

INTERSTATE COMMERCE COMMISSION

WASHINGTON

REPORT OF THE DIRECTOR

BUREAU OF SAFETY

ACCIDENT ON THE

ANN ARBOR RAILROAD

URANIA, MICH.

SEPTEMBER 30, 1936

INVESTIGATION NO. 2103

SUMMARY

Railroad: Ann Arbor

Date: September 30, 1936

Location: Urania, Mich.

Kind of accident: Head-end collision

Trains involved: Freight : Passenger

Train numbers: Extra 2214 : Train No. 52

Engine numbers: 2214 : 1610

Consist: 27 cars : 2 cars

Speed: Practically : 10-14 m.p.h.
stopped :

Track: 1^o curve; grade 0.7 percent ascending
for west-bound trains.

Weather: Cloudy and slightly foggy

Time: 3:20 p.m.

Casualties: 13 injured

Cause: Failure of crew of Train No. 52 to obey
a meet order and to comply with block-
signal rules.

December 10, 1936

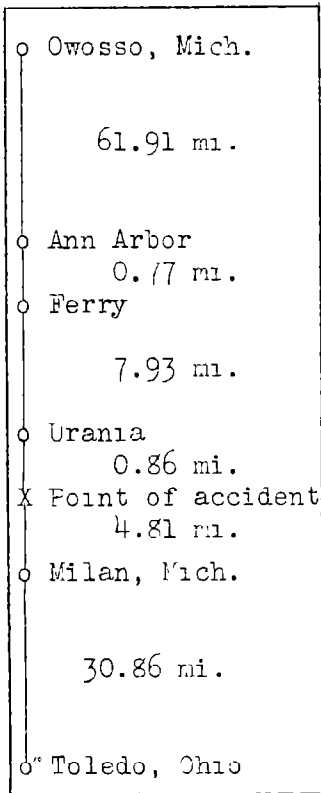
To the Commission:

On September 30, 1936, there was a head-end collision between a passenger train and a freight train on the Ann Arbor Railroad near Urania, Mich., which resulted in the injury of 2 passengers, 2 mail clerks, 1 express messenger, 1 porter, and 7 railroad employees, 1 of whom was deadheading. The investigation of this accident was made in conjunction with a representative of the Michigan Public Utilities Commission.

Location and method of operation

This accident occurred on the First Division, which extends between Toledo, Ohio, and Owosso, Mich., a distance of 107.14 miles, and is a single-track line over which trains are operated by timetable and train orders, with an automatic block-signal system in use between Milan and Ann Arbor, a distance of 14.37 miles, within which limits this accident occurred. The letter "A" is displayed on the signal mast of absolute automatic block signals and the letter "G" is displayed on the signal mast of permissive automatic grade signals; trains with 75 percent or more of rated tonnage, may pass grade signals in the stop position without stopping, and proceed with caution. The accident occurred at a point 0.86 mile east of the station at Urania; approaching this point from the west, the track is tangent for a distance of 3,912 feet, followed by a 1° curve to the left 1,100 feet in length, the accident occurring on this curve at a point 635 feet from its western end. Approaching from the east, the track is tangent for more than 1 mile, followed by the curve on which the accident occurred. The grade for west-bound trains is generally ascending, being 0.7 percent at the point of accident.

The passing track at Urania is 4,498 feet in length and parallels the main track on the north. Eastbound signal 36-5 "A" is located near the east passing-track switch; this signal is of the color-light type, displaying green, yellow, and red, respectively, for "proceed", "proceed with caution", and "stop and stay". Westbound signal 34-8 "G" is located 0.81 mile east of the point of accident. This signal displays green, yellow, and red, respectively, for "proceed", "proceed with caution", and "stop and then proceed with caution".



Sig. 36-5 A

Urania

Signal 36-5 A

Urania

Station

3,512 ft.

Direction of Train No. 52

0.86 mi.

P.C.

1°

1,170 ft.

* ← Point of accident → *

P.T.

Sig. 34-8 G

Direction of Extra 2214

0.81 mi.

Sig. 33-0

Sig. 32-0 A

Grade Signal 34-8 G

Milan

Inv. No. 2103
Ann Arbor R.R.
Urania, Mich.
Sept. 30, 1936

In the vicinity of the point of accident the track is laid between two cuts, on a fill 675 feet in length; the cut on the west is about 400 feet in length with a maximum depth of about 5 feet, while the cut on the east is about 1,300 feet in length, with a maximum depth of about 15 feet. Due to the curvature and these cuts, the view of the point of accident is restricted to approximately 750 feet from the engineman's side of a west-bound engine, and to about 1,800 feet from the fireman's side of an east-bound engine.

