

**W-0453 – Red Signal Overrun at Alexandria Rail Yard - October 3, 2025****Document Purpose**

*This WMSC written report on WMATA Metrorail's safety event investigation and review of Metrorail's findings in accordance with the WMSC Program Standard, in conjunction with the attached Metrorail investigation report that has undergone WMSC staff review, feedback, and Metrorail revision, describes the investigation activities, identifies factors causing or contributing to the accident, and sets forth ongoing, additional, or upcoming corrective actions and further oversight work (such as inspections and audits) as necessary or appropriate. The WMSC's ongoing oversight during the investigative process, including safety event reporting and verification, participation in investigative interviews, data review, consistent communication with the Metrorail investigations team, and feedback on Metrorail's reports leads to further improvements prior to consideration of the reports by WMSC Commissioners for adoption. The WMSC's safety event investigation oversight assures the sufficiency and thoroughness of Metrorail's investigations. The WMSC Commissioners are considering these documents (the WMSC review and Metrorail's investigation report) as a unified item for adoption at the Washington Metrorail Safety Commission meeting on October 6, 2026.*

*WMSC staff recommend adoption of this investigation.*

**Safety event summary:**

On October 3, 2025, at 9:24 a.m., an Office of Car Track Equipment Maintenance, Rail Fleet (CTEM) Mechanic #1 operated Roadway Maintenance Machine (RMM) Prime Mover (PM) 54 past red signal C99-220 in Alexandria Yard.

Prior to the red signal overrun, the CTEM Mechanic #1 contacted the Alexandria Yard Interlocking Operator at 9:08 a.m., stating they were at signal C99-160, requesting permission to operate PM-54 around the loop to test the equipment's low propulsion power. The Interlocking Operator granted two absolute blocks to PM-54 without incident. At 9:21 a.m., the Interlocking Operator granted PM-54 another absolute block to clear signal C99-162. The CTEM Mechanic #1 acknowledged and repeated the instructions. C99-162 is the signal before the roadway crossing in Alexandria Yard. CTEM Mechanic #2, acting as the flag person from the RMM's remote station, directed the movement. Closed-Circuit Television (CCTV) footage showed CTEM Mechanic #2 signal CTEM Mechanic #1 to make a safety stop near signal C99-162 before entering the roadway crossing, PM-54 came to a complete stop before C99-162. CTEM Mechanic #2 then signaled CTEM Mechanic #1 to proceed past lunar signal C99-162. Once PM-54 resumed movement, CTEM Mechanic #2 left the remote station and walked back towards the operating cab of PM-54. CTEM Mechanic #1 continued moving PM-54 beyond red signal C99-220. In a post incident interview, the CTEM Mechanic #1 explained they did observe the red signal but continued past it with the intention of clearing the roadway crossing.

The Interlocking Operator observed the indication of a red signal overrun on the interlocking board and informed CTEM Mechanic #1 that PM-54 had exceeded its authorized block and passed red signal C99-220.

The Interlocking Operator notified control center personnel including the Assistant Operations Manager and the Maintenance Operations Center (MOC) Desk Controller of the incident.

Personnel from Track and Structures (TRST), Safety Investigations (SAFE), CTEM, and ATCM responded to inspect the equipment and infrastructure.



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No injuries or damage were reported.

The CTEM Mechanic #1 and #2 were removed from service in accordance with Metrorail policy. WMATA's Drug and Alcohol Program determined that they both complied with the Drug and Alcohol Policy and Testing Program Policy.

The probable cause and contributing factors leading to this safety event include:

- The CTEM Mechanic #1's failure to follow established procedures requiring vehicles to stop at red signals.
- The CTEM Mechanic #2 was not assigned as a flagman but gave the proceed signal through the roadway crossing and then left the remote station.
- A review of CTEM Mechanic #1 Training Certifications shows their last CTEM Yard Move recertification occurred September 19, 2023, and they were not in compliance with their biennial training certification.

Investigation W-0453 led to specific recommended corrective actions (RCA), including:

- CTEM Mechanic #1 attended Yard Move recertification training.
- The Office of Technical Skills Maintenance Training (TSMT) will provide CTEM Leadership with a periodic report regarding personnel pending training requirements.
- A 6-month audit of CTEM Mechanic Yard Move Certifications.



