

Inv-2342

INTERSTATE COMMERCE COMMISSION

WASHINGTON

REPORT OF THE DIRECTOR

BUREAU OF SAFETY

ACCIDENT ON THE

ALTON RAILROAD

SUMMIT, ILLINOIS

APRIL 1, 1939

INVESTIGATION NO. 2342

SUMMARY

Inv-2342

Railroad: Alton
Date: April 1, 1939
Location: Summit, Ill.
Kind of accident: Head-end collision
Trains involved: B. & O. freight : B. & O. freight
Train numbers: 197 : 94C
Engine numbers: 4417 and 4452 : 4613
Consist: 18 cars, cabooses : 24 cars, cabooses
Speed: Standing : 15-20 m.p.h.
Operation: Timetable, automatic block-signal and automatic train-stop system, effective with current of traffic.
Track: Double; 0°45' curve; grade level
Weather: Cloudy
Time: 12.57 a.m.
Casualties: 1 killed, 1 injured
Cause: Occupying main track without authority because of a misunderstanding of instructions, and failure to operate the south-bound train in accordance with the yard-limit rule.

Inv-2342

May 16, 1939.

To the Commission:

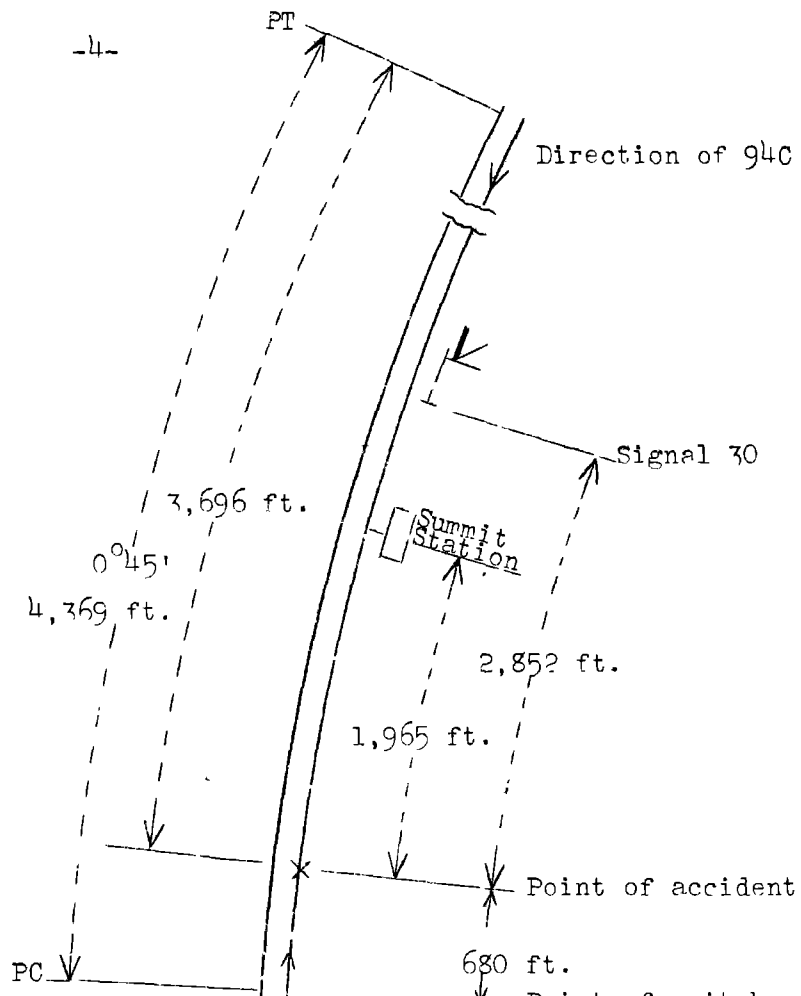
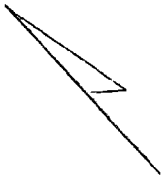
On April 1, 1939, there was a head-end collision between two Baltimore and Ohio freight trains on the Alton Railroad near Summit, Ill., which resulted in the death of one employee, and the injury of one employee. This accident was investigated in conjunction with the Illinois Commerce Commission.