The weather was cloudy and slightly foggy at the time of the accident, which occurred about 3:20 p.m.

Description

Extra 2214, a west-bound freight train, consisted of 51 cars and a caboose, hauled by Wabash engine 2214, and was in charge of Conductor Barcus and Engineman Corners. This train departed from Boulevard Yard, Toledo, Ohio, 34.48 miles from Urania, at 10:16 a.m., according to the train sheet, and arrived at Milan, 5.67 miles from Urania, at 11:15 a.m. After waiting at this point for cars from a connecting line, the crew received instructions from the dispatcher to take the head portion of their train to Urania. Engine 2214, with the 27 head cars left Milan at 2:10 p.m. and the cars were placed on the main track at Urania; the head brakeman was left at that point with instructions to let Train No. 52 proceed to Milan and meet the rear portion of Extra 2214 at that point. Engine 2214 then returned to Milan, where the crew received train order 33, form 19, reading:

No. 52 meet extra 2214 west at Urania.
No. 52 take siding.

Engine 2214 then departed with the rear 29 cars and caboose, at 3:10 p.m., and collided with Train No. 52 on approaching Urania, the extra having been brought practically to a stop.

Train No. 52, an east-bound passenger train, consisted of 1 combination mail and baggage car, of steel-underframe and steel-siding construction, and 1 coach-cafe car, of wooden construction with steel center sills, hauled by engine 1610, and was in charge of Conductor Stotenbur and Engineman Farrell. This train departed from Owosso, Mich., 70.61 miles from Urania, at 1:09 p.m., according to the train sheet, 11 minutes late, and passed Ferry, 7.93 miles from Urania, at 3:07 p.m., 3 minutes late, at which point the crew received a copy of train order 33, form 19, previously quoted. Train No. 52 was stopped at Urania by the

head brakeman of Extra 2214, who informed the crew that his conductor had instructed him to permit Train No. 52 to proceed to Milan and meet the rear portion of Extra 2214 at that point. Train No. 52 then proceeded toward Milan and collided with Extra 2214 while traveling at a speed estimated to have been between 10 and 14 miles per hour.

The two engines were locked together but remained in an upright position with the front ends telescoped, the first car in Extra 2214 was demolished and the second car was derailed and badly damaged. The employees injured were the engineman and fireman of Train No. 52, the engineman and conductor of Extra 2214, the general superintendent, the general car foreman, and a fireman who was deadheading on Train No. 52.

Summary of evidence

Engineman Corners, of Extra 2214, stated that on receiving instructions to double from Milan he took the first cut to Urania and left the cars on the main track in charge of the head brakeman. He held a meet order with Extra 2170 at Urania and also instructions to follow that train back to Milan for the rear portion of his train, but inasmuch as he arrived at Urania ahead of Extra 2170 he returned to Milan with his engine ahead of that train and his head brakeman was instructed by Conductor Barcus to permit Extra 2170 to proceed to Milan, and also Train No. 52, provided his engine did not return to Urania ahead of No. 52. Upon his return to Milan he received train order 35, providing for a meet with Train No. 52 at Urania, and he accepted the order without question, stating that he thought if the crew of No. 52 told his head brakeman that they held a meet order at Urania, the brakeman would not let that train leave there. Engineman Corners stated that he then departed from Milan with the rear portion of his train; signal 34-8 "G" displayed a yellow indication when he was about 5 or 6 car lengths from it, although he stated that he could have seen this signal from a distance of about 1,600 feet. He further stated that he had not asked the conductor or fireman regarding the signal indication, but had called it to them when he saw it and also made the remark that they would not delay Train No. 52 very long. He estimated the speed of his train on passing this signal to have been about 15 or 16 miles per hour. He saw Train No. 52 when about 20 or 25 car lengths distant, at which time the speed of his train was not more than 12 miles per hour; he immediately applied the air brakes in emergency and his train had practically stopped when the collision occurred. Engineman Corners further stated it was his understanding that under the practices of this railroad, a flagman's instructions took precedence over rules. He considered

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that Extra 2170 had a right to proceed to Milan on the instructions of the flagman left at Urania inasmuch as the flagman was aware of the order providing for the meet between his train and Extra 2170 at the time he received such instructions from his conductor. The train order providing for the meet with Train No. 52 had not been received, however, at that time, and Engineman Corners stated that it was his idea that when the crew of Train No. 52 informed his brakeman at Urania of the meet order, he would hold the train at that point.

