National Transportation Safety Board

Office of Railroad, Pipeline and Hazardous Materials Washington, DC 20594



RRD23FR017

INVESTIGATION FACTUAL REPORT

Group Chair's Factual Report

April 23, 2024

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A. ACCIDENT DATA

Accident No: RRD23FR017 Type: Remote control locomotive strike with employee fatality Location: Walbridge yard, Walbridge, Ohio Milepost: CDA 118.0 Date: September 17, 2023 Time: 03:24 (EDT) Carrier: CSX Transportation Train type/Designation: Y397 Fatalities: 1 Injuries: 0

B. PARTIES TO THE INVESTIGATION

Parties to this National Transportation Safety Board investigation include CSX Transportation (CSX), Federal Railroad Administration (FRA), and Transportation Communications Union/International Association of Machinists and Aerospace Workers (TCU/IAM).

c. INVESTIGATION GROUP

| IIC | Matthew Thompson Investigator in Charge National Transportation Safety Board (NTSB) |
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| Party Coordinator | Jason Cox National Union Representative Transportation Communications Union (TCU) |

D. ACCIDENT SUMMARY

On September 17, 2023, at about 3:24 a.m. local time, a CSX Transportation (CSX) mechanical department employee with over eighteen years of service was struck and fatally injured when he walked into the path of a moving yard locomotive that was being operated by a remote-control operator (RCO).

At the time of the accident, the employee was working with another carman to secure and lock switches leading to a cut of standing cars that required mechanical inspections. The two employees were utilizing a company truck to drive along the tracks to various locations throughout the yard to access these switches. Security camera footage reviewed by NTSB investigators on scene showed the employee parking his truck next to the active track and then after getting out of the truck, walking directly into the path of the remote locomotive.

Visibility at the time of the accident was dark, but the location was illuminated with overhead fluorescent lighting at the point of impact and the headlight of the lead locomotive was observed to be on and functioning correctly in the obtained security video.

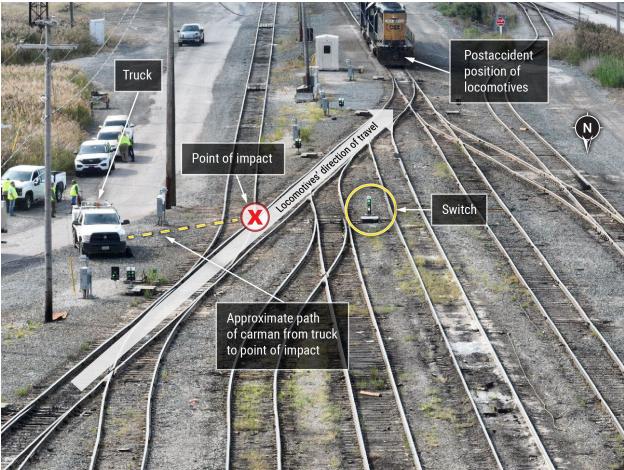


Figure 1- View of the accident location (Drone footage provided by CSX)

E. DETAILS OF THE INVESTIGATION

1.0 Description CSX Operations at Walbridge Yard, Walbridge Ohio

CSX Walbridge Yard is a large rail facility that contains areas for receiving, classifying, and building various types of freight trains. It has four dedicated remote-control zones (RCZ)¹ which are utilized by qualified remote-control operators (RCO)² controlling remote control locomotive (RCL's)³ within the yard and operates on a 24-hour schedule. The method of operation in Walbridge yard is governed by CSX operating rules and are designated as other than main track.

¹ Remote Control Zone (RCZ) -is a designated portion of track in which a remote-control locomotive may operate without protecting the leading end of the movement.

² Remote Control Operator (RCO) - An employee who has control of remote-control locomotive by means of an operator control unit.

³ Remote Control Locomotive (RCL) - A locomotive equipped and configured to be controlled by a remote-control operator utilizing an operator control unit.

Such movements are made at a speed that permits stopping within one-half the range of vision, short of a train, a car, on-track equipment, an obstruction, a stop signal, a derail, or an improperly lined switch and must not exceed 10 MPH when not moving to or from the main track, operating through hand operated switches unless specified otherwise in special instructions.⁴

2.0 Events Prior to the Accident

2.1 Accident Employee References

For clarity within this factual report, the individuals directly involved in the accident will be referred to as follows:

1. Carman 1. The CSX mechanical employee that was fatally struck.

2. Carman 2. The CSX mechanical employee with Carman 1 at the time of the accident.

3. Accident conductor. The CSX employee operating the RCL.

4. Manager of train operations (MTO). The CSX transportation manager on duty at the time of the accident.

5. Mechanical supervisor. Mechanical manager on duty at the time of the accident.

6. Walbridge Yardmaster. Yardmaster on duty at the time of the accident.

2.2 CSX Mechanical Carman

On September 16th, 2023, at 11:00 pm local time, a group of workers consisting of two carmen reported for duty at the Walbridge yard mechanical employee crew room for their work assignments and safety briefings. During interviews with investigators, Carman 2 stated that there were five car inspectors and one lead carman on duty at this time, and that they all received their safety briefing from the CSX general car foreman. This briefing was then followed by the lead carman who issued work assignments for the entire shift of carman.