Location and Method of Operation

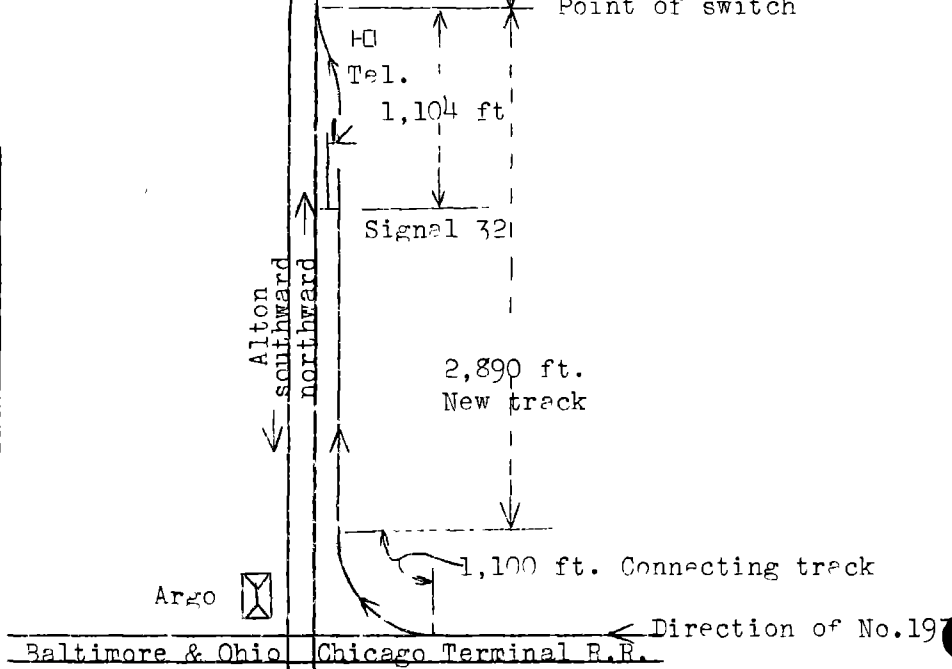
This accident occurred on that part of the Eastern Division designated as the Chicago Terminal which extends between Argo and Chicago, Ill., a distance of 13.1 miles, and is entirely within yard limits. This is a double-track line over which trains with the current of traffic are operated by timetable and an automatic block-signal and automatic train-stop system. Argo is 2.8 miles south of Glenn; between these points southbound freight trains are frequently operated on the northward main track on the authority and under the direction of the yardmaster at Glenn. It is the duty of the yardmaster to issue detour orders and to arrange with the towerman at Argo and with switch tenders for protection for such movements. Block signals do not govern trains moving against the current of traffic.

Baltimore and Ohio freight trains use the Alton Railroad yard at Glenn and the Alton tracks between Glenn and Argo. Summit is an intermediate station located 1.2 miles north of Argo. The accident occurred on the northward main track at a point 1,965 feet south of the depot at Summit. Approaching this point from the north, there is a tangent 7,735 feet in length, followed by a $0^{\circ}45'$ curve to the left 4,369 feet in length; the accident occurred on this curve at a point 3,696 feet from its northern end. The grade is practically level at the point of accident.

Two main tracks of the Baltimore and Ohio Chicago Terminal Railroad, which are under Indiana Harbor Belt Railroad operation, cross the Alton Railroad tracks at Argo. An interlocking tower, from which signals governing movement of trains at this point are operated, is located in the northwest angle of this crossing. There is a connecting track, 1,100 feet in length, leading from the main tracks of the Baltimore and Ohio Chicago Terminal Railroad northward to the Alton Railroad, at the north end



○	Chicago, Ill.	
		10.3 mi.
○	Glenn	
		1.6 mi.
○	Summit	
		0.78 mi.
X	Point of accident	
		0.82 mi.
○	Argo, Ill.	



Inv. No. 2342
 Alton R. R.
 Summit, Ill.
 April 1, 1939

of which there are facing-point crossovers leading to the Alton Railroad. A track known as New track, the south end of which joins the connecting track, parallels the Alton main tracks on the east side a distance of 2,890 feet, and its north end is connected to the northward main track by a hand-operated switch. There is a hand-operated derail on New track, located at a point 245 feet south of the main-track switch, and near this derail there is a telephone in a box where communication can be had with the yardmaster at Glenn and the towerman at Argo.