Fireman Cummings, of Extra 2214, stated that he did not hear the instructions given to the head brakeman by Conductor Barcus at Urania, nor did he ask what instructions had been given. After returning to Milan with the engine they waited for Extra 2170 to arrive before departing with the rear portion of their train. Fireman Cummings stated that he did not observe the indication of signal 34-8 "G" as he was busy with the stoker but he heard the engineman call the indication yellow; he did not hear the conductor repeat it. He estimated the speed of his train to have been about 25 miles per hour on approaching the signal and about 5 miles per hour at the time of the accident.

Conductor Barcus, of Extra 2214, stated that at Milan he received an order to meet Extra 2170 at Urania; also a message instructing him to take half his train and double to Urania, which was done. At Urania the cars were left standing on the main line, and the engine came back through the passing siding. As the opposing train had not arrived, the engine of Extra 2214 returned from Urania to Milan ahead of Extra 2170; Conductor Barcus stated that he instructed Brakeman Howay to let Extra 2170 come to Milan and that the rear portion of his train would be on main line at Milan; also as the main line at Urania was blocked with cars he instructed Flagman Howay to flag Train No. 52 and head that train through the passing track and that as things looked at the time these instructions were given he could not get back to Urania to meet 52 he would protect them at Milan. After returning to Milan and receiving the order to meet Train No. 52 at Urania, he thought it perfectly safe to leave Milan, and he said nothing to the dispatcher about the instructions he had given his head brakeman. He figured that Train No. 52 would not go by the meeting point nor would it pass a red signal indication at that point. He stated that had he held the meet order with Train No. 52, as well as the order with Extra 2170 at Urania, at the time he was at Urania, and had given these same instructions to his brakeman, he would have remained at Milan for Train No. 52. He also stated that his brakeman was left at Urania merely to protect No. 52 against the cars on the

main track. Immediately after the arrival of Extra 2170 at Milan, his engine departed with the rear portion of his train. Conductor Barcus rode on the brakeman's seat on the left side of the cab and observed that the signals en route displayed green indications until they approached signal 34-8 "G", which he did not see until the engine was about 5 car lengths from it, and he saw it change from green to yellow. Conductor Barcus further stated that he understood rule 220 providing that train orders once in effect continue so until fulfilled, superseded or annulled but he understood that a "train could go anywhere on a flag, meet or no meet."

Head Brakeman Howay, of Extra 2214, stated that after he flagged Train No. 52 at Urania, he boarded the engine and explained to Engineman Farrell the instructions that had been given to him by his conductor, that Train No. 52 was to go on down to Milan and that the conductor would take care of them at that point. He also told the engineman that Extra 2170 had left Urania at 2:45 p.m. He rode on the engine to the east end of the siding where the train was stopped, but he did not observe the indication of the east-bound signal at that point and did not have any conversation with the engine crew relative to this signal being in the stop position. He then went back to the rear of the train to give Conductor Stotenbur the same information, at which time General Superintendent Parvin and Trainmaster Craighead were on the rear with the conductor. Brakeman Howay stated, however, that he did not hear anything about the meet order, that he knew nothing about it and did not have any conversation with the members of the crew of Train No. 52 relative to a meet. After Train No. 52 left he closed the main track switch, and soon after this he heard a strange noise and upon turning around he saw steam escaping and knew that something had happened; he then noticed signal 36-5 "A" displaying a stop indication, which was the first time he had observed the signal.

Flagman Lebhrec, of Extra 2214, stated that he remained at Milan while the head portion of his train was taken to Urania. When the rear portion departed from Milan he received a copy of train order 33 from the operator and understood its contents. He rode on the left side in the cupola of the caboose to a point near signal 34-8 "G"; then he left the cupola and he did not observe the indication displayed by that signal.

