

INTERSTATE COMMERCE COMMISSION
WASHINGTON

REPORT OF THE DIRECTOR
BUREAU OF SAFETY

ACCIDENT ON THE
CHICAGO, BURLINGTON & QUINCY RAILROAD

KEMP, NEBR.

OCTOBER 7, 1937

INVESTIGATION NO. 2205

SUMMARY

Inv-2205

Railroad: Chicago, Burlington & Quincy
Date: October 7, 1937.
Location: Kemp, Nebr.
Kind of accident: Head-end collision
Trains involved: Light engine: passenger
Train numbers: Extra 6105 : 302
Engine numbers 6105 : 2806
Consist: -- : 3 cars
Speed: Unknown; : 30-35 m.p.h.
backing up :
Track: 1°30' curve; 0.94 percent
descending grade.
Weather: Clear
Time: 2:04 p.m.
Casualties: 5 killed and 7 injured
Cause: Failure of light engine to clear
time of passenger train.

Inv-2205

October 26, 1937.

To the Commission:

On October 7, 1937, there was a head-end collision between a passenger train and a light engine backing up on the Chicago, Burlington & Quincy Railroad near Kemp, Nebr., which resulted in the death of five employees and the injury of five passengers, one baggage expressman and one mail messenger.

Location and method of operation

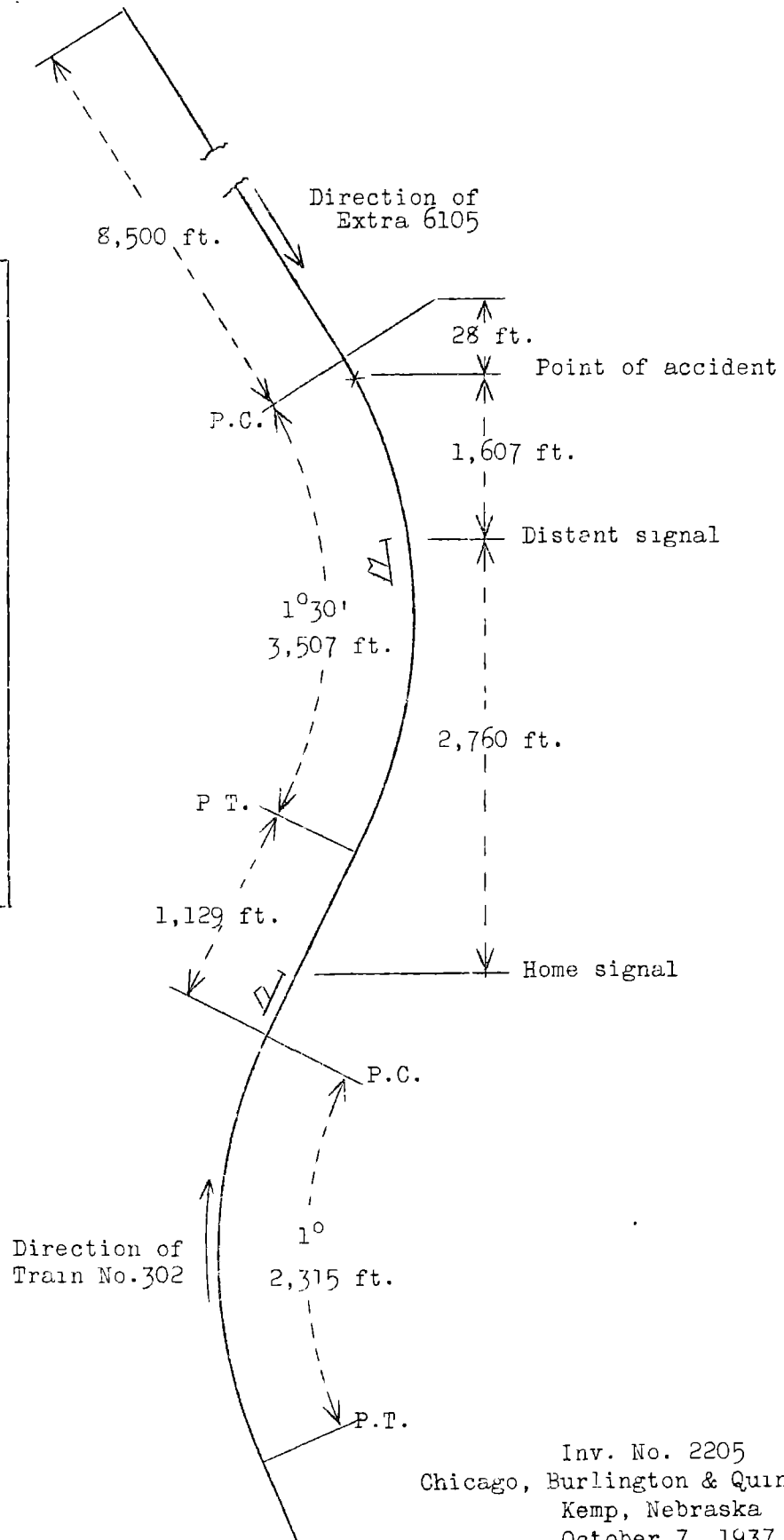
This accident occurred on the Alliance and Sterling Subdivision of the Sterling Division, which extends between Alliance, Nebr., and Sterling, Colo., a distance of 115.12 miles. In the vicinity of the point of accident this is a single-track line over which trains are operated by timetable, train orders and a manual block system for following movements only, no block system being provided for opposing movements. The accident occurred at a point 3,740 feet north of the spur track switch at Kemp. Approaching this point from the north the track is tangent for more than 1 mile, followed by a 1°30' curve to the right 3,507 feet in length, the accident occurring 28 feet south of the northern end of this curve. Approaching from the south there is a 1° curve to the right 2,315 feet in length, tangent track for a distance of 1,129 feet, followed by the curve on which the accident occurred. The grade for south-bound trains is generally descending for several miles to and beyond the point of accident, and is 0.94 percent at the point of accident. The maximum speed permitted for passenger trains is 50 miles per hour, and for light engines, 40 miles per hour.