Northward automatic signal No. 32, governing movements with the current of traffic on the Alton Railroad northward main track, is located between that track and New track at a point 1,104 feet south of the north end of New track. Signal No. 30, the next signal in advance on the northward track, is located 3,532 feet north of the north end of New track and 2,852 feet north of the point of accident.

Rule 2 of the Chicago Terminal of the Alton Railroad timetable reads in part as follows:

"* * * When the schedules and rules in this time table vary from the Main Line Time Table, the Terminal Time Table will prevail. Otherwise the Main Line Time Table, schedules, rules and special instructions remain in full effect in this Terminal. * * *"

Rule 6 of the Alton Railroad timetable reads in part as follows:

"Rule 93 of 'Book of Rules' changed in part to read as follows: Yard engines and other trains have the right to work within yard limits regardless of second class, third class and extra trains, but must clear first class trains.

"Trains or yard engines must not be run against current of traffic within yard limits, except as authorized by regular Detour Order, Form 216.

"All second class, third class and extra trains will reduce speed in passing through yard limits and proceed only as the way is seen or known to be clear. * * *"

Detour Order Form 216 provides the following explanation:

"1. Trains will not operate against current of traffic without a Detour Order and then only between points mentioned therein.

"2. Enginemen or others operating trains under the provisions of this order will run under full control and be prepared to stop within their range of vision, approaching all cross over and facing point switches with utmost caution.

"3. Detour orders will be issued in triplicate by the Block Operator over the signature of the superintendent. Conductors or Pilots and Enginemen must each have a copy of this order."

Rule 17, of the Chicago Terminal timetable, reads in part as follows:

"Foreign crews before entering upon the tracks of the Alton R.R. at * * * and Argo must report to the operator or switch tender and ascertain from him if all trains due have passed and obtain his permission before entering upon the track."

General Order No. 770 issued under date of Oct. 20, 1932, reads in part as follows:

"Effective Sunday, October 23, 1932, at 12:01 A.M., no foreign crew will come onto the Alton main line at Argo without the permission of towermen at Argo who in turn will get this permission from the yardmaster at Glenn.

"Crews coming via the north wye from the IHB tracks to Alton track will not use the crossover from the new track to the northbound Alton main line, but instead will pull to the north end of the new track, which track parallels the northbound main line, and will call up the towerman at Argo for permission to use the main line from a telephone located in the box about eighty (80) feet south of the clearance point of this track. * * * After getting permission to use the main line and a line up as to what

track they are to pull in on at Glenn, will line up the main line switch and wait three (3) minutes before fouling the Alton main line."

* * *

The weather was cloudy but visibility was good at the time of the accident, which occurred about 12:57 a.m.

Description

No. 197, a north-bound freight, consisted of 18 cars and a caboosc, hauled by engines 4417 and 4452 coupled, and was in charge of Conductor Reese and Enginemen Snook and Smith. This train left its terminal at Garrett, Ind., at 4:32 p.m. and stopped about 12:50 a.m. at the north end of New track at Argo, where the head brakeman communicated by telephone with the towerman. The train entered the northward main track of the Alton Railroad about 12:55 a.m., and had stopped with the lead engine at a point 680 feet north of the switch when it was struck by No. 94C.

No. 94C, a south-bound freight train, consisted of 24 cars and a caboosc, hauled by engine 4613 and was in charge of Conductor Kennedy and Engineman Barbillion. After receiving Detour Order No. 40, Form 216, issued by the yardmaster at Glenn at 12:30 a.m., authorizing it to run against the current of traffic on northward main track from Crossover 45, Glenn, to north wye, Argo, this train left Glenn at 12:40 a.m., according to the train sheet, 1 hour 40 minutes late, on the northward main track, and collided with No. 197, while traveling at an estimated speed of 15 or 20 miles per hour.

The engine of No. 94C stopped in an upright position, and was derailed to the west in line with, and a short distance from, the northward main track, and was considerably damaged. The tender was separated from the engine and stopped on its right side across the southward main track with the front end opposite the cab of the engine, and was considerably damaged. The first car stopped upright and across the southward main track immediately south of the tender, its superstructure being sheared off. The second car stopped across the southward main track north of the tender and leaned at an angle of 45 degrees. The third car was derailed to the east of the northward main track and stopped opposite the second car at an angle of 45 degrees. The lead truck of the fourth car was derailed. The first three cars were badly damaged.