On completion of the briefs, the two-carman workgroup began performing the work that they had been assigned. Carman 2 described this work as general

⁴ CSX Operating rule 300.4, Chapter 3 - Movement of Trains.

mechanical inspections of rail cars throughout all sections of the yard. He stated that while he talked to the yardmaster frequently, he received his instructions directly from the lead carman, and that these instructions were normally handwritten and given to him at the crew room in a fact to face brief.

2.3 CSX Conductor Y397

On September 16th, 2023, the accident conductor was assigned to work Y397, however due to crew shortages, he was reassigned to work the Y394 assignment.

The CSX Y394 is a is a one-person RCO yard switching assignment located in Walbridge yard. Switching operations at Walbridge yard are directed by the Walbridge yardmaster. Work instructions and documentation from the yardmaster are delivered to the crews primarily through a printer located in one of several "shanty's" which function as a crew room. Verbal instructions from the yardmaster are given to the crews through crew handheld radios.

During his interview with investigators, the accident conductor stated that he was notified of the assignment change by the MTO prior to reporting for duty. He stated that he signed up at eastbound yard at 11:59 p.m. After receiving his switch lists, he stated that he had a job briefing with the previous RCO that was going off duty, and that they discussed what yard tracks were clear of equipment and which ones were getting full.

After this brief, the accident conductor stated that he went to track 3 in the eastbound yard to begin inspecting and testing his locomotive. After these tests were completed, he established his remote-control zone (RCZ) by riding the head end of his locomotive from the track 3 in the eastbound yard to the road crossing at Latcha road, and then from there, proceeded timetable west back up the new lead track to track 19 in the eastbound yard. He stated that he while he swept his remote zone, that he checked his switches for proper lining and checked his remote-control zone signs to make sure they were down.

After the accident conductor established his remote zone, he stated that he contacted the yardmaster to let him know that his "zone was active" and began performing his switching work.

3.0 The Accident

At 3:16 am, carman 2 attempted to contact the conductor of Y394 via his handheld radio to request permission to "lock up 3 and 5". This was described to investigators by carman 2 as a request to place locks and blue flags on tracks 3 and 5 in the eastbound yard.

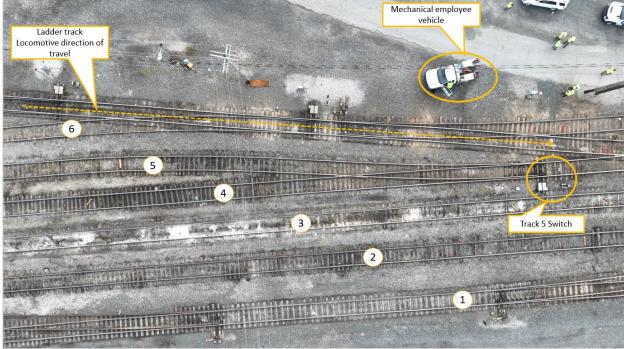


Figure 2 - Overhead view with track labels (Drone image provided by CSX)

According to interview statements from the accident conductor, the conductor stated that he responded to the carman 2, but that the carman was unable to hear his transmission. He stated that he attempted to respond to him several times but that the carman was not receiving his transmissions. The yardmaster was able to hear radio communications from the conductor to the carman. Shortly thereafter, the yardmaster began to relay the transmission to the carman from the accident conductor and told the carman 2 that they had the accident conductor's permission lock up the switches they had requested.

At 3:20 am, security camera footage reviewed by investigators showed carman 1 and 2 arriving to the accident location in a white work truck along the right of way in the vicinity of the eastbound track 3 switch. Carman 1 is seen exiting the driver's side of the truck and walking across the "ladder" track before performing work on the track 3 switch. Carman 2 is seen leaving the passenger side of the truck and after walking across the "ladder" track is seen in the video placing a lighted blue flag marker within the gauge of track 3.

At 3:21 am, event recorder data reviewed by investigators indicated that the accident conductor began moving his locomotives timetable east from 19 track to the ladder track. During this movement, CSXT2032 was the leading and controlling locomotive and CSXT8033 was in trail. The accident conductor was riding the rear locomotive platform of CSXT8033.