At Northport, 1.31 miles south of Kemp, there is a wye forming a connection with another subdivision; the north switch of this wye is protected by home and distant signals of the 2-position, semaphore type, located 4,270 and 7,030 feet north of the switch. These signals also display their most restrictive indications when a train is on the track circuit between the wye switch and the distant signal. The accident occurred at a point 1,607 feet north of the distant signal.

In the vicinity of the point of accident the track is laid in prairie country and a clear view of approximately 2 miles can be had from a point 3/4 mile north of the point of accident, and for a distance of more than 1 mile the distant signal can be seen easily from the cab of a south-bound engine.

The weather was clear at the time of the accident, which occurred about 2:04 p.m.

o Alliance, Nebr.	
	13.59 mi.
o Bonner	
	8.22 mi.
o Angora	
	6.04 mi.
o Vance	
	4.65 mi.
X Point of accident	
o Kemp	
	1.31 mi.
o Northport	
	2.73 mi.
o bridgeport	
	78.58 mi.
o Sterling, Nebr.	



Inv. No. 2205
Chicago, Burlington & Quincy RR,
Kemp, Nebraska
October 7, 1937

Description

Extra 6105, a south-bound light engine backing up, was in charge of Engineman Briley and Fireman Collins. At Angora, 10.69 miles north of Kemp, the crew received train order 218, form 19, instructing them to run extra Angora to Bridgeport, train order 219, form 19, instructing them to run ahead of No. 302 Angora to Bridgeport, a message concerning the procedure to be followed upon arrival at Northport, and a form A clearance. Extra 6105 departed from Angora at 1:40 p.m., according to the train sheet, and stopped at Vance, 4.65 miles north of Kemp, at 1:55 p.m., after which it continued southward and when approaching Kemp collided with Train No. 302.

Train No. 302, a north-bound passenger train, consisted of one combination mail and baggage car, one coach and one Pullman sleeping car, all of steel construction, hauled by engine 2806, and was in charge of Conductor Joder and Engineman Opie. This train departed from Bridgeport, the last open telegraph office, 4.04 miles south of Kemp, at 1:50 p.m., according to the train sheet, on time, and after passing Kemp, collided with Extra 6105 while traveling at a speed estimated to have been between 30 and 35 miles per hour.

