

INTERSTATE COMMERCE COMMISSION
WASHINGTON

REPORT NO. 3276
CHICAGO, BURLINGTON & QUINCY RAILROAD COMPANY
IN RE ACCIDENT
NEAR BRIAR BLUFF, ILL., ON
SEPTEMBER 3, 1949

SUMMARY

Date:	September 3, 1949	
Railroad:	Chicago, Burlington & Quincy	
Location:	Briar Bluff, Ill.	
Kind of accident:	Head-end collision	
Trains involved:	Freight	: Freight
Train numbers:	Extra R.I. 2593 South	: Extra 4971 North
Engine numbers:	2593	: 4971
Consists:	31 cars, caboose	: 25 cars, caboose
Estimated speeds:	3 m. p. h.	: 20 m. p. h.
Operation:	Timetable and train orders; manual- block system for following movements only	
Track:	Single; 2°30' curve; 0.21 percent ascending grade southward	
Weather:	Clear	
Time:	11:44 a. m.	
Casualties:	1 killed; 3 injured	
Cause:	Failure to obey meet order	
Recommendation:	That the Chicago, Burlington & Quincy Railroad Company establish an adequate block system on the line on which this accident occurred	

INTERSTATE COMMERCE COMMISSION

REPORT NO. 3276

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

CHICAGO, BURLINGTON & QUINCY RAILROAD COMPANY

November 3, 1949

Accident near Briar Bluff, Ill., on September 3, 1949,
caused by failure to obey a meet order.