At 3:23 am, carman 1 returns to the work truck, and then proceeded timetable west along the right of way to the vicinity of the track 5 switch. Carman 2 is seen walking back towards the right of way across tracks 3, 4 and the "ladder" track where carman 1 stops and picks him up. The truck is then observed driving timetable west to the vicinity of accident location. During this time, the headlight of locomotive CSXT 2032 is seen on the video proceeding timetable east on the "ladder" track.

At 3:23:53, the work truck transporting the two carman stop along the right of way in the vicinity of the track 6 switch along the "ladder" track. The headlight of locomotive CSXT 2032 is seen proceeding timetable east in the vicinity of the eastbound track 7 switch.

At 3:23:57, the driver's side door of the work truck is seen to be opened, and carman 1 is seen walking towards the "ladder" track. The headlight of locomotive CSXT 2032 is seen passing the track 6 switch which intersects with the "ladder" track. Carman 2 is seen exiting the passenger side of the work truck.

At 3:24:02, carman 1 is seen walking across within the gauge of the "ladder" track looking straight ahead and did not look at the locomotives approaching from the right.

At 3:24:04 the security camera records CSXT 2032 striking carman 1 in the vicinity of the "ladder" track and the "new track lead". Carman 2 is seen walking timetable west and around the front of the work truck. He then proceeds across the ladder track in the vicinity of track 6 after the locomotives pass his location.

At 3:24:38, carman 2 is seen placing a blue flag marker light within the gauge of track 5. Afterwards, he is seen walking back across the tracks to the work truck. At 3:25:17, carman 2 is seen walking towards the accident site. On arriving at the location of the fatal strike, he is seen running back towards his truck.

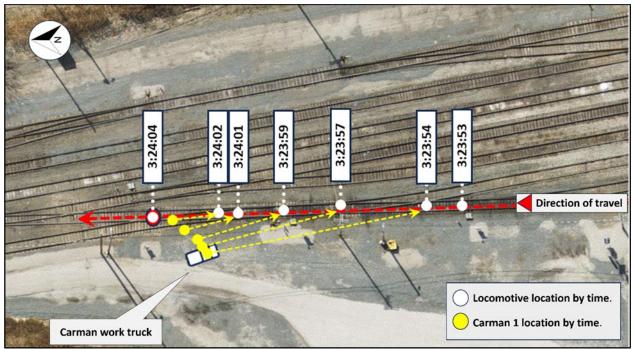


Figure 3 - Time detail of the fatal accident.

4.0 Postaccident Site Description

On Sunday, September 17, 2023, the Operations group conducted an onscene inspection of the accident site. The purpose of this site walk was to collect and document information related to the accident.

This included the following activities:

- Site photography and track observations.
- Accident distance measurements.
- Inspection of CSXT-2032 and remote-control functionality.
- Observation of Remote-Control switching capabilities.
- Video recordings of the shoving re-enactment.

This information was documented and discussed with the parties after the organizational meeting that was held on September 18, 2023.

5.0 Track and Infrastructure Information

The accident occurred on the Midwest Division, Toledo Terminal Subdivision in Walbridge Yard. On the New Lead/Switching Lead (ladder) turnout in the West End of the Eastbound Yard at milepost #CDA115.5. The jointed track at the area of the accident is tangent with a maximum speed of 10 mph.

6.0 Accident Locomotive Equipment Information

At the time of the incident the train consisted of two locomotives. Locomotive CSXT 2032 was the controlling locomotive and was facing timetable west. Locomotive CSXT 8033 was in trail of leading locomotive and was facing timetable west.

6.1 Locomotive and Consist Information

| CSXT 2032 - Lead remote control locomotive (RCL) |
|--|
| Built 1972 Rebuilt EMD GP38-2 to GP38-3 |
| 2000 hp EMD 645 16-cylinder engine |
| 4 axles, DC traction motors |
| Weight - 256,000 pounds |
| Length -59 ft 2 in |
| Width – 10 ft 5 in |
| Height - 15 ft 8 in |
| Last periodic inspection - 5//2023 |
| Next periodic inspection due - 11/25/2023 |

CSXT 8033 - Trailing locomotive Built 1979 EMD SD40-2 3000 hp EMD 645E3 16-cylinder engine 6 axles, DC traction motors Weight - 383,000 pounds Length -68 ft10 in Width - 10 ft 7 in Height - 15 ft 11 in Last periodic inspection - 8/19/2023 Next periodic inspection due - 11/18/2023

6.2 Mechanical Inspections

On-scene post-accident inspection of locomotives CSXT 2032 and CSXT 8033 was performed. The locomotives were found to be current on all required Federal tests and inspections, with no exceptions identified.