Washington Metropolitan Area Transit Authority  
Department of Safety  
Office of Safety Investigations

**FINAL REPORT OF INVESTIGATION A&I E251750**

|                                                                         |                                                 |
|-------------------------------------------------------------------------|-------------------------------------------------|
| <b>Date of Event:</b>                                                   | October 3, 2025                                 |
| <b>Type of Event:</b>                                                   | O-8: Red Signal Overrun                         |
| <b>Incident Time:</b>                                                   | 09:26 Hours                                     |
| <b>Location:</b>                                                        | Alexandria Yard (C99)                           |
| <b>Time and How received by Safety:</b>                                 | 09:31 Hours / Safety Information Official (SIO) |
| <b>Washington Metrorail Safety Commission (WMSC) Notification Time:</b> | 11:04 Hours                                     |
| <b>Responding Safety Officers:</b>                                      | Office of Safety Investigations                 |
| <b>Rail Vehicle:</b>                                                    | Prime Mover (PM) 54                             |
| <b>Injuries:</b>                                                        | None                                            |
| <b>Damage:</b>                                                          | None                                            |
| <b>Emergency Responders:</b>                                            | None                                            |
| <b>Safety Universal Data System (SUDS I/A) Number</b>                   | 20251003#130943MX                               |

Incident Date: 10/03/2025 Time: 09:26 hours  
Final Report v.1 – Red Signal Overrun  
E251750

Drafted By: SAFE 708 – 11/10/2025  
Reviewed By: SAFE 707 – 12/28/2025  
Approved By: SAFE 707 – 12/28/2025

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# Alexandria Yard – Red Signal Overrun

October 3, 2025

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## **Abbreviations and Acronyms**

|              |                                                       |
|--------------|-------------------------------------------------------|
| <b>AIMS</b>  | Advanced Information Management System                |
| <b>AOM</b>   | Assistant Operations Manager                          |
| <b>ARS</b>   | Audio Recording System                                |
| <b>ATC</b>   | Automatic Train Control                               |
| <b>CCTV</b>  | Closed-Circuit Television                             |
| <b>CTEM</b>  | Office of Car Track Equipment Maintenance, Rail Fleet |
| <b>ERT</b>   | Emergency Response Team                               |
| <b>IO</b>    | Interlocking Operator                                 |
| <b>I/A</b>   | Incidents/Accidents                                   |
| <b>MICC</b>  | Metro Integrated Command and Communications Center    |
| <b>MOC</b>   | Maintenance Operations Center                         |
| <b>MOR</b>   | Metrorail Operating Rulebook                          |
| <b>NOAA</b>  | National Oceanic and Atmospheric Administration       |
| <b>PM</b>    | Prime Mover                                           |
| <b>RMM</b>   | Roadway Maintenance Machine                           |
| <b>RTC</b>   | Rail Traffic Controller                               |
| <b>RTRA</b>  | Office of Rail Transportation                         |
| <b>SAFE</b>  | Department of Safety                                  |
| <b>SOP</b>   | Standard Operating Procedure                          |
| <b>SPOTS</b> | System Performance On-Time Summary                    |
| <b>SUDS</b>  | Safety Universal Data System                          |
| <b>TRST</b>  | Department of Track & Structures                      |
| <b>WMATA</b> | Washington Metropolitan Area Transit Authority        |
| <b>WMSC</b>  | Washington Metrorail Safety Commission                |

**Washington Metropolitan Area Transit Authority**  
**Department of Safety – Office of Safety Investigations**

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**Executive Summary**

*\*Note that all times listed are approximate and may contain minor variations due to differences between systems of record. \**

