limits between Randolph Street and 11th Place are seen or known to be clear. Electric trains must come to a stop not less than 100 feet to the rear of a standing train on the same track. Apparently the engineer of No. 205 misjudged the distance in which his train could be stopped under the existing conditions and did not take action in time to stop short of the preceding train.

<u>Cause</u>

This accident was caused by failure to operate the following train in accordance with special instructions soverning movements at designated points within yard limits.

Dated at Washington, D. C., this seventh day of June, 1954.

By the Commission, Commissioner Clarke,

(SEAL)

GEORGE W. LAIRD,

Secretary.