CSX RCLs consisted of lead locomotive CSXT 2032 and trailing locomotive CSXT 8033 and were inspected by FRA post-accident on September 17, 2023 at approximately 4:55 pm while secured on the "New Lead" located at the East End (South) of Walbridge Yard. Lead locomotive CSXT 2032 had operational head lights, ditch lights, bell, and horn. RCL beacon lights on both left & right side were functional and operational. A "Man-Down" and "Vigilance" tests performed, no defects were observed.

7.0 Data Recordings and Radio Communications

Digital evidence investigators received from CSX included the locomotive event recorder data files, outward facing video files, security camera videos and yardmaster radio recordings preceding the accident.

On review of these recordings, investigators noted that the various digital recording times displayed did not reflect the actual event times. The investigative group agreed to use the locomotive event recorder time as the actual time as this data was downloaded through a server.

7.1 Walbridge Eastbound Yard Camera Video

On Tuesday, September 19, 2023, NTSB Investigators conducted a review of the Walbridge Eastbound yard camera video that contained video footage of the accident. The following timeline was developed based on the investigator's observations of this video and in conjunction with the event recorder table data reviewed on scene.

| Security camera time stamp | Locomotive distance in feet | Elapsed time (sec) | Description of video events as observed by investigators |
|----------------------------------|-----------------------------------|--------------------------|---|
| 3:23:53 | 169 | 11 | Work truck stops (brake lights off). |
| 3:23:54 | 155 | 10 | No movement observed |
| 3:23:55 | 140 | 9 | No movement observed |
| 3:23:56 | 124 | 8 | Carman 1 opens driver side vehicle door. |
| 3:23:57 | 109 | 7 | Carman 1 steps out of truck. |
| 3:23:58 | 94 | 6 | Carman 1 shuts driver side door. |
| 3:23:59 | 78 | 5 | Carman 1 begins walking toward the ladder track. |
| 3:24:00 | 63 | 4 | Carman 1 is half the distance between truck and the ladder track. |
| 3:24:01 | 47 | 3 | Carman 1 reaches the first rail of ladder track. |
| 3:24:02 | 32 | 2 | Carman 1 is seen inside of ladder track gauge. |
| 3:24:03 | 16 | 1 | Carman 1 is seen inside of ladder track gauge. |
| 3:24:04 | 0 | 0 | Carman 1 is struck by CSXT 2032. |

Table 1 - Walbridge yard security camera video timeline.

7.2 Locomotive Event Recorder Review

Digital evidence received by CSX included the locomotive event recorder data files. Investigators conducted a review of the event recorder data from the lead locomotive CSXT 2032. The locomotive wheel size was measured at 40 inches.

7.2.1 Event Recorder Data from CSXT 2032 Preceding the Accident

The following timeline was developed based on the group's observations of the initial movement of the RCL prior to proceeding timetable east to the accident location (Table 2).

An additional column has been added to this table data to correlate the time and distance relative to the accident site. This column has been labeled as "Distance to strike".

| Time | feet | Speed mph | OCU⁵ A Speed Selection | EAB BP | EAB BC | Bell | Horn | PCS Open | Distance to strike |
|---------|------|--------------|------------------------------|-----------|-----------|------|------|-------------|-----------------------|
| 3:21:15 | 3638 | 0 | Stop | 89 | 69 | Off | Off | Closed | 3187 |
| 3:21:16 | 3638 | 0 | Couple | 89 | 69 | On | Off | Closed | 3187 |
| 3:21:17 | 3638 | 0 | Couple | 89 | 54 | On | Off | Closed | 3187 |
| 3:21:18 | 3638 | 0 | Couple | 89 | 30 | On | Off | Closed | 3187 |
| 3:21:19 | 3638 | 0 | Couple | 89 | 15 | On | Off | Closed | 3187 |
| 3:21:20 | 3638 | 0 | 10 | 89 | 7 | On | Off | Closed | 3187 |
| 3:21:21 | 3638 | 0 | 10 | 89 | 6 | On | Off | Closed | 3187 |
| 3:21:22 | 3637 | 0.4 | 10 | 89 | 5 | On | Off | Closed | 3186 |
| 3:21:23 | 3636 | 0.7 | 10 | 89 | 4 | On | Off | Closed | 3185 |
| 3:21:24 | 3634 | 1.4 | 10 | 89 | 3 | Off | Off | Closed | 3183 |

Table 2 - Event recorder table data of the RCL on initial movement.