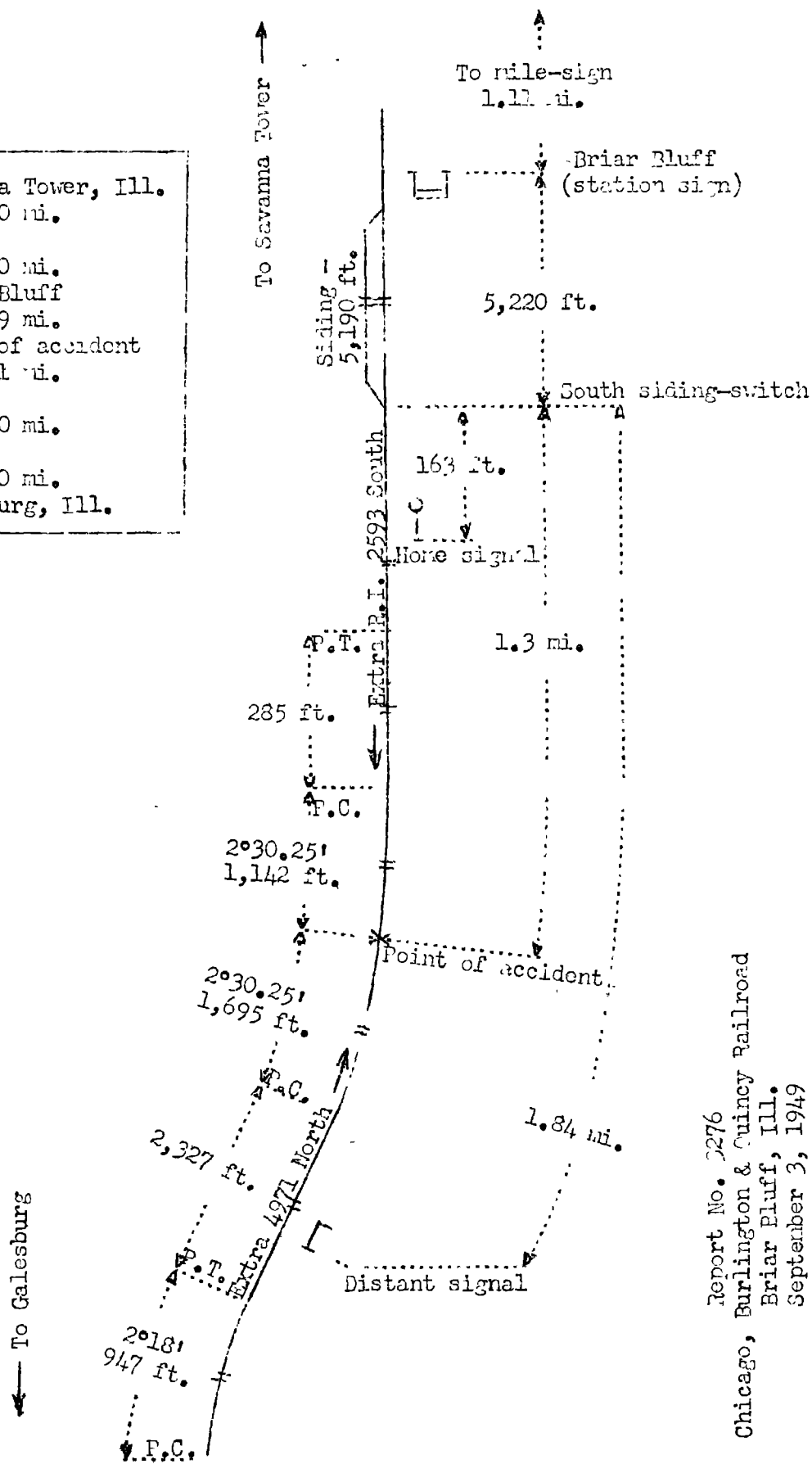
REPORT OF THE COMMISSION¹

PATTERSON, Commissioner:

On September 3, 1949, there was a head-end collision between a freight train of the Chicago, Rock Island and Pacific Railroad and a freight train of the Chicago, Burlington & Quincy Railroad on the line of the latter carrier near Briar Bluff, Ill., which resulted in the death of one employee 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 Savanna Tower, Ill.
- | 57.60 mi.
- o Colona
- | 1.60 mi.
- o Briar Bluff
- | 2.29 mi.
- X Point of accident
- | 6.41 mi.
- o Orion
- | 12.00 mi.
- o Alpha
- | 18.00 mi.
- o Galesburg, Ill.



Report No. 3276
 Chicago, Burlington & Quincy Railroad
 Briar Bluff, Ill.
 September 3, 1949

Location of Accident and Method of Operation

This accident occurred on that part of the Galesburg Division extending between Savanna Tower and Galesburg, Ill., 97.9 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 by a manual-block system for following movements only. At Colona, 57.6 miles south of Savanna Tower, this line is crossed at grade by a double-track line of the C.R.I. & P. A connecting track is provided for interchange between the two lines. Movements over the crossing and over the connecting track are governed by interlocking signal indications. The interlocking station located adjacent to the crossing, is also a train-order office and a manual-block station. C.R.I. & P. trains are manned by C.R.I. & P. employees over that part of the C.B. & Q. extending between Colona and Orion, 10.3 miles south of Colona. At Briar Bluff, 1.6 miles south of Colona, a siding 5,190 feet in length parallels the main track on the west. The south switch of this siding is 5,220 feet south of the station sign at Briar Bluff. The station sign is 9 feet 7 inches long and 10-1/2 inches wide, is supported by two posts, and bears the words "BRIAR BLUFF" in white letters 8-1/2 inches high on a black background. It is located at right angles to the main track, 8 feet 6 inches above the level of the top of the rail and 14 feet 10 inches east of the center-line of the main track. A sign 3 feet long and 9 inches high and bearing the words "BRIAR BLUFF" is located adjacent to and west of the main track at a point 1.11 miles north of the station sign at Briar Bluff. The accident occurred on the main track at a point 1.3 miles south of the south siding-switch at Briar Bluff. From the north there are, in succession, a tangent 285 feet in length and a 2°30' curve to the right 1,142 feet to the point of accident and 1,695 feet southward. From the south there are, in succession, a 2°18' curve to the right 947 feet in length, a tangent 2,327 feet and then the curve on which the accident occurred. At the point of accident the grade is 0.21 percent ascending southward.

