

IN RE INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE DETROIT,  
TOLEDO & IRONTON RAILROAD AT HAMLER, OHIO, ON JANUARY 16, 1920

April 13, 1920.

On January 16, 1920, there was a head-end collision between a freight train and a work train on the Detroit, Toledo & Ironton Railroad at Hamler, Ohio, which resulted in the death of 4 employees and the injury of 6 employees. After investigation of this accident, the Chief of the Bureau of Safety submits the following report.

The Second District of the Northern Division, on which this accident occurred, is a single-track line extending between Napoleon, Ohio, and Junction, Ohio, a distance of 117.5 miles. Trains are operated by timetable and train orders, no block signal system being in use. Under rule 221 trains are authorized to pass a train order board in the stop position for the purpose of doing station work. Approaching the point of accident from the north, beginning at the crossing of the tracks of the Baltimore & Ohio with those of the Detroit, Toledo & Ironton Railroad, there is about 1,000 feet of tangent track, a 2-degree curve to the left about 730 feet in length, and then tangent track to the point of collision, a distance of nearly 700 feet, approaching from the south the track is tangent for more than two miles. About 35 feet south of the southern end of the curve is the north switch of a passing track located on the east side of the main line, the south passing track switch being about 3,500 feet south of the north switch. The grade is practically level, and in clear weather the view from either direction is unobscured for a distance of about 2,000 feet. At the time of the accident a severe snow storm was raging.

Extra 108 was a light wrecking outfit, consisting of a flat car, 3 material cars and a caboose, hauled by engine 108, and in charge of Conductor Ostott and Engineer Ruetz. It left Napoleon at 11.20 p.m. January 15, being operated as an extra from that point to Hamler, a distance of 13.7 miles. At Hamler the crew in charge of the train received a copy of train order No. 11 designating it as a work extra. This order, which was addressed to the crew of extra 108 and all trains south at Hamler, and which was made complete to extra 108 at 1.28 a.m., read as follows

"Eng. 108 work one twenty-five 1.25 a.m. until six 6 o'clock p.m. between Hamler and derailment one and one-fourth miles north of Leipsic with right over all trains."

Leipsic is 9.2 miles south of Hamler. There are two intermediate stations between Leipsic and Hamler, at which there are only spur tracks, the passing track at Hamler being the only passing track between Hamler and the point of derailment, which had occurred at 6.45 p.m. January 15.

After receiving train order No. 11, work extra 108 proceeded to the point of derailment and then returned to Hamler with 14 cars, placing them on the south end of the passing track. The work extra then returned to the point of derailment and after completing the work of rerailling the derailed equipment was unable to handle all of the cars at one time and started for Hamler hauling 22 cars and pushing the cars composing the wrecking outfit ahead of the engine, with the caboose in the lead. It was the intention to continue north on the main line and back the 22 cars in on the passing track at the north switch. The train had reached a point between the passing track switches, nearly 700 feet south of the north switch when it collided with train No. 43.

Southbound train No. 43 was a second-class freight train scheduled to run from Napoleon to Lima, Ohio. It was hauled by engine 94, which was being operated backing up, and was in charge of Conductor Flynn and Engineman Colson. Before leaving Napoleon at 10.10 a.m., instructions were received that they were to be turned around at Hamler, but no order annulling train No. 43 south of Hamler had been issued at the time the train arrived at that point at 11.20 a.m., for the reason that it was the purpose after going back to Napoleon to return to Hamler and again take up the schedule of train No. 43. Shortly after 12 o'clock noon the engine was started south on the main track with the intention of hauling some cars between the passing track switches and then running around them and it was while the cars were being hauled between the switches that the engine collided with the caboose of work extra 108, the collision occurring at about 12.15 p.m.

The caboose was demolished and 3 cars of the wrecking outfit so badly damaged that they were afterward destroyed. The engine truck of engine 108 was derailed, and slight damage sustained by the front end of the engine. Slight damage was also sustained by the rear end of the tender of engine 94. All of the killed and injured were in the caboose of work extra 108.