The lead engine of No. 197 was derailed but remained upright and nearly in line with the northward main track;

the tender stopped upright with the front end pointed to the northeast and immediately behind the engine; both were slightly damaged. The second engine of No. 197 remained upright with the front end on the northward main track, and the rear end nearly touching the east rail of the southward main track; the tender became separated from the engine, and remained upright with the front end to the northwest against the rail of the southward main track, and the rear end on the northward main track; both were considerably damaged. The lead truck of the first car of No. 197 was derailed.

The employee killed was the engineman of No. 94C, and the employee injured was the brakeman of No. 94C.

Summary of Evidence

Engineman Snook, of No. 197, who was in charge of the lead engine, stated that his train arrived at Argo at 12:47 or 12:48 a.m., and proceeded to the north end of New track. He walked to the telephone where the brakeman was calling the towerman at Argo for permission to use the main track; he heard the brakeman identify himself, saying, "Engine 4417, train No. 197," and by standing close to the brakeman he heard the words, "Main track, let's go," issue from the telephone receiver. He said the brakeman then turned around facing him and repeated, "Main track, let's go," then hung up the receiver and started back. Engineman Snook waited 2 or 3 minutes in compliance with the rule and then started; after the engine entered the main track, he saw the headlight of the approaching train in the vicinity of Summit depot, about 2,000 feet distant, but thought it was on the southward track; suddenly realizing it was on the same track as his own train, he applied the brakes in emergency, called a warning, and jumped off. His train was stopped when the collision occurred. He said that in the absence of the conductor it is the duty of the engineman to enforce compliance with the rules; however, rule 17 of the Chicago Terminal does not require that the engineman personally secure telephone permission at Argo to enter the tracks of the Alton Railroad and it has been the custom to allow the head brakeman to perform this duty provided he is a promoted man, which was the case in this instance.

Fireman Fuller, of the lead engine of No. 197, stated that it had rained intermittently and was cloudy at the time of the accident. He was not informed in regard to instructions received from the towerman at Argo. After the

train entered the main track, he had no knowledge of anything wrong until the engineman called out to jump and applied the brakes in emergency. He said his train was stopped when the accident occurred.

Engineman Smith, of the second engine of No. 197, stated that he was walking toward the telephone when he heard the head brakeman say, "Main track, let's go." He said that at the time of the accident No. 197 was stopped and the approaching train was working steam.

Fireman Cattell, of the second engine of No. 197, stated that the weather was cloudy and misty, but the visibility was good when the accident occurred.

Brakeman Clelland, of No. 197, stated that when his train stopped at the north end of New track he went to the telephone and called the yardmaster at Glenn, identified himself, and asked for a track, receiving instructions to pull into track 1-B. He then called the towerman at Argo, and told him that it was engine 4417, train 197, and the towerman said, "Main track," and then added, "Let's go;" he repeated this to the towerman, and did not think he hung up the receiver before the towerman had time to finish his instructions. He then opened the switches and gave a proceed signal. He said that he did not repeat to Engineman Snook the conversation about a clearance and that all the information the engineman had before pulling out on the main track was what he received by standing close to him and listening while he was telephoning. After his train was on the main track, he saw a headlight coming, but did not realize it was on the same track until the engineman called a warning to jump off.

Conductor Reese, of No. 197, stated that his train arrived at the north end of New track about 12:50 a.m., at which time he was in the caboose; after the train had stood there 4 or 5 minutes, it started, and after proceeding about half the length of the train, the brakes were applied. He said the accident occurred at 12:57 a.m. Arriving at the head end of the train, he questioned Brakeman Clelland in regard to getting permission to use the Alton main line, and was satisfied that the rules had been complied with in getting a clearance from the operator at Argo. The conductor stated that the reason he did not go to the telephone to get the clearance was because he considered the men on the head end competent to handle it.