Investigators noted the OCU A speed selection data as it related to the locomotive speed throughout this data review. These selections display the selector lever that the RCO used to control the speed of his equipment. Investigators noted that the speed associated with this selection is predefined by the manufacturer.

Investigators also noted that the locomotive bell was activated for 4-5 seconds during the initial movement.

⁵ Operator Control Unit (OCU) This is a portable, radio-remote unit worn by the RCO operator to control locomotive operations.

7.2.2 Event Recorder Data from CSXT 2032 at the Time of the Accident

The following timeline was developed based on the group's observations of the initial movement of the RCL prior to proceeding timetable east to the accident location (Table 4).

| Time | Feet | Wheel Speed mph | OCU A Speed Selection | EAB BP | EAB BC | Bell | Horn | PCS Open | Distan to stri |
|---------|------|-----------------------|-----------------------------|-----------|-----------|------|------|-------------|-------------------|
| 3:24:47 | 620 | 10 | 10 | 89 | 0 | Off | Off | Closed | 169 |
| 3:24:48 | 606 | 10 | 10 | 89 | 0 | Off | Off | Closed | 155 |
| 3:24:49 | 591 | 10.4 | 10 | 89 | 0 | Off | Off | Closed | 140 |
| 3:24:50 | 575 | 10.4 | 10 | 89 | 0 | Off | Off | Closed | 124 |
| 3:24:51 | 560 | 10.7 | 10 | 89 | 0 | Off | Off | Closed | 109 |
| 3:24:52 | 545 | 10.4 | 10 | 89 | 0 | Off | Off | Closed | 94 |
| 3:24:53 | 529 | 10.4 | 10 | 89 | 0 | Off | Off | Closed | 78 |
| 3:24:54 | 514 | 10.7 | 10 | 89 | 0 | Off | Off | Closed | 63 |
| 3:24:55 | 498 | 10.7 | 10 | 89 | 0 | Off | Off | Closed | 47 |
| 3:24:56 | 483 | 10.4 | 10 | 89 | 0 | Off | Off | Closed | 32 |
| 3:24:57 | 467 | 10.7 | 10 | 89 | 0 | Off | Off | Closed | 16 |
| 3:24:58 | 451 | 10.7 | 10 | 89 | 0 | Off | Off | Closed | 0 |

Table 3 - Event recorder table data of RCL prior to the fatal strike.

8.0 Operating Rules in Effect at the Time of the Accident

Operating Rules that were in effect at the time of the accident and include the following:

- CSX Employee Operating Manual effective February 1, 2023.
- CSX Air Brake & Train Handling, effective June 1, 2023.
- CSX Equipment Handling, effective June 1, 2023.
- CSX Safe Way, effective June 1, 2023.
- Toledo Terminal subdivision timetable no.1, effective November 1, 2017.
- Toledo Terminal subdivision Bulletin order reissue, effective June 25, 2023.

9.0 Employee Operational Information

9.1 Employee Certification information

| NAME | HIRE DATE | HIRE DATE CRAFT | | LAST RULES EXAMINATION | |
|--------------------|------------|-----------------|----------|---------------------------|--|
| Carman 1 | 10/25/2004 | Mechanical | N/A | 2/6/2023 | |
| Carman 2 | 10/25/2004 | Mechanical | N/A | 01/30/2023 | |
| Accident conductor | 6/11/2012 | Conductor/RCO | 9/8/2023 | 02/12/2022 | |

Table 4 - Employee certification.

9.2 Employee Hours of Service (HOS) Information

Investigators requested the hours-of-service (HOS) information of the employees directly associated with this accident. The following tables detail the work and rest histories of the three CSX employees.

| Employee | On duty | Off duty | On du | ty times | _ | vious off y times | Cumulative on duty time | |
|-------------|-------------------------|------------------------|-------|----------|-----------|----------------------|----------------------------|-------------|
| Linployee | date/time | date/time | Hours | Minutes | Hour s | minutes | Hours | minute s |
| | 9/16/2023 10:51 p.m. | 9/17/2023 3:30 a.m. | 4 | 39 | 63 | 51 | 4 | 39 |
| | 09/15/23 | 09/16/23 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 9/13/2023 10:46 p.m. | 9/14/2023 7:00 a.m. | 8 | 14 | 15 | 19 | | |
| | 9/12/2023 10:51 p.m. | 9/13/2023 7:27 a.m. | 8 | 36 | 15 | 51 | | |
| CARMAN 1 | 9/11/2023 10:49 p.m. | 9/12/2023 7:00 a.m. | 8 | 11 | 15 | 47 | 41 | 46 |
| | 9/10/2023 10:54 p.m. | 9/11/2023 7:02 a.m. | 8 | 8 | 15 | 25 | | |
| | 9/9/2023 10:52 p.m. | 9/10/2023 7:29 a.m. | 8 | 37 | 62 | 52 | | |
| | 09/08/23 | 09/09/23 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 9/6/2023 10:51 p.m. | 9/7/2023 8:00 a.m. | 9 | 9 | NR | NR | Not re | eported |