Engineman Colson, of train No. 43, stated that after arriving at Hamler the caboose was left on the main track and the cars placed on the house track. Some cars were switched out, coupled to the caboose, and the engine then started south with the train for the purpose of running around it, the engine was being operated backing up, with Brakeman Young on the rear end of the tender. Engineman Colson said he was looking back, but on account of the snow could see only about three or four car lengths. When about eight or ten car lengths south of the north passing track switch, he turned around, and just afterwards the fireman called his attention to the work extra. He then looked back and saw the work extra approaching at a speed of about 8 or 10 miles an hour. He brought his train to a stop, reversed the engine and had moved ahead a distance of about 10 or 15 feet when the collision occurred. He also stated that when his train arrived at Hamler the train order board was displayed, but that no orders had been delivered to him up to the time of the accident, neither had he

at any place received any order or message relative to work extra 108.

Fireman Hall, of train No. 43, stated that he saw the caboose of the work extra when about ten car lengths distant and at once notified Engineman Colson, who applied the air brakes in emergency. He jumped from the engine when the two trains were about three car lengths apart. He said his own train had been stopped and had just started to move ahead when the collision occurred. Fireman Hall also said that Brakeman Young was riding on the rear of the tender at the time the engine passed over the road crossing near the north switch, but that he did not know where the brakeman was at the time of the collision.

Head Brakeman Young, of train No. 43, stated that he was on the caboose, four car lengths north of the engine, when his attention was attracted to the caboose of the work extra by hearing someone calling out. At this time the two trains were not more than a car length apart.

Conductor Flynn, of train No. 43, stated that he had been instructed to go as far as Hamler, at which point his crew was to turn around and pick up a northbound train. The train order board was displayed when his train arrived at Hamler at 11.20 a.m., but he did not go into the office until about 11.45 a.m. There was an order there addressed to all trains south, train order No. 11, and he picked it up and read it, but did not receive a copy of it, neither did he say anything about it to the members of his crew as he did not see them again until after the collision occurred, at which time he was still in the office. Conductor Flynn further stated that if he had been in charge of work extra 108, working under the authority contained in train order No. 11, he would have considered that his rights ended at the south passing track switch.

Brakeman Busick stated that after the cars being handled by engine 94 had cleared the north passing track switch, he aligned the switch for the passing track and then started after the train with the intention of going ahead of it and protecting by flag when it had reached the south passing track switch. He had not reached the engine when the collision occurred. He said that he was being governed by timetable rule No. 3, and that he considered his train had a right to do its work on the main track without flag protection, provided it did not foul the south passing track switch. Timetable rule 3 which is the same as one of the paragraphs of standard code rule 5, reads as follows.

"Unless otherwise indicated the time of a train at any station on timetable applies to the switch where an inferior train takes the siding, where there is no siding, it applies to the place from which fixed signals are operated. Where there is neither siding nor fixed signal, it applies to the place where traffic is received or discharged."

Engineman Reutz, of work extra 102, stated that the air brakes were cut in on the four cars ahead of the engine and on the first car behind the engine, the brakes on the balance of the cars not being cut in on account of the next car having been damaged in the derailment. When about 15 car lengths south of the south switch, he shut off steam and brought the train under such control that he could have stopped it within 10 car lengths. His vision at this time was limited to about two or three car lengths ahead of the caboose, upon which the brakeman was riding. His first knowledge of the approach of train No. 43 was when the brakeman called to him, at which time he could not see the brakeman on account of the snow. The collision occurred just after he had applied the brakes and reversed the engine, at which time the speed of his train was about five or six miles an hour. Engineman Reutz further stated that he was familiar with timetable rule No. 3, but that under train order No. 11 his train was a superior train as far as the north passing track switch, and he thought he had the right to proceed on the main track as far as that switch.