Engineman Farrell, of Train No. 52, stated that both he and his fireman understood the contents of train order 33 received at Ferry. On approaching Urania he picked up

the flagman, who told him that Extra 2214 had brought the head end to Urania and had returned to Milan with the engine for the rear portion and would remain at that point for Train No. 52. The flagman also told him that Extra 2170 had proceeded to Milan. Engineman Farrell stated that he stopped on the passing track, near the depot at the east end of this track. The automatic block signal at the east switch displayed a red indication for his train and he told the flagman that he could not enter a red block, but the flagman said to go ahead, that everything was clear and that Extra 2214 would wait at Milan and that Train No. 52 would proceed on a flag. Engineman Farrell said when he mentioned the red block, the flagman also stated that "they" were in the circuit, but he did not know whether the flagman meant that his own engine was still in the circuit or whether Extra 2170 was in the circuit. During the course of the conversation the flagman was also informed of the meet order, and when Engineman Farrell proceeded it was with the understanding from the flagman that Extra 2214 would remain at Milan, and he thought that was all that was necessary. He told the flagman, however, to consult the conductor, which was done and Engineman Farrell then received a proceed signal from his conductor, although he had had no conversation with him before departing from Urania, nor was the train dispatcher communicated with. After leaving Urania he operated his train at a speed of not more than 12 or 14 miles per hour and his fireman informed him of the approach of Extra 2214 when they were about 6 or 7 car lengths from it; he immediately applied the air brakes in emergency and saw the train about 4 or 5 car lengths distant. Engineman Farrell stated that he understood the rules, but when operating under flag it had been the practice to violate the provisions or instructions contained in train orders without first notifying or having a thorough understanding with the train dispatcher. A flagman, however, did not precede his train when he departed from Urania.

Fireman Longstreet, of Train No. 52, stated that he heard some of the conversation between his engineman and the flagman of Extra 2214, and when the engineman asked the flagman about the red block, he understood the flagman to say "they were in the circuit". Fireman Longstreet stated that after leaving Urania he put in a fire and when he got back on his seat box he saw Extra 2214 about 3 or 4 pole lengths beyond and he immediately warned his engineman who applied the air brakes in emergency. He further stated that he did not know of any written or verbal instructions that authorized the movement against opposing trains on authority of a flagman contrary to a train order, but that it had been

the practice to do so on this railroad for 23 or 24 years.

Conductor Stotenbur, of Train No. 52, stated that when the stop was made at the east end of the passing track at Urania, Brakeman Howay told him that his train was to go to Milan for Extra 2214. He told the brakeman, however, that they held a meet with his train at Urania, but the brakeman told him a second time that Extra 2214 was waiting at Milan and that Train No. 52 was to proceed to Milan. Conductor Stotenbur then gave his engineman a proceed signal, and as they were pulling out of the passing track he observed the absolute block signal displaying a red indication. Conductor Stotenbur stated that he understood that a train can proceed at any time under flag protection, and that they have been accustomed to move under flagman's instructions and that it did not occur to him that he should communicate with the train dispatcher. He considered in this case that the instructions of the flagman superseded the instructions received in the train order; he has been a passenger conductor for nearly 30 years and during his experience it has been a customary practice to operate under authority of a flagman's instructions or protection.

Train Dispatcher Norman stated that if he had been advised by the crew of Extra 2214 that a flagman had been left at Urania with instructions to allow Train No. 52 to proceed from that point to Milan, he would not have issued train order 33, but no member of the crew of Extra 2214 objected to accepting this order, and neither the conductor nor the engineman of Train No. 52 communicated with him from Urania before they departed from that point. He did not recall any written instructions and he had not been given any verbal instructions which would permit trains to violate the provisions of a meet order under any circumstances or conditions, and as far as he knew since being in the service of this railroad there has not been any such practice. He further stated that he issued a message instructing Extra 2214 to take their head end to Urania and to let Extra 2170 out and then follow them back to Milan with the engine but he also said that Extra 2170 had no right to leave Urania without complying with the meet order with Extra 2214.

Towerman Hitchingham, on duty at Milan at the time of the accident, stated that when he delivered train order 33 to the conductor of Extra 2214 he made no objection nor any comment, and the towerman stated that he did not have any

knowledge of the arrangements the conductor had made with the brakeman that had been left at Urania.

Trainmaster Craighead, Assistant Trainmaster Miller, Road Foreman of Engines Maue and Chief Dispatcher Giverson stated that they did not have any knowledge of any previous violation of instructions contained in train orders by any crew on their railroad except by authority of flag protection. Chief Dispatcher Giverson also stated that no instructions had been given verbally or in writing to the effect that train orders may be violated at any time.