The south siding-switch at Briar Bluff is a spring switch. North-bound movements over the switch are governed by the indications of a two-aspect color-light signal located 163 feet south of the switch. The controlling circuit is so arranged that this signal will indicate Stop when the south siding-switch is in other than normal position, or when

the track circuit extending between the signal and the clearance point of the siding is occupied. A two-position semaphore-type signal is located 1.84 miles south of the south siding-switch and 3,030 feet south of the point of accident. The controlling circuit is so arranged that this signal will indicate Approach either when the signal near the south siding-switch indicates Stop or when any portion of the track between the two signals is occupied.

Operating rules of the C.B. & Q. read in part as follows:

GENERAL RULES . .

A. Employees whose duties are prescribed by these rules must provide themselves with a copy.

Employees whose duties are in any way affected by the time-table must have a copy of the current time-table with them while on duty.

C. Employees must pass the required examinations.

DEFINITIONS

Pilot.--An employe assigned to a train when the engineman or conductor, or both, are not fully acquainted with the physical characteristics or rules of the railroad, or portion of the railroad, over which the train is to be moved.

14. ENGINE WHISTLE SIGNALS.

Note.--The signals prescribed are illustrated by "o" for short sounds; "—" for longer sounds. * * *

SOUND.

INDICATION.

* * *

(n) — — o

Approaching meeting or waiting point. See Rule S-90.

* * *

S-87. * * *

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

S-90. * * *

Train must stop clear of the switch used by the train to be met in going on the siding.

* * *

The engineman of each train will give signal 14(n) at least one mile before reaching a meeting * * * point. Should the engineman fail to give signal 14(n) as herein prescribed the conductor must take immediate action to stop the train.

211. * * *

* * *

Enginemen must show train orders to firemen and when practicable to forward trainmen. Conductors must show train orders when practicable to trainmen.

FORMS OF TRAIN ORDERS

S-A

Fixing Meeting Points for Opposing Trains

(1) * * *

Extra 652 north meet Extra 231 south 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.

* * *

P

* * *

When a train is directed by train order to take siding, it should be done in the following form:

- (1) No 1 meet No 2 at B.
No 1 take siding at B.

* * *

C.R.I. & P. timetable special instructions read in part as follows:

16a. Trains operating over CB&Q, between Colona and Orion Jct., will be governed by CB&Q Time Table and Operating Rules.

The maximum authorized speed for the trains involved was 30 miles per hour.

Description of Accident

Extra R.I. 2593 South, a south-bound C.R.I. & P. freight train, consisted of engine 2593, 31 cars and a caboose. At Colona, 1.6 miles north of Briar Bluff, the crew of this train received, among others, copies of CB&Q train order No. 15 reading as follows:

Eng RI 2593 run extra Colona to
Jct switch at Orion Extra 4971
North meet Extra RI 2593 south
and No. 82 motor 105 at Briar
Bluff Extra 4971 north take
siding at Briar Bluff

Extra R.I. 2593 South departed from Colona at 11:36 a. m., entered the C.B. & Q. track at that station, passed the south siding-switch at Briar Bluff, where it was required to meet Extra 4971 North, and while moving at an estimated speed of 3 miles per hour it collided with Extra 4971 North at a point 1.3 miles south of the south siding-switch.

Extra 4971 North, a north-bound freight train, consisted of engine 4971, 25 cars and a caboose. At Alpha, 20.7 miles south of Briar Bluff, the crew of this train received copies of train order No. 15. Extra 4971 North departed from Alpha, the last open office, at 9:25 a. m., passed the signal located 3,030 feet south of the point of accident, which signal indicated Approach, and while moving at an estimated speed of 25 miles per hour it collided with Extra R.I. 2593 South.