Conductor Ostott, of work extra 108, stated that he was riding on the engine at the time of the collision and that his view was limited by the snow to about six or seven car lengths. It was <sup>the</sup> intention to back the cars in at the north passing track switch, flag protection being provided for that part of the movement beyond the north switch. He could not recall any rule to that effect, but said the train order gave his train rights over all trains between Hamler and the point of derailment, that "Hamler" meant the point where the inferior train would take the siding, and that under train order No. 11 he thought his train had rights as far as the north switch. He was familiar with the requirements of a right-of-track order in which the train first named in the order must take the siding unless otherwise provided, his train was the only train named in train order No. 11, and he agreed that the same principle applied to it, and after it was also explained by the operating officials that under timetable rule No. 3 he had no rights beyond the south switch, he said he realized his error.

Brakeman Dearwester, of work extra 108, stated that he was riding on the front platform of the caboose when the train approached Hamler. He saw the engine of train No. 43 when it was about eight or nine car lengths distant and called to the men in the caboose to jump, at the same time getting off, running back toward his own engine and calling to the enginemen to stop the train. He estimated the speed of his train at the time of collision to have been about four miles an hour. He understood that under train order No. 11 his train had no rights to the main track beyond the south passing track switch, but said that when the train proceeded on the main track beyond that point he knew that the conductor was on the engine, and not knowing whether the conductor had received any additional orders when he went into the tower on the preceding trip to Hamler. He made no attempt to stop the train.

Fireman Rhody, of work extra 108, who was a boiler washer making an emergency trip as a fireman, stated that he was putting in a fire when the engineman reversed the engine and at the same time the road foreman of engines, who was riding on the engine, told the men on it to look out. Fireman Rhody stated that he jumped from the engine without stopping to see what was the trouble.

Head Brakeman Jahns, of work extra 108, was also riding on the engine at the time of the collision. He stated that under his interpretation of train order No. 11 his train had rights over all trains up to the Baltimore & Ohio crossing at Hamler, which is a few feet south of the tower. This was his own opinion of the order, not based on anything he had studied in connection with the rules or train orders.

Road Foreman of Engines Hayes, who was riding on engine 108 at the time of the accident, stated that he did not see train order No. 11 until after the accident, but that he knew about what was contained in the order. He did not give the crew any instructions to run beyond the south switch, and at the time the engine passed the switch he did not know it had done so, having been on the deck of the engine working on the fire. He was not with the crew when they placed the first cut of cars on the siding, and while he knew of their intention to place the cut they were then handling on the siding, he did not know that it would be necessary to proceed north on the main line to the north switch in order to do so. Had he known the train was going to proceed on the main line beyond the south switch, he would have told the crew to send a flagman ahead. He said that under train order No. 11 the rights of the work extra ended at the south passing track switch. General Superintendent Kavanaugh however, stated that when he first arrived at Hamler after the accident, Road Foreman of Engines Hayes was of the opinion that under its working order extra 108 had a right to use the main track as far north as the north passing track switch.

Operator Otto, on duty at Hamler at the time of the accident, stated that the train order board was displayed at the time extra 108 arrived, at 11.20 or 11.25 a.m. At this time he had train order No. 11, addressed to extra 108 and all trains south. He did not have an order annulling train No. 43 south of Hamler, but he had received a message that train No. 43 would be turned around at Hamler; he gave this message to Conductor Flynn and said that the conductor also saw train order No. 11. Operating rule No. 221 of this railroad reads in part as follows:

"A fixed signal shall be used at each train order office, which shall indicate "stop" when there is an operator on duty, except when changed to "proceed" to allow a train to pass after getting train orders, or for which there are no orders. A train must not pass the signal while "stop" is indicated, except to do station work, or when authorized by Form OD56. The signal must be returned to "stop" as soon as the train has passed. It must be fastened at "proceed" only when no operator is on duty. This signal must be used

also to hold trains running in the same direction,  
the required time apart. \* \* \* \* \*

Operator Otto said that under this rule train No. 43 had the right to pass beyond the train order board while doing its station work, and that there was no immediate necessity of giving Conductor Flynn a copy of train order No. 11 because under the rules the first passing track switch is the "station" unless the train order specifies otherwise, and he therefore expected the work extra to pull in on the siding at the south switch. He said he had been instructed that in the case of an extra being given a right-over-all-trains order its rights ceased at the first passing track switch in the direction in which it was moving.

