

IN RE INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE
BALTIMORE & OHIO RAILROAD AT BRIDGEVILLE, OHIO,
ON AUGUST 4, 1918.

October 8, 1918.

On August 4, 1918, there was a head-end collision between two freight trains on the Baltimore & Ohio Railroad at Bridgeville, Ohio, resulting in the death of one employee and injuries to three employees. After investigation, the Chief of the Bureau of Safety submits the following report:

The Central Ohio sub-division on which the accident occurred, extends between Newark and Schick, Ohio, a distance of 102.2 miles. It is a single-track line running generally east and west on which train movements are governed by time table, telephonic train orders and a manual block signal system. East bound trains are superior to trains of the same class moving in the opposite direction.

The trains involved in the accident were west bound freight train No. 77, consisting of engines 2507 and 205 coupled, with 39 loaded and 3 empty cars, in charge of Conductor Milbaugh and Enginemen Howard and Swern, and east bound freight train 2nd No. 70, consisting of engines 2918 and 2621 coupled, with 55 loaded and 4 empty cars in charge of Conductor Frease and Enginemen Pyle and McDonald.

Train No. 77, due at Bridgeville at 11.37 p.m. on the 3rd, arrived at Bridgeville at 11.04 a.m. of the 4th. At this point there was a delay of a few minutes in switching, after which Conductor Milbaugh received order No. 89 reading as follows:

"Second 2nd No. Seventy 70, engines 2918 and 2621 coupled take siding and meet No. Seventy Seven 77, Engines 2507 and U. P. 205 coupled at Bridgeville instead of Sonora."

This order gave No. 77 the right to proceed west over the main track as far as the west switch, and while doing so at a speed of about 6 miles an hour, it collided with 2nd No. 70. The accident occurred at 11.23 a.m., at which time the weather was clear.

Train 2nd No. 70 left Newark at 7.48 a.m. on the date of the accident, 6 hours and 3 minutes late. At BZ tower, the last open telegraph office, 11 miles west of Bridgeville, this train received order No. 69 reading as follows:

"Second 2nd No. Seventy (Erasure) 70, engines 2918 and 2621 coupled & meet No. Seventy Seven 77, engines 2507 & U. P. 205, coupled at Bridgeville, instead of Sonora."

Train 2nd No. 70 departed from BZ tower at 10.48 a.m. and collided with train No. 77 between the passing track switches at Bridgeville while running about 13 miles per hour.

At Bridgeville the grade is slightly ascending from the west, where, parallel to the main track on the north side, is a passing siding with a capacity of 92 cars. On the south of, and also parallel to, the main track is a storage track about 4,000 feet in length, the west switch to which is located just east of N. O. Tower and about 800 feet east from where the accident occurred. Leading from this switch to near the middle of the passing siding is a cross over track.

Approaching the scene of the accident from the west, there is a tangent about 3,000 feet in length, succeeded by a

5-degree and 17 minute curve to the left about 1200 feet long followed by another tangent of about 10,000 feet. It was on the east end of this curve and near the beginning of the tangent that the accident occurred. The curve is in a cut about 20 feet in depth, the right side of which is the more prominent and which limits the view from an engine moving eastward to a range of about 200 feet.

The tank of engine 2918, which was the lead engine of train No. 70 was derailed and turned over to the south and clear of the main track, the engine itself remaining on the track. The second engine and tank of No. 70 headed south and cleared the main track. With the exceptions of the 7th, 8th and 9th cars, which were derailed, and the 6th and 10th cars, each of which had one pair of wheels derailed, all of the cars in train No. 70 remained on the track. In train No. 77, the head engine, No. 2507, was derailed, as was also one pair of wheels of the fourth car in the train.

Order No. 88, as received by train 2nd No. 70 at BZ tower, did not restrict the rights of that train, and in making the meet with train No. 77, train 2nd No. 70, being the superior train, had a right to use the main track at Bridgeville as far as the east switch.

Train Dispatcher Haight stated that the order as given by him over the telephone was for 2nd 70 to take siding and meet No. 77 at Bridgeville; the order was so written in the dispatcher's train order book.

Operator Varner at Bridgeville also stated that the order as given by the dispatcher directed 2nd No. 70 to take siding at Bridgeville, and the order given by him to Conductor Milbaugh of train 77 was so written.