The statements of Brakeman Miller and Flagman Brinkman, of No. 197, brought out nothing additional of importance except the latter stated that after the accident he asked Head Brakeman Clelland why the train was out of the siding and the head brakeman replied, "I called up the operator and gave him our engine number, 197, and operator said, 'Main line, let's go.' "

Fireman Dame, of No. 94C, stated that after receiving a detour order at Glenn, his train was backed to the northward track and proceeded on that track, and when in the vicinity of Summit, at which time the speed was 25 or 30 miles per hour, he observed a headlight which he thought was on the north end of New track at Argo; as the train proceeded a little farther the headlight did not appear to be in the right position to be on the side track, and it seemed to be moving. He shouted to the engineman to stop, and the latter immediately made an emergency application of the brakes, at which time he thought the opposing train was about 1,000 feet distant, and the collision occurred very soon afterward. The speed of his train at the time of the accident was about 15 miles per hour. It was very dark but visibility was good. When comparing watches with the engineman before leaving Glenn he found the engineman to be in normal condition.

Conductor Kennedy of No. 94C, who was in the caboose, stated that after receiving Form 216, which gave him permission to use the northward main track Glenn to Argo, his train backed through Crossover 45 and departed on the northward track at 12:50 a.m., and at 12:57 a.m., it collided with No. 197 near Argo. He was thoroughly familiar with the rules and understood that Form 216 gave him permission to operate his train over the northward track between the points named on this form, and that the train must be operated under full control, prepared to stop within range of vision, and also approach all crossovers and facing-point switches with utmost caution. He said his train did not exceed a speed of 20 miles per hour anywhere en route; the brakes were applied in emergency before the accident occurred, and the train did not run more than two and one-half or three car lengths after he felt the brakes become applied.

The statements of Brakemen Hughes and Ruhland of No. 94C, who were in the caboose, corroborated those of Conductor Kennedy.

Yardmaster Cronin, who was on duty at Glenn at the time the accident occurred, stated that when the conductor

of No. 94C reported ready, he informed him that his train would use the "wrong main" to Argo. The yardmaster then called the towerman at Argo, and inquired as to what was the last northbound train and the towerman replied that it was the oil train. He told the towerman that the oil train had arrived at Glenn, and to put out a block as he would send No. 94C "wrong main," and gave the towerman the names of the conductor and the engineman and the time the train was called; the towerman then said, "OK let them come." Yardmaster Cronin then issued Standard Form 216 to No. 94C, giving the conductor 2 copies, one being for the engineman, at which time it was 12:30 a.m., and stated that this is the common practice and according to the rules when operating trains against the current of traffic. He notified the switchtender on duty at Crossover 45 that No. 94C would use the northward track to Argo. No. 94C proceeded south on the northward track at 12:46 or 12:47 a.m. and after it had departed, a member of the crew of No. 197 called him on the telephone for a track. The yardmaster gave him No. 1 track in "B" yard, but did not have an opportunity to add that No. 94C was coming before this person hung up the receiver and rang the tower at Argo. The yardmaster then listened on the phone and heard this person say that No. 197 was ready to go to Glenn, and the towerman said "Stay into clear, 94C is coming wrong main," after which the receiver was hung up; later the towerman at Argo called the yardmaster and said that No. 197 had gone out against No. 94C, and a minute or two later said they had come together. Yardmaster Cronin said that in this case the rules and instructions were not complied with as the man was told to stay into clear until No. 94C passed. It is a practice frequently to send trains from Glenn to Argo on the northward main track. It is not the practice to hold B.& O. trains at the home signal on the I.H.B. when reverse movements are made, but they pull into New track, and there is nothing to hold these trains other than by telephone.

Towerman Vukovich, who was on duty at Argo tower at the time the accident occurred, stated that the yardmaster at Glenn called him on the telephone at 12:25 a.m., and instructed him to hold all north-bound trains for No. 94C running on the "wrong main track" from Glenn to Argo. At 12:50 a.m., a member of the crew of No. 197 called him on the telephone from the north end of New track, and asked for a clearance to proceed to Glenn. He told this man to wait for No. 94C coming on the "wrong main" from Glenn, and while the rules require that these instructions be repeated to him, it was not done in this instance; however,

he felt that this man had understood the instructions, but when he hung up there was no way to call him back to make sure that there was no doubt about the instructions. Shortly after, he discovered that No. 197 was moving out of New track, and immediately notified the yardmaster at Glenn, who replied that he had been listening in on the telephone, and had heard the instructions to No. 197 to stay at Argo until the arrival of No. 94C. The towerman stated that the usual procedure is to move B. & O. trains around the north wye, and down New track to clear the crossovers just north of the tower, so that they will not block west-bound train movements on the I. H. B. main track. He said that after a train had arrived at the north end of New track, there is no way to control the movement of that train except by telephone communication with the crew. At the time he talked with the member of the crew of No. 197, the phone reception was clear and he could hear distinctly.