Dispatcher Blose, on duty from 11.00 p.m. until 7.00 a.m. stated that he put out train order No. 11 at Hamler because there are often some short trains between Napoleon and Malinta, the station between Napoleon and Hamler, and it was not desired to burden them with orders when they did not run as far as Hamler. If there was a regular work extra in that territory the order probably would have been put out at Napoleon. Example 6, Form H, of the forms of train orders, and the interpretation placed upon it in the rule book reads as follows

"Work extra 292 has right over all trains between  
'D' and 'E' 7 p.m. to 12 night."

"This gives the work extra the exclusive right  
between the stations designated between the  
times named. \* \* \*"

Dispatcher Blose stated that according to his interpretation of this rule, the working limits of work extra 108 under train order No. 11 extended between the south switch at Hamler and the point of derailment, the work extra having no right to the track between the south switch and the telegraph office.

Dispatcher Dibert, on duty from 7 a.m. until 3 p.m. stated that no order annulling train No. 43 south of Hamler had been issued prior to the time the train arrived at that point, as it was the purpose after going back to Napoleon to return to Hamler and again take up the schedule of No. 43. He said that under the provisions of rule 221 a train might pass the train order board for the purpose of doing its station work and he in ignorance of orders which might restrict its rights at that point. He did not know why train order No. 11 was not put out at Napoleon, but assumed that the dispatcher on duty at the time had reasons for not doing so. When asked why he did not issue it himself to train No. 43 before it left Napoleon he said that he was too busy; that the order was correctly placed under the rules, and that there was no necessity of changing it and putting it out at Napoleon. He thought that even if train order No. 11 had been in the possession of the crew of train No. 43 before the train left Napoleon it probably would have passed the

train order board at Hamler in doing its station work at that point. Dispatcher Dibert stated that his interpretation of a "station" as named in example 6, form H, of the forms of train orders, would be the point where the inferior train takes the siding.

Dispatcher Lewis, on duty from 3 p.m. until 11 p.m. stated that even if the crew of train No. 43 had been in possession of a copy of train order No. 11 they would have had the right to use the main track as far as the south switch while doing their station work. Under his interpretation of example 6, form H, the work extra has the right of track between two designated points, and that in this particular case work extra 106 had no right to the main track north of the south switch at Hamler, where an inferior train would take the siding for a superior train. The word "station" to an inferior train means the first switch at which the train can head in, if there is no siding, it applies to the place where passengers are received or discharged.

Chief Train Dispatcher Graham stated that to the crew of the work extra "Hamler" would be the south switch at Hamler, with no right to the main track north of that point. In answer to a question as to how the south switch would be determined upon as fixing the location of "Hamler," rather than the tower or the station itself, he stated that timetable rule 3 defines a station, and that where there is a siding nothing but the siding can be considered as the station. If it had been desired to extend the working limits of the work extra to the tower at Hamler the order would have specified "between the train order board at Hamler and the point of derailment." Dispatcher Graham also stated that it was not strictly necessary for train order No. 11 to have been put out at Napoleon as the siding at Hamler is one and one-half miles south of the train order board and southbound trains could not get into the working limits of the work extra without first getting the order at Hamler, he considered the order to have been properly placed. With regard to train No. 43 he stated that under rule 221 it had the right to use the main track as far south as the south switch with the train order board displayed. Dispatcher Graham did not know of any other instances where employees had misinterpreted the rules establishing rights by train order, and he thought that the conductors and enginemen generally were well posted on the rules.

General Superintendent Kavanaugh stated that the definition of a station as contained in the book of rules, which is the same as the standard code definition, should be taken in its entirety, the different classifications not being arranged in order of their relative importance. This definition reads as follows:

Station -- A place designated on the timetable by name, at which a train may stop for traffic, or to enter or leave the main track; or for water or fuel, or from which fixed signals are operated.