Operator Laxton at B2 tower stated that the order was taken by him in a hurry so that it could be immediately delivered and thus effect a meeting point for the two trains at a station farther east than first arranged. In copying the order he said he was a few words behind the dispatcher, and that in correcting the number of the eastbound train from 73, as first written, to 70, it was possible that he had left out the words "take siding" after the first "coupled" and before the character "&", and that in repeating the order to the dispatcher in accordance with the rules he had repeated the words "take siding" although those words were not copied in the order. He also admitted that the presence of the character "&" indicated that he had not written the order as given to him and as repeated by him. In response to the question as to whether he felt that he was responsible for the accident, he replied: "If I left these two words out, which evidently I did according to the statements of Mr. Haight and Mr. Varner, no one else but me could be responsible."

Rule 211 of the Book of Rules of the Baltimore & Ohio Railroad Company, governing train orders, provides:

"When a '19' train order has been transmitted, operators must (unless otherwise directed) repeat it at once from the manifold copy, in the succession in which the several offices have been addressed."

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Operator Laxton did not do this in that he failed to repeat the order as he had copied it.

Rule 201 of the same book of rules provides also that train orders must be "clear; in the prescribed forms when applicable; and without erasure, alteration or interlineation."

The order as accepted by the crew of train 2nd No. 70 did not comply with this rule in two respects, namely:

(1) The order was not clear in that, following the first word "coupled," there was the character "&" which in itself indicated that something had been left out of the order which it was their duty to have cleared up before accepting it.

(2) The order contained an erasure and alteration, ^{although} which in itself, as explained by Operator Laxton, related only to a train number and did not bear on the movement of the train itself, should not have been accepted by the train crew.

Conductor Freese of train 2nd No. 70 stated that Operator Laxton handed him the order at BZ tower and he gave a copy to both of his enginemen and remarked to them that it was a straight meet order; they all understood the order together and agreed that they were to hold the main track at Bridgeville. He said he asked the operator about the erasure, and he replied that he had put a wrong figure there; that was all. When he got on the caboose he showed the order to his flagman, who called his attention to the fact that the operator had made a change in the order, and he told his flagman that the order was all right. Conductor Freese admitted that in accepting the

order with an erasure on it, he violated the rule, but stated that after the operator had explained it to him, he was satisfied it was all right.

Engineman Pyle stated that he knew there was a rule against receiving orders containing erasures or interlineations, and that order 89 was not a correct order under this rule, but after the operator's explanation, the order was understood by all to be a straight meet order.

Engineman McDonald stated when the conductor handed him the order, he called his attention to the erasure and was told that the operator had written down "72." After this explanation he did not feel that the alteration in the order affected it.

The direct cause of the accident was the incorrect copying of train order No. 89 by Operator Laxton, together with the improper acceptance of the order by the conductor and engineman of train 2nd 70 when such order contained an erasure and when the order itself was not clear in that the presence of the character "4" between "coupled" and "meet" should at least have raised a doubt as to the form of the order.

The fact that in this particular case the erasure on the order did not effect any material change in its wording relating to train movements, does not excuse a disregard of a fundamental rule as to train orders. Moreover, it is possible that if a new order had been demanded the operator would have detected his mistake, and he doubtless would have discovered it had his attention been called to the apparent departure from the regular form required by the rules of the company.

Operator Laxton was 37 years of age; had been in the telegraph service a little more than 20 years; had worked at BZ tower more than 3 years; and, according to the statement of Dispatcher Haight, had been found to be a reliable operator, although sometimes he had gotten his orders mixed, making it necessary for the dispatcher to correct him. On the day before the accident he had not been well. The night before the accident he had had cramps most of the night, getting up at about 5 a.m. At that time he thought of not reporting for work, but on account of shortage of operators decided to go to work at 7 a.m., his regular hour, and during most of the day of the accident suffered with cramps.

Engineer Pyle had been in the service on the division involved about 19 years, and engineer McDonald had been in the service of the company about 18 years. Conductor Frease had been in the service of the Baltimore & Ohio Railroad 31 years, 28 years as a conductor. He was examined on the rules on May 27, 1918.

At the time of the accident none of the employees involved had been on duty in violation of the hours of service law.

RFW.