Table 5 - Carman 1 hours of service records.

| Employee | On duty date/time | Off duty date/time | On duty times | | Previous off duty times | | Cumulative on duty time | |
|----------|--------------------------|--------------------------|---------------|---------|----------------------------|---------|----------------------------|---------|
| | date/time | date/time | Hours | Minutes | Hours | minutes | Hours | minutes |
| | 09/16/2023 10:45 p.m. | 09/17/2023 08:00 a.m. | 9 | 15 | 15 | 26 | | |
| | 09/15/2023 10:47 p.m. | 09/16/2023 07:19 a.m. | 8 | 32 | 15 | 53 | | |
| | 09/14/2023 10:45 p.m. | 09/15/2023 06:54 a.m. | 8 | 9 | 15 | 51 | 42 | 39 |
| CARMAN | 09/13/2023 10:45 p.m. | 09/14/2023 06:54 a.m. | 8 | 9 | 15 | 26 | | |
| 2 | 09/12/2023 10:45 p.m. | 09/13/2023 07:19 a.m. | 8 | 34 | 87 | 43 | | |
| | 09/10/23 | 09/11/23 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 09/08/2023 10:45 p.m. | 09/09/2023 07:02 a.m. | 8 | 17 | 39 | 51 | Notr | apartad |
| | 09/06/2023 10:45 p.m. | 09/07/2023 06:54 a.m. | 8 | 9 | NR | NR | inot r | eported |

Table 6 - Carman 1 hours of service records.

| Employee | On duty date/time | Off duty | On du | ty times | - | ous off times | Cumulative on duty time | |
|-----------------------|----------------------|--------------------|-------|----------|--------|------------------|----------------------------|---------|
| | date/time | date/time | Hours | Minutes | Hours | minutes | Hours | minutes |
| | 9/16/23 11:59 PM | 9/17/23 8:20 AM | 8 | 21 | 16 | 58 | | |
| | 9/15/23 11:00 PM | 9/16/23 7:01 AM | 8 | 1 | 15 | 46 | 24 | 36 |
| | 9/14/23 11:00 PM | 9/15/23 7:14 AM | 8 | 14 | 64 | 29 | | |
| | 9/13/23 11:00 PM | Rest day | 0 | 0 | 0 | 0 | 0 | 0 |
| | 9/12/23 10:30 PM | Rest day | 0 | 0 | 0 | 0 | U | 5 |
| Accident Conductor | 9/11/23 10:30 PM | 9/12/23 6:31 AM | 8 | 1 | 14 | 29 | 16 | З |
| | 9/10/23 11:59 PM | 9/11/23 8:01 AM | 8 | 2 | 79 | 13 | 10 | J |
| | 9/9/23 12:01 AM | Rest day | 0 | 0 | 0 | 0 | 0 | 0 |
| | 9/8/23 3:25 AM | Available | 0 | 0 | 44 | 18 | | |
| | 9/7/23 7:00 AM | 9/7/23 4:46 PM | 9 | 46 | 23 | 53 | Not r | eported |
| | 9/5/23 10:30 PM | 9/6/23 7:07 AM | 8 | 37 | Not re | eported | | |

Table 7 - Accident conductor hours of service records.

9.3 Employee Operational Testing (2/15/2023 - 9/11/2023)

| NAME | From date | End date | Total tests | Total Non-Compliant | NC % |
|--------------------|-----------|-----------|----------------|------------------------|------|
| Carman 1 | 2/15/2023 | 9/6/2023 | 16 | 0 | 0 |
| Carman 2 | 2/15/2023 | 9/7/2023 | 15 | 0 | 0 |
| Accident conductor | 9/20/2022 | 9/11/2023 | 28 | 0 | 0 |

Table 8. Employee operational testing records.

9.4 Toxicology Testing

Post-accident, specimens obtained from the fatally struck carman by the Office of the Chief Medical Examiner (ME) of the State of Ohio were provided for testing by the Civil Aerospace Medical Institute (CAMI) of the Office of Aerospace Medicine, of the Federal Aviation Administration. The specimens were tested and found to be negative for the presence of illicit drugs and alcohol. No other CSX employees were tested.