On Friday, October 3, 2025, at 09:24 hours, an Office of Car Track Equipment Maintenance, Rail Fleet (CTEM) Mechanic #1 operating Roadway Maintenance Machine (RMM), Prime Mover (PM) 54, overran signal C99-220 in Alexandria Yard displaying a red signal. CTEM Mechanic #1 was being directed by CTEM Mechanic #2, acting as the Flag person, positioned at the remote station of the RMM. A review of the Audio Recording System (ARS) revealed that the Interlocking Operator (IO) granted the CTEM Mechanic #1 an absolute block past signal C99-162, at the roadway crossing into Alexandria Yard. A review of the Closed-Circuit Television (CCTV) shows the CTEM Mechanic #2 signaling CTEM Mechanic #1 in the main cab of the RMM to come to a safety stop near signal C99-162 before entering the roadway crossing. CTEM Mechanic #2 then signaled CTEM Mechanic #1 to continue past signal C99-162, across the roadway crossing, and continue past signal C99-220, displaying a red aspect. The IO observed a red signal overrun via their Advance Information Management System (AIMS) and informed CTEM Mechanic #1 that they had passed their authorized block and overrun signal C99-220, displaying a red aspect.

The IO notified the Metro Integrated Command and Communications Center (MICC) Maintenance Operations Center (MOC) Desk Controller and Automatic Train Control (ATC) Desk Controller to report the incident and requested Automatic Train Control Maintenance (ATCM) personnel to respond. Personnel from Track and Structures (TRST), Safety Investigations (SAFE), CTEM, and ATCM responded to inspect the equipment and infrastructure. The IO also reported the incident to the MICC Rail Section, OPS 3 Button Rail Traffic Controller (RTC), who notified the MICC Rail Section Assistant Operations Manager (AOM).

There were no injuries or damages reported as a result of this event.

In adherence to the Metrorail Operating Rulebook, 1.6.2, which outlines the protocol for removing an employee from service for involvement in an operational safety event, a CTEM Supervisor responded to Alexandria Yard to remove both CTEM Mechanic #1 and CTEM Mechanic #2 from duty for post-incident testing.

The probable cause of the Red Signal Overrun at Alexandria Yard event on Friday, October 3, 2025, was complacency by CTEM Mechanic #1, who passed signal C99-220 displaying a red signal without permission. Specifically, CTEM Mechanic #1 did not adhere to the procedures within the MOR Section 3.3 Signals Requiring a Stop.

**Incident Site**

Alexandria Yard, Outer Loop, Signal C99-220.

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|                                    |
|------------------------------------|
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## Purpose and Scope

## **Investigative Methods**

- Physical site assessment, including video and document review.
- Formal Interviews – Safety interviewed three (3) individuals as part of this investigation. The interview included persons present at, during, and after the incident, those directly involved in the response process, and representatives from the Washington Metrorail Safety Commission (WMSC). Safety interviewed the following individuals:
  - Interlocking Operator
  - CTEM Mechanic #1
  - CTEM Mechanic #2
- Informal Interviews – Collected through conversations with individuals during the investigation to provide background and supporting information. Written statements were reviewed from personnel present during the event.
- Documentation Review – Collection of relevant work history information and process documentation contained in WMATA systems of record. These records include:
  - Metrorail Operating Rulebook (MOR)
  - National Oceanic and Atmospheric Administration (NOAA)

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- CTEM Mechanic #1's Employee Training Procedures & Records
  - CTEM Mechanic #1's Certification Records
  - CTEM Mechanic #1's 30-Day Work History
  - Communications and Signaling – Investigation Data
  - Maximo Data
- System Data Recording Review – Collection of information contained in Metro Data Recording Systems. This data includes:
    - Audio Recording System (ARS) playback
    - Closed-Circuit Television (CCTV)
    - Oracle Report

## **Investigation**

On Friday, October 3, 2025, at 09:08 hours, CTEM Mechanic #1 contacted the Alexandria Yard IO, stating they were at signal C99-160, requesting permission to operate RMM, PM-54, around the loop to test the equipment's blow power. The IO instructed to verify a lunar at C99-160, granted an absolute block no closer than 10 feet of C99-204 displaying a red aspect, and instructed CTEM Mechanic #1 to stand by at that location. ARS audio revealed that CTEM Mechanic #1 acknowledged and repeated the instructions given to the IO.