Engine 2593 was derailed but stopped upright. The second to the sixth cars, inclusive, of Extra R.I. 2593 South were derailed and stopped in various positions along the track. The third and the fourth cars were demolished, the engine and the second car were considerably damaged and the other derailed cars were slightly damaged. Engine 4971 and the first 5 cars of Extra 4971 North were derailed. The front end of engine 4971 was crushed and forced upward. The cab was crushed and the cistern torn loose from the tender frame. All of the derailed cars of this train were somewhat damaged.

The engineer of Extra 4971 North was fatally injured, and the conductor, the fireman and the front brakeman of Extra 4971 North were injured.

The weather was clear at the time of the accident, which occurred at 11:44 a. m.

During the 30-day period preceding the day of the accident, the average daily movement in this territory was 10.07 trains.

Discussion

The crews of both trains held copies of train order No. 15, which established Briar Bluff as the meeting point between Extra R.I. 2593 South and Extra 4971 North. The order included the instruction that Extra 4971 North take siding at the meeting point. Under the rules Extra 4971 North was required to enter the siding at the south siding-switch and Extra R.I. 2593 South was required to remain north of the fouling point at the south siding-switch until Extra 4971 North was into clear on the siding.

Extra R.I. 2593 South was stopped on the C.R.I. & P. main track at Colona about 11:25 a. m., because the governing interlocking signal indicated Stop. After the train stopped, the front brakeman and the flagman, who had been on the engine, proceeded to the interlocking tower. About 5 minutes later the operator at Colona delivered copies of four C.B. & Q. train orders and three C.R.I. & P. train orders, with clearance forms, both to the front brakeman and to the flagman. The C.B. & Q. train orders pertained to the movement of this train between Colona and the junction switch at Orion, and the C.R.I. & P. train orders pertained to the movement beyond Orion on the C.R.I. & P. Immediately

afterward the operator reversed the lever controlling the interlocking signal, and this action permitted the train to proceed. The front brakeman boarded the engine while it was passing the tower and handed the train orders and the two clearance forms to the engineer. The flagman boarded the caboose while it was passing the tower and delivered the train orders and the clearance forms to the conductor. The engineer said that when he received the clearance forms and the train orders from the front brakeman, he immediately checked the number of each order against the number shown on the clearance form, then he read each order, and handed the orders to the front brakeman, who also read them. The front brakeman read the train orders and was consulting the timetable to determine the location of Briar Bluff when the engineer observed the opposing train. The engineer immediately placed the brake valve in the emergency position, and the train had almost stopped when the collision occurred. The fireman had not read the train orders, and he did not know that Briar Bluff had been established as the meeting point with Extra 4971 North. The conductor said that when the orders were delivered to him by the flagman he immediately checked the orders against the clearance forms and then read the orders. He said that when he read train order No. 15 both he and the flagman consulted the timetable to determine the location of Briar Bluff. When it was discovered that Briar Bluff was the first station south of Colona, the flagman informed the conductor that they had just passed a siding. The conductor then took action to open the conductor's valve located in the cupola but the brakes were applied in emergency before he reached the valve.

Copies of train order No. 15 were received by the crew of Extra 4971 North at Alpha, 20.7 miles south of Briar Bluff. Each member of the crew had read the order and understood that their train was required to enter the siding at Briar Bluff at the south siding-switch. The speed of the train was about 30 miles per hour while it was approaching the signal located 1.84 miles south of the south siding-switch. The enginemen were maintaining a lookout ahead from their respective positions in the cab of the engine and the front brakeman was seated behind the fireman. The conductor and the flagman were in the caboose. The signal indicated Approach, and the speed of the train was reduced to about 25 miles per hour. The surviving employees on the engine said they thought that Extra R.I. 2593 South had arrived at the south siding-switch at Briar Bluff and that a member of the crew had opened

the switch for Extra 4971 North to enter the siding. The fireman and the front brakeman saw Extra R.I. 2593 South about 650 feet distant and called a warning to the engineer. The brakes then were applied in emergency, and the speed was reduced to about 20 miles per hour when the collision occurred.

