# INTERSTATE COMMERCE COMMISSION WASHINGTON

INVESTIGATION NO. 2522

THE CHICAGO, BURLINGTON & QUINCY RAILROAD COMPANY

REPORT IN RE ACCIDENT

NEAR WINNEBAGO, NEBR., ON

SEPTEMBER 6, 1941

#### SUMMARY

Railroad: Chicago, Burlington & Quincy

Date: September 6, 1941

Location: Winnebago, Nebr.

Kind of accident: Head-end collision

Trains involved: Passenger : Light engine

Train numbers: 16 : Extra 2809 South

Engine numbers: Gas-electric : 2809

motor car 9729

Consist: 1 car :

Estimated speed: 20 m. p. h. : 12 m. p. h.

Operation: Timetable and train orders, and

manual-block system for following

movements only

Track: Single; 10 curve; 0.411 percent

descending grade northward

Weather: Partly cloudy

Time: About 4:53 p. m.

Casualties: 1 killed; 17 injured

Cause: Accident caused by an inferior train

occupying the main track on the time

of an opposing superior train

Recommendation: That the Chicago, Burlington & Quincy

Railroad Company establish an adequate block-signal system on its Ashland and Sioux City Sub-division, and submit to this Commission for approval rules and instructions for the proper maintenance and operation of such block-

signal system

#### INTERSTATE COMMERCE COMMISSION

## INVESTIGATION NO. 2522

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

THE CHICAGO, BURLINGTON & QUINCY RAILROAD COMPANY

October 18, 1941.

Accident near Winnebago, Nebr., on September 6, 1941, caused by an inferior train occupying the main track on the time of an opposing superior train.

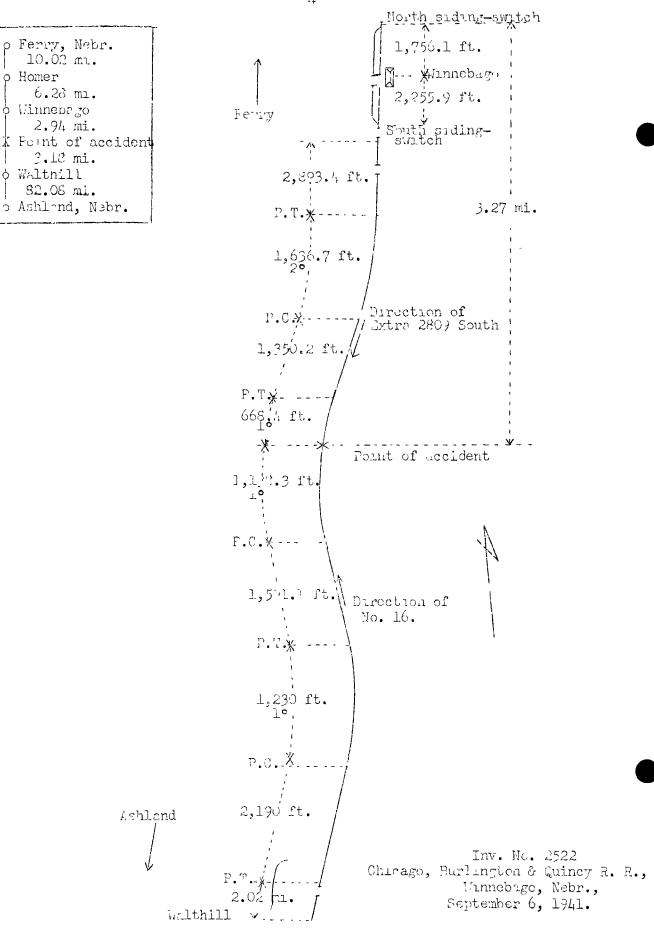
# REPORT OF THE COMMISSION

# PATTERSON, Commissioner:

On September 6, 1941, there was a head-end collision between a passenger train and a light engine on the Chicago, Burlington & Quincy Railroad near Winnebego, Nebr., which resulted in the death of 1 passenger, and the injury of 11 passengers, 1 railway-mail clerk, and 5 train-service employees.