Engine 2806 stopped on its left side with the driving wheels in the air at an angle of about 45°; the body of the tender was torn loose from the trucks and telescoped the front end of the first car, and the rear pair of tender truck wheels was derailed; none of the cars in the passenger train was derailed. The tender of engine 6105 was crushed between the two engines. The employees killed were the enginemen and firemen of both engines and a student fireman on engine 6105.

Summary of evidence

Conductor Joder, of Train No. 302, stated that before leaving Denver, their initial terminal, the air brakes were tested and they worked satisfactorily en route. At Bridgeport three train orders and a clearance form A were received; one of the orders provided for a meet with No. 303 at Bonner, 18.91 miles north of Kemp, but nothing was received relative to an opposing extra train. He was on the right side of the coach when the collision occurred and he did not notice an application of the air brakes prior thereto. He estimated the speed of the train to have been between 30 and 35 miles per hour at the time of the accident.

Brakeman Tobin, of Train No. 302, was of the opinion that the air brakes were applied about a second prior to the collision.

Dispatcher Cutler, at Alliance, stated that under the orders issued to Extra 6105, he expected that the light engine would run ahead of Train No. 303 to Bridgeport, but that it would clear at Vance for Train No. 302, its scheduled time at that point being 2:10 p.m. About 5 minutes after the orders had been issued, he told the operator at Angora that Train No. 302 was on time and that he had better get the block at Vance so as not to delay No. 303. Engineman Briley called from Vance at 1:55 p.m., and Dispatcher Cutler told him that he wanted the block; it has been the practice to get the block when a passenger train is involved. He supposed that the light engine was in the clear at that time, although he did not ask Engineman Briley. He stated that Engineman Briley was thoroughly familiar with this territory and was a reliable man. Helping freight trains north from Northport is a common practice, and although this was Engineman Briley's first trip this year on a helper engine he has been working on freight trains between Alliance and Guernsey which includes the territory in which the accident occurred.

Agent-Operator Scott, at Angora, stated that when he delivered the train orders and message to the engineman of engine 6105 no mention was made of Train No. 302, and Operator Scott assumed that the engineman would know that Train No. 302 was on time as he did not have any train order indicating otherwise. Engineman Briley appeared to be in normal condition at the time he talked with him.

Discussion

The investigation developed that Engineman Briley of Extra 6105 held no train orders authorizing him to proceed beyond Vance against Train No. 302. When Engineman Briley called the dispatcher at 1:55 p.m. from Vance, 4.65 miles north of Kemp, the dispatcher said he wanted the block for Train No. 303 and assumed that the light engine was into clear for Train No. 302, as the schedule time of this train at Vance was 2:10 p.m. The reason for the engineman's failure to clear the main track and remain at Vance for Train No. 302 cannot be stated as the engine crew was killed in the accident, as was also the student fireman riding on this engine. Neither can any explanation be made for the failure of both crews to note the approach of the opposing train in time to prevent the collision, since both members of the passenger engine crew also were killed. The accident occurred in prairie country and there was nothing to obstruct the view across the curve on which the accident occurred. On either train the most favorable view would be from the west or fireman's side of the cab, and as performance of the duties usually required of the fireman often occupies the attention of that member of the crew at times when he should be on the lookout, it is possible that neither fireman was maintaining a lookout ahead while approaching the curve.

That the crew of Train No. 802 did not see the light engine until just prior to the accident is indicated by the statement of the brakeman that the brakes were applied in emergency a second before the collision, but there was no clue to indicate whether any preventive action was taken by the crew of the light engine.

The block system in operation in the territory in which this accident occurred provides no protection for opposing movements. During the thirty days prior to this accident an average of 15 train movements, both directions included, were made daily in the territory which includes the point of accident. In view of the traffic density, consideration should be given to the need of an adequate block system in order that proper protection may be provided for all trains.

Conclusion

This accident was caused by the failure of a light engine to clear the scheduled time of an opposing superior train.

Respectfully submitted,

W. J. PATTERSON,

Director.