Mr. Kavanaugh stated that under train order No. 11, issued in the form outlined in example 6, form H, of the forms of train orders, the station at Hamler, as far as the work extra was concerned, was the south passing track switch, that being the place where an inferior train moving from the point of derailment to Hamler would take the siding. He stated that he determined the responsibility for this accident under time table rule 3, his interpretation of that rule being that when a work train is working within assigned limits with right over all trains it has no right to the main track at either station named in the order, and must take siding at the first switch at each of the stations named. Mr. Kavanaugh also stated that in the case of a train doing its station work under rule 221, there are no special instructions limiting its movement to the outer switches even though there might be no yard limit boards, as is the case at Hamler, and that in no case is flagging protection necessary except when moving in the direction opposite to that in which the train is being operated. He would not regard it as necessary for a southbound extra with running orders from Napoleon to Hamler to have a copy of train order No. 11, as its rights under its running order would extend only to the north switch, while the rights of the work extra would end at the south switch, both movements on the passing track being under full control. Mr. Kavanaugh further stated that all employees were given a copy of the book of rules when it was revised in 1915, at which time they were given both oral and written examinations on the rules. Since that time they have been examined orally at different times.

This accident was caused by work extra 108 occupying the main track beyond the limits designated in its work order without flag protection, for which Conductor Ostott and Engineman Ruetz are primarily responsible. Road Foreman of Engines Hayes was in a position to know what was being done, was acquainted with the requirements of train order No. 11, and is therefore also responsible for this accident. The operating officers of this company are also at fault on account of a misunderstanding which existed between them and employees on the work extra, of the working limits and right-of-track of their train under the order issued to that train.

Conductor Ostott was employed as a brakeman in 1909, and was promoted to conductor in 1917. Engineman Ruetz was employed as a fireman in 1908, left the service in 1909, was reemployed as a fireman in 1911, and promoted to engineman in 1914. The records of these employees were good. Road Foreman of Engines Hayes had had about nine years experience as an engineman, three and one-half years as general foreman and over three years as road foreman of engines.

At the time of the accident the crew in charge of work extra 108 had been on duty 13 hours and 15 minutes, after periods off duty varying from 16 hours to several days.



The statements of the various employees involved indicated that they did not have a uniform understanding as to the extent of their working limits as designated in train order No. 11. According to the statements of the general superintendent and the train dispatchers, there is no question but that under the interpretation of these officials the south passing track switch was the northern working limit, beyond which the work extra could not occupy the main track without flag protection, and it is upon their interpretation of the rules and the instructions issued to the employees relative thereto that the cause of this accident is fixed as stated above. But there was no general understanding to that effect among the members of the crew of the work extra, including the road foreman of engines, their opinions as to the northern limit of the territory assigned to the work extra varying between the south switch, north switch and the train order board.

The order in question conveys "right over all trains," the misunderstanding is based solely upon the northern limit established for the work train by this order. It appears from the investigation that the road foreman of engines himself, whose duties included the instruction and examination of engine-men, was of the opinion at the time of the accident that the superiority of the work train "over all trains" extended as far north as the north passing track switch where he thought any opposing train would be required to take siding, and the other employees of the work train crew also held views which were at variance with the interpretation placed upon the order by the dispatcher and the general superintendent. It was this lack of a uniform understanding among operating officers and employees as to the requirements of the rules and the proper interpretation of the train order which led to this accident. That this condition existed without discovery until a disastrous accident occurred indicates lax supervision and it calls for immediate correction by proper examination and definite instruction of employees, in order to prevent the recurrence of similar accidents.

This accident, which resulted from the misunderstanding of a train order, again calls attention to the necessity for the block system as a means of safeguarding traffic. Had an adequate block system been in use on this line, there would have been no opportunity for such a misunderstanding as occurred in this instance and the accident would undoubtedly have been averted.