*Figure 1 – Depicts Prime Mover (PM) 54, a Plasser PMC-50 Rail Maintenance Machine.*

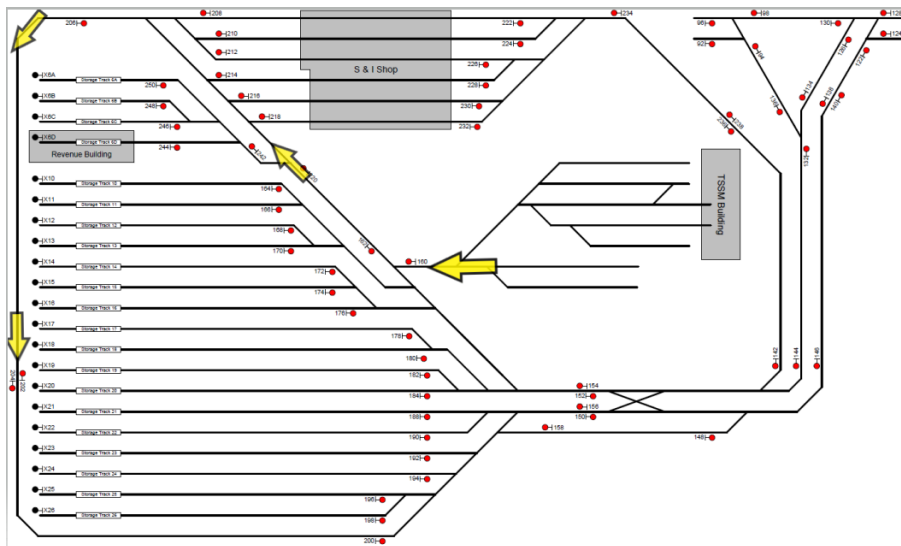


Figure 2 - Depicts PM 54's movement from signal C99-160 to signal C99-204.

At 09:13 hours, CTEM Mechanic #1, notified the IO that they were no closer than 10 feet of C99-204. The IO gave a lunar signal at C99-204 and granted CTEM Mechanic #1 an absolute block to clear C99-146. At 09:17 hours, the IO asked CTEM Mechanic #1 if they received their instructions. CTEM Mechanic #1 stated that they did not and remained standing by signal C99-204. The IO repeated the instructions, giving CTEM Mechanic #1 an absolute block to clear C99-146. ARS audio revealed that CTEM Mechanic #1 acknowledged and repeated back the instructions.

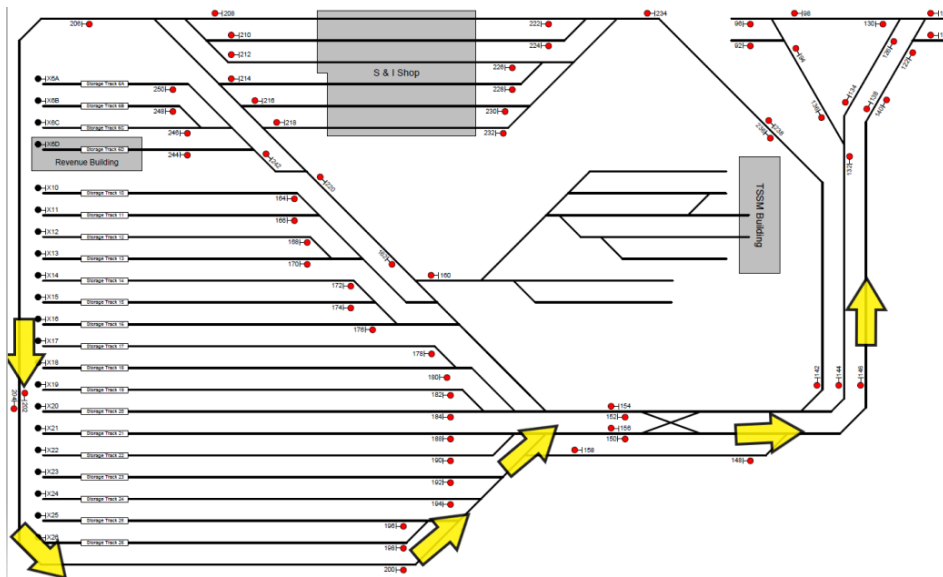


Figure 3 - Depicts PM 54's movement from signal C99-204 to signal C99-146.

At 09:21 hours, CTEM Mechanic #1, notified the IO that they had cleared signal C99-146. The IO gave a lunar signal at C99-146 and granted CTEM Mechanic #1 an absolute block to clear signal C99-162. ARS audio revealed that CTEM Mechanic #1 acknowledged and repeated back the instructions.