<sup>&</sup>lt;sup>1</sup>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 Homer



# Location of Accident and Method of Operation

This accident occurred on that part of the Omaha Division designated as the Ashland and Sioux City Sub-division, which extends between Ferry and Ashland, Nebr., a distance of 104.5 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, and a manual-block system for following movements only. At Winnebago a siding 4,012 feet in length parallels the main track on the west. The north switch of this siding is 1,756 feet north of the station. The accident occurred at a point 3.27 miles south of the north siding-switch at Winnebago. As the point of accident is approached from the north there are, in succession, a tangent 2,893.4 feet in length, a 20 curve to the right 1,636.7 feet, a tangent 1,350.2 feet, and a 1º curve to the left 668.4 feet to the point of accident and 1,138.3 feet beyond. As the point of accident is approached from the south there are, in succession, a tangent 2,190 feet in length, a 1° curve to the left 1,230 feet, a tangent 1,591.1 feet, and the curve on which the accident occurred. At the point of accident the grade is 0.411 percent descending for north-bound trains.

Operating rules read in part as follows:

5. \* \* \*

The time applies to the switch where an inferior train enters the siding: \* \* \*

S-87. An inferior train must keep out of the way of opposing superior trains and failing to clear the main track by the time required by rule must be protected as prescribed by Rule 99.

Extra trains must clear the time of opposing regular trains not less than five minutes unless otherwise provided, \* \* \*.

318-B. \* \* \*

A train must not be admitted to a block which is occupied by a passenger train, \* \* \*.

Notes to Rule 318-B.-Rule 318-B is for permissive block for following movements only.

#### RULES FOR FIREMEN

994. \* \* \* keep in mind all orders and notices regarding the movement of trains, so as to be prepared to correct any oversight or mistake if there should be any occasion for so doing.

Time-table instructions read in part as follows:

Manual Block System. Rule 318-B in effect.

The maximum authorized speed for passenger trains is 45 miles per hour and for light engines, 35 miles per hour.

# Description of Accident

Extra 2809 South, a south-bound train, consisted of engine 2809. The engine and tender brakes were tested at Ferry, 16.3 miles north of Winnebago, and the brakes functioned properly en route. This train departed from Ferry at 4:18 p. m., according to the dispatcher's record of movement of trains, passed Winnebago at 4:48 p. m., and, while moving at a speed estimated as about 12 miles per hour, it collided with No. 16 at a point about 3.27 miles south of the north siding-switch at Winnebago.

No. 16, a north-bound first-class passenger train, consisted of gas-electric motor car 9729 and coach 5454. The gaselectric motor car was of steel construction and was provided with wood flooring. It was 65 feet in length, divided into an engine compartment, a mail compartment and a baggage-express compartment, and was equipped with a 350-gallon fuel tank located under the floor and between the trucks. The coach was of wooden construction and had seating capacity for 60 passengers. The brakes of No. 16 had been tested at Lincoln, Nebr., 112.5 miles south of Winnebago, and the brakes functioned properly en route. This train departed from Ashland, 88.2 miles south of Winnebago, at 2:20 p. m., according to the dispatcher's record of movement of trains, on time, departed from Walthill, 6.12 miles south of Winnebago and the last open office, at 4:47 p. m., on time, and, while moving at a speed of about 20 miles per hour, it collided with Extra 2809 South.

In the immediate vicinity of the point of accident the track is laid in a cut, the east slope of which rises about 18 feet in height. There is vegetation on both sides of the track. Because of track curvature, the cut and the vegetation, the view from the right side of the cab of a north-bound engine of the point where the accident occurred is restricted to about 1,300 feet and from the left side of the cab of a south-bound engine to about 700 feet.

Engine 2809 telescoped the front end of the motor car about 7 feet. The motor car and the coach were driven back about 23 feet by the impact. The front truck of the motor car became disengaged and was driven back about 3 feet and the rear truck was derailed. During this process the fuel tank was punctured, the gasoline became ignited and the motor car and coach were enveloped in flames and destroyed. The front end of engine 2809 was badly damaged.

The weather was partly cloudy at the time of the accident, which occurred about 4:53 p. m.

The employees injured were the engineran, the brakeman-baggageman and the conductor of No. 16, and the engineman and the fireman of Extra 2809 South.

## <u>Data</u>

During the 30-day period preceding the day of the accident, the average daily movement over the line involved was 9.2 trains.