Switchtender Baethke, who was on duty at Alton Junction when the accident occurred, stated that he did not hear the telephone conversation between the yardmaster at Glenn and the towerman at Argo in regard to protecting for a "wrong main" movement of No. 94C, but was listening on the phone and heard the brakeman of No. 197 ask the towerman for permission to enter the main line, and the towerman replied, "After 94C comes wrong main you may proceed to Glenn." He did not hear any reply to this, but heard the receiver click. There was no trouble on the telephone wires at that time.

Discussion

According to the testimony, No. 94C, a south-bound train, was authorized to use the northward main track from Glenn to Argo, and it collided with No. 197 on the northward track while traveling at an estimated speed of 15 or 20 miles per hour. No. 197 arrived at the north end of New track about 12:50 a.m., and entered the northward main track shortly thereafter, and had proceeded but a short distance when it stopped and then it was struck by No. 94C.

The yardmaster at Glenn had called the towerman at Argo about 12:25 a.m., and informed him that No. 94C would be run against the current of traffic on the northward main track from Glenn to Argo, and instructed him to provide block protection for this movement. The towerman fully understood these instructions.

The preponderance of evidence was to the effect that the towerman did not authorize No. 197 to occupy the north-

ward main track. The head brakeman of No. 197 called the towerman on the telephone from the north end of New track for authority to proceed on the northward main track to Glenn, and according to the testimony of the towerman, he instructed the brakeman to wait for the arrival of No. 94C coming on the northward main track, after which the brakeman hung up the receiver without making any reply, and the towerman had no means of calling him back, but was satisfied his instructions were understood by the brakeman. This statement of the towerman, as to the instructions issued to the brakeman, was in effect corroborated by the yardmaster at Glenn and the switchtender at Alton Junction, both of whom stated that they were listening on the telephone at the time the conversation took place. On the other hand, the statement of the head brakeman was to the effect that the towerman said, "Main track, let's go," and this statement was corroborated by the engineman of the lead engine of No. 197, who stated that he was standing by the side of the brakeman when the conversation took place. The evidence indicates that there was nothing wrong with the telephone, and that conversation could be heard distinctly at that time.

Under the provisions of the yard-limit rule, it is required that all trains other than first-class trains will reduce speed in passing through yard-limits, and proceed only as the way is seen or known to be clear. Since No. 94C was not a first-class train, this train was required to comply with the yard-limit rule. The estimate of the speed of No. 94C at the time of the accident was from 15 to 20 miles per hour. If No. 94C had complied with this rule, and since No. 197 had stopped before the accident occurred, it is apparent that the accident would have been averted.

The investigation disclosed that trains are frequently operated from Glenn to Argo against the current of traffic. These movements are made by the use of a detour order issued to the train making such movement, and the yardmaster at Glenn, who authorizes these movements, first communicates by telephone with the towerman at Argo and arranges with him for protection for the movement before issuing the detour order; there are no block-signals governing movements against the current of traffic. Under the provisions of a general order, trains arriving at Argo and destined to Glenn are required to proceed to the north end of New track and there communicate by telephone with the towerman at Argo before entering the northward main track. The towerman has no means of holding these trains

at this point other than by instructions he issues over the telephone. This condition indicates insufficient protection to insure the safety of these reverse movements; however, subsequent to this accident, officials of the railroad informed the Commission's inspectors that the practice of running trains against the current of traffic between Glenn and Argo has been discontinued until such time as safety devices can be installed to furnish adequate protection for these reverse movements. On April 15, the Alton Railroad made an application to the Commission for approval of installation of reverse traffic signaling between Glenn and Argo.

Conclusions

This accident was caused by No. 197 occupying the main track without authority because of a misunderstanding of instructions, and failure to operate No. 94C in accordance with the yard-limit rule.

Respectfully submitted,

W. J. PATTERSON,

Director.