The investigation disclosed that a C.R.I. & P. freight train was being operated daily except Sunday over that part of the C.B. & Q. extending between Colona and Orion Jct. This movement was operated north-bound on Monday, Wednesday and Friday, and south-bound on Tuesday, Thursday and Saturday. Prior to August 16, 1949, a C.R.I. & P. crew was regularly assigned to this movement. However, on that date, the crew assignments were changed to pool service, and thereafter the C.R.I. & P. crew with the greatest amount of time off duty at the originating terminal was assigned to cover this service. The employees assigned to this movement were required by the C.B. & Q. to pass an examination pertaining to the operating rules of this carrier, and to be fully acquainted with the physical characteristics of that part of the line extending between Colona and Orion Jct., in order to qualify themselves for service on this line when a pilot is not provided. A pilot is required if the employees are not qualified. Arrangements had been made that the examination of the C.R.I. & P. employees working on the line in question was to be conducted by a representative of the C.R.I. & P. who previously had been examined on C.B. & Q. operating rules by a representative of the C.B. & Q. The engineer of Extra R.I. 2593 South reported for examination on August 29, 1949, when he was about to start his first trip over this line. He said that he was not examined but was issued a certificate bearing the indorsement of the official assigned to examine him and indicating that he had been examined. Before beginning his first trip over the C.B. & Q. line the conductor reported to the designated C.R.I. & P. officer for examination at 9:45 a. m. on the day of the accident. He said that the C.R.I. & P. officer discussed Rule 99, informed him that the other rules either were identical or similar to the C.R.I. & P. rules, and issued a certificate that the conductor was qualified to operate trains between Colona and Orion Jct. The fireman reported for examination but was informed that it was not necessary that firemen be examined. The front brakeman and the flagman said that they had not been examined.

The engineer and the fireman had made only one trip over the C.B. & Q. between Colona and Orion Jct. This trip was made five days prior to the day of the accident. The engineer said that in this instance he protested against making the trip without a pilot, because he was entirely unfamiliar with the physical characteristics of the line between Colona and Orion Jct. However, a pilot was not assigned. When the conductor reported for examination on the day of the accident, he, too, protested against making an initial trip over the C.B. & Q. without a pilot, but he was instructed to proceed. Neither the front brakeman nor the flagman had made a trip over the C.B. & Q. prior to the day of the accident. Copies of the current C.B. & Q. operating timetable were provided only for the engineer and for the conductor.

There was no misunderstanding concerning the instruction contained in order No. 15 but no member of the crew knew the location of the station where the order was to be fulfilled. The engineer said he thought that Briar Bluff was the second station south of Colona instead of the first. He saw the siding at Briar Bluff but he did not see either the advance station sign, located 1.11 miles north of Briar Bluff, or the station sign at Briar Bluff which is located east of the main track, or on the fireman's side. The train had passed the meeting point, 1.6 miles south of the station where order No. 15 was received, before the employees determined the location of Briar Bluff by referring to the timetable. If a pilot had been assigned to this train, the accident probably would not have occurred.

The book of operating rules of the C.B. & Q. contains manual-block rules for the blocking of opposing trains as well as following trains, but the provision for blocking opposing trains was not in effect in the territory in question. If this provision had been in effect in this territory these opposing trains would not have been permitted to occupy the same block simultaneously.

Cause

It is found that this accident was caused by failure to obey a meet order.

Recommendation

It is recommended that the Chicago, Burlington & Quincy Railroad Company install an adequate block system on the line on which this accident occurred.

Dated at Washington, D. C., this third day of November, 1949.

By the Commission, Commissioner Patterson.

(SEAL)

W. P. BARTEL,
Secretary.