According to the timetable, No. 16 was due to leave Walthill, 6.12 miles south of Winnebago, at 4:47 p. m., Winnebago at 4:57 p. m., and Homer, 6.28 miles north of Winnebago, at 5:07 p. m.

There is no siding between Walthill and Winnebago.

## Discussion

The rules governing operation on the line involved provide that an inferior train must keep out of the way of opposing superior trains, and extra trains must clear the time of opposing regular trains not less than 5 minutes. All the employees involved understood these requirements.

No. 16, which was a north-bound first-class train, departed from Walthill, the first station south of the point of accident, at 4:47 p. m., on time. No train order restricting the movement of No. 16 had been issued. Extra 2809 South passed Winnebago, the first station north of the point of accident, at 4:48 p. m., and collided with No. 16 about 5 minutes later. There was no siding between Winnebago and Walthill. Extra 2809 was required to be in the clear at Walthill not later than 4:42 p. m., if it proceeded to that station for No. 16. Since Extra 2809 did not reach Winnebago until 4:48 p. m. and since No. 16 was due to leave Winnebago at 4:57 p. m., Extra 2809 was required to be in the clear at Winnebago not later than 4:52 p. m.

The crew of No. 16 consisted of three employees. The engineman was maintaining a lookout shead and the speed was 35 to 45 miles per hour. The first the engineman knew of the approaching train was when his motor car reached a point about 1,300 feet south of the point where the accident occurred, then he observed what appeared to be the upper portion of a smokestack extending above the top of the embankment. He did not take action to stop his train until the front portion of the approaching engine came into view, then he applied the brakes in emergency and the speed of his train was reduced to about 20 miles per hour at the time the collision occurred.

The crew of Extra 2809 contisted of the enginemen and the fireman. According to the statement of the engineman of Extra 2809, his train departed from F-rry at 4:18 p. m. and at that time he thought there was rufficient time to proceed to Winnebago, a distance of 16.3 miles, to clear the time of No. 16. As his train was approaching Winnebaso about 4:48 p. m., he read the schedule of No. 16; however, because of the manner in which he had folded the timetable, he misread the leaving time of 5:07 p. m. for No. 16 at Homer, 6.28 miles north of Winnebago, as the leaving time for No. 16 at Walthill. The engineman informed the fireman that there was sufficient time to proceed to Valthill to clear for No. 16. At that time the firemen was looking at his own timetable and the engineman assumed that the fireman was checking the schedule of No. 16. According to the statement of the fireman, he had consulted his timetable only once during the trip and this was prior to the time his engine reached Winnebago. He did not look at the page on which the achedule of No. 10 appeared, but looked at the page that showed the speed restrictions to ascertain the maximum authorized speed for light engines. Although the fireman understood that the rules require firemen to be prepared to correct any oversight or mistake, no depended upon the engineman to comply with the operating rules. The train-order signal at Winnebago changed from stop to proceed and the engine passed the station at a speed of about 35 miles per hour. Both the engineman and the fireman were maintaining a lookout ahead from their respective positions on the engine. The view ahead was restricted because of track curvature, an embankment and vegetation. About 700 feet north of the point where the accident occurred, the fireman observed the approaching train and called a warming. The engineman immediately applied the brakes in emergency and the speed was reduced to about 12 miles per hour at the time of the collision.

The block system is used on this line for following movements only. The book of operating rules of this railroad contains manual-block rules which provide for the blocking of opposing movements as well as following movements, but the rules

for blocking opposing movements are not in effect on the line involved in this accident. Had the rules for blocking opposing movements been in effect, the operator at Winnebago would have been required to display his signal at stop for Extra 2809 and not to permit that train to enter the block extending between Winnebago and Walthill until after No. 16 had cleared this block and he had arranged with the operator at Walthill for block authority; thereby the accident would have been averted.

## <u>Cause</u>

It is found that this accident was caused by an inferior train occupying the main track on the time of an opposing superior train.

## Recommendation

It is recommended that the Chicago, Burlington & Quincy Railroad Company establish an adequate block-signal system on its Ashland and Sioux City Sub-division, and submit to this Commission for approval rules and instructions for the proper maintenance and operation of such block-signal system.

Dated at Washington, D. C., this eighteenth day of October. 1941.

By the Commission, Commissioner Patterson.

(SEAL)

W. P. BARTEL,

Secretary.