General Superintendent Parvin, who was on Train No. 52 at the time of the accident, stated that instructions contained in train orders at infrequent intervals have been violated when movement was made under flag protection, and that neither he nor Trainmaster Craighead, who was also on Train No. 52, questioned Conductor Stotenbur relative to train order 33 which he held establishing the meeting point with Extra 2214 at Urania. During his interrogation of Brakeman Howay, General Superintendent Parvin stated that he overheard Conductor Stotenbur inform Brakeman Howay that Train No. 52 held a meet with Extra 2214 West at Urania and the brakeman replied: "That's all right, you can go anywhere on a flag." General Superintendent Parvin further stated that trainmasters and road foremen of engines are instructed to check regularly the proper compliance with train orders when riding with crews over the road.

Discussion

The investigation disclosed that after the conductor of Extra 2214 gave instructions to his brakeman at Urania, where the head portion of his train had been left, to let Train No. 52 proceed to Milan, 5.67 miles from Urania, a train order was issued providing for a meet between Extra 2214 and Train No. 52 at Urania, and Conductor Barcus accepted this order at Milan without notifying the dispatcher of the instructions he had given his brakeman. Both the engineman and the conductor then left Milan with the belief that Train No. 52, in view of the meet order, would remain at Urania.

The crew of Train No. 52 received train order 33 at Ferry, 7.93 miles from Urania, and on being flagged by Brakeman Howay of Extra 2214 at Urania, was instructed to proceed to Milan where the rear portion of Extra 2214 was waiting for both Extra 2170 and Train No. 52. Engineman Farrell stopped the train at the east end of the passing track where

the block signal was displaying a red or "stop and stay" indication. Engineman Farrell did not confer with his conductor, but after the brakeman had given the same instructions to Conductor Stotenbur, the conductor gave a proceed hand signal, and notwithstanding the meet order the train proceeded on the verbal statement from the brakeman that Extra 2214 would remain at Milan.

This movement was in direct violation of train order No. 33 which directed Train No. 52 to meet Extra 2214 at Urania. Under the rules, train orders once in effect continue so until fulfilled, superseded or annulled; a train order can be superseded or annulled only by an order issued in prescribed form by the dispatcher, and not by information or instructions of a flagman. Under the circumstances Train No. 52 should not have departed from Urania until Extra 2214 was met at that point, or until proper orders governing its further movement were received from the dispatcher.

This movement was also in direct violation of rule 8 of the rules governing operation of automatic block signals, which provides that on single track, when a train is stopped by a signal displaying the "stop and stay" indication, and which governs the block to the next station, and a caution or clear signal is not immediately displayed, the conductor will communicate with train dispatcher by telephone and request a clearance; if unable to communicate with dispatcher a flagman must precede the train through the block. Train No. 52 should not have proceeded against a red signal indication without calling the dispatcher, and particularly so in this case in view of the fact that the instructions received from the flagman conflicted directly with the meet order.

General Superintendent Parvin and Trainmaster Craighead were on Train No. 52 and, according to the evidence, were standing directly behind Conductor Stotenbur when Brakeman Howay told him his train could proceed to Milan and that Extra 2214 would wait at that point, but apparently these officials did not question the movement of Train No. 52 from Urania with train order 33 still in effect. Furthermore, the investigation disclosed that a previous order which established a meet between Extra 2214 and Extra 2170 at Urania was not fulfilled; Extra 2170 proceeded from Urania to Milan upon verbal instructions of a flagman without communicating with the dispatcher; also the engine of Extra 2214 preceded Extra 2170 from Urania to Milan instead of following that train as instructed by the dispatcher. Statements made

by several employees during this investigation indicated that practices of this character are of common occurrence on this railroad.

Conductor Barcus exercised bad judgment in accepting the meet order with Train No. 52 without notifying the dispatcher of the instructions given his head brakeman who had been left at Urania, particularly in view of the fact that Extra 2170 had just completed a movement from Urania to Milan in violation of a meet order upon instructions from his head brakeman; also in not having a clear and definite understanding with his head brakeman concerning information or instructions to be given to the crew of Train No. 52.

The lax operating practices which were disclosed by this investigation require prompt corrective measures by responsible officials of this railroad.

Conclusions

This accident was caused by failure of the crew of Train No. 52 to obey a meet order and to comply with block signal rules.

Respectfully submitted,

W. J. PATTERSON,

Director.