9.5 Interviews Conducted Onscene

The investigative team conducted five interviews relating to this accident. These interviews were held on September 18, 2023, and on September 19th, 2023, and were conducted in a CSX provided conference room located in Walbridge, Ohio.⁶

- 1. Carman 2.
- 2. Accident conductor.
- 3. Manager of train operations (MTO).
- 4. Mechanical supervisor.
- 5. Walbridge Yardmaster.

10.0 Internal Oversight

10.1 CSX Operational Testing Program

As required by federal regulation 49 CFR part 217, CSX supervisors conduct operational testing to evaluate compliance with the current CSX Operating rules, related Timetable Special Instructions, and federal regulations.

All CSX non-management employees, non-management employees of foreign railways, and contractors working in safety sensitive positions on CSX property and while on duty are subject to this operational testing.

Operational testing is performed by a qualified testing supervisor following procedures and instructions contained in the CSX Operational Testing program Manual⁷ in effect on February 1, 2022, and updated in May 2023.

CSX operational testing is conducted by supervisors observing employees performing a variety of defined activities. These testing activities are designated by a test number listed in the CSX operational testing manual and contain the operating rules associated with the activity they are observing.

Testing Supervisors document the results of employee operational testing with the applicable rules listed under the individual test with either a "satisfactory" for an observation in compliance or "unsatisfactory" for a non-compliant observation.

⁶ The complete interview transcripts are located in the docket at the following web address: <u>https://data.ntsb.gov/Docket/?NTSBNumber=RRD23FR017</u>

⁷ The complete CSX Operational Testing program Manual can be found in the docket at the following web address: <u>https://data.ntsb.gov/Docket/?NTSBNumber=RRD23FR017</u>

10.2 CSX Operational Testing Records

On September 15, 2023, NTSB Investigators requested the operational testing records conducted by managers assigned to Walbridge yard for the year prior to this accident.

The records CSX provided to investigators contained a total of 3,117 compliance tests conducted by five manager and included a mixture of CSX operational testing results for both the mechanical and transportation departments. These records also included operational testing that were conducted at locations other than Walbridge yard.

The below table details the overall operational testing counts and percentages by CSX manager for the period of September 17, 2022, through September 15, 2023.

| Manager | Total of all tests conducted | Total of tests in Compliance | Total of tests not in compliance | Compliance Percentage | Non-compliant Percentage |
|-----------|------------------------------------|------------------------------------|--|--------------------------|-----------------------------|
| Manager 1 | 685 | 680 | 5 | 99.27% | 0.73% |
| Manager 2 | 545 | 544 | 1 | 99.82% | 0.18% |
| Manager 3 | 366 | 364 | 2 | 99.45% | 0.55% |
| Manager 4 | 733 | 730 | 3 | 99.59% | 0.41% |
| Manager 5 | 788 | 786 | 2 | 99.75% | 0.25% |

| Total: | 3117 | 3104 | 13 | 99.57% | 0.42% |
|---|------|------|----|--------|-------|
| Table 9 - CSX manager overall operational testing counts and percentages. | | | | | |

10.3 Operational Testing Conducted in Walbridge Yard

Investigators reviewed the information contained in the records submitted by CSX for testing that was specifically conducted in Walbridge Yard for the period of September 17, 2022, through September 15, 2023. The following table displays the operational test counts and percentages by CSX occupational categories.

| Craft category | Total of all tests conducted | Total of tests in compliance | Total of tests not in compliance | Compliance Percentage | Total of tests not in compliance |
|--------------------------------|------------------------------------|------------------------------------|--|--------------------------|--|
| Mechanical - Carman | 1252 | 1246 | 6 | 99.52% | 0.48% |
| Mechanical - Welder Carman | 162 | 160 | 2 | 98.77% | 1.23% |
| Mechanical - Utility Worker | 102 | 102 | 0 | 100.00% | 0.00% |

| Totals | 1612 | 1604 | 8 | 99.50% | 0.50% |
|---------------------------|------|------|---|----------|-------|
| Supervisor | Ι | I | 0 | 100.00 % | 0.00% |
| Mechanical | 1 | 1 | 0 | 100.00% | 0.00% |
| Unidentified craft | 1 | 1 | 0 | 100.00% | 0.00% |
| Conductor | 7 | 7 | 0 | 100.00% | 0.00% |
| Mechanical - Machinist | 87 | 87 | 0 | 100.00% | 0.00% |

Table 10 - Testing records specific to CSX mechanical carmen.

10.4 Operational Testing Records Specific to CSX Mechanical Carmen

| Craft | Test rule number | Total of all tests conducted | Total of tests in compliance | Compliance percentage | Total of tests not in compliance | Percentage of test not in compliance |
|----------------------|---------------------|------------------------------------|------------------------------------|--------------------------|--|--|
| | 4051 | 590 | 666 | 88.6% | 4 | 0.6% |
| | 232 | 80 | 95 | 84.2% | 2 | 2.1% |
| | 1101 | 169 | 212 | 79.7% | 0 | 0.0% |
| Mechanical Carman | 401 | 155 | 196 | 79.1% | 0 | 0.0% |
| Culture | 1102 | 140 | 212 | 66.0% | 0 | 0.0% |
| | 712 | 5 | 212 | 2.4% | 0 | 0.0% |
| | 400 | 2 | 196 | 1.0% | 0 | 0.0% |

Table 11 - Testing records specific to CSX mechanical carmen.

11.0 External oversight

11.1 The Federal Railroad Administration

The Federal Railroad Administration (FRA) is the primary agency responsible for the creation and enforcement of federal railroad safety regulations. The FRA exercises these responsibilities for regulating railroad safety standards through the issuance, implementation, and enforcement of railroad safety regulations.

Rail safety regulations that govern FRA inspection and enforcement activities are documented under Title 49, Subtitle B, Chapter II of the Code of Federal Regulations (CFR)⁸.

⁸ An electronic version of Title 49, Subtitle B, Chapter II of the CFR can be found at the following web address: <u>https://www.ecfr.gov/current/title-49/subtitle-B/chapter-II</u>

11.2 FRA Safety Alerts and Bulletins

Safety Advisories are issued by FRA to provide guidance and clarification to railroads concerning regulatory rail safety requirements and other important safety issues.

11.2.1 Safety Bulletin 2023-07 (Issued September 29, 2023)

On September 29, 2023, the FRA issued a Safety Bulletin 2023-07° in reference to this accident. In this bulletin, the FRA "reminds all railroads and railroad employees of the importance of maintaining constant situational awareness when approaching or fouling railroad tracks."

11.3 Federal Regulations Relating to the Accident

11.3.1 Part 217–Railroad Operating Rules

Through the requirements of this part, the Federal Railroad Administration learns the condition of operating rules and practices with respect to trains and other rolling equipment in the railroad industry, and each railroad is required to instruct its employees in operating practices.

11.3.2 Part 218- Railroad Operating Practices

This part prescribes minimum requirements for railroad operating rules and practices. Each railroad may prescribe additional or more stringent requirements in its operating rules, timetables, timetable special instructions, and other special instructions.

11.3.3 Part 220- Railroad Communications

This part prescribes minimum requirements governing the use of wireless communications in connection with railroad operations. In addition, this part sets forth prohibitions, restrictions, and requirements that apply to the use of personal and railroad-supplied cellular telephones and other electronic devices. So long as these minimum requirements are met, railroads may adopt additional or more stringent requirements.

⁹ The referenced FRA Safety Bulletin 2023-07 can be found at the following web address: <u>https://railroads.dot.gov/sites/fra.dot.gov/files/2023-09/Safety%20Bulletin%202023-07.pdf</u>

11.3.4 Part 243- Training, Qualification, and Oversight for Safety-related Railroad Employees

The purpose of this part is to ensure that any person employed by a railroad or a contractor of a railroad as a safety-related railroad employee is trained and qualified to comply with any relevant Federal railroad safety laws, regulations, and orders, as well as any relevant railroad rules and procedures promulgated to implement those Federal railroad safety laws, regulations, and orders.

This part contains the general minimum training and qualification requirements for each category and subcategory of safety-related railroad employee, regardless of whether the employee is employed by a railroad or a contractor of a railroad. Contractors shall coordinate with railroads and comply with the contents of this part, including those aspects of training that are specific to the contracting railroad's rules and procedures.

11.3.5 Part 271- Risk Reduction Program

The purpose of this part is to improve railroad safety through structured, proactive processes and procedures developed and implemented by railroads.

Each railroad subject to this part must establish a Risk Reduction Program (RRP) that systematically evaluates railroad safety hazards on its system and manages the risks associated with those hazards to reduce the number and rates of railroad accidents/incidents, injuries, and fatalities.

F. PARTIES TO THE INVESTIGATION - ACKNOWLEDGEMENT SIGNATURES

The undersigned designated Party to the Investigation representatives attest that the information contained in this factual report for NTSB's accident investigation RRD23FR017 of the CSX Railroad employee fatality that occurred at Walbridge, Ohio is a factually accurate representation of the information collected during the investigation, to the extent of their best knowledge and contribution in this investigation.

| Name (print) | Title | Signature | Date |
|--------------|-------|-----------|------|
| Name (print) | Title | Signature | Date |
| Name (print) | Title | Signature | Date |
| Name (print) | Title | Signature | Date |
| Name (print) | Title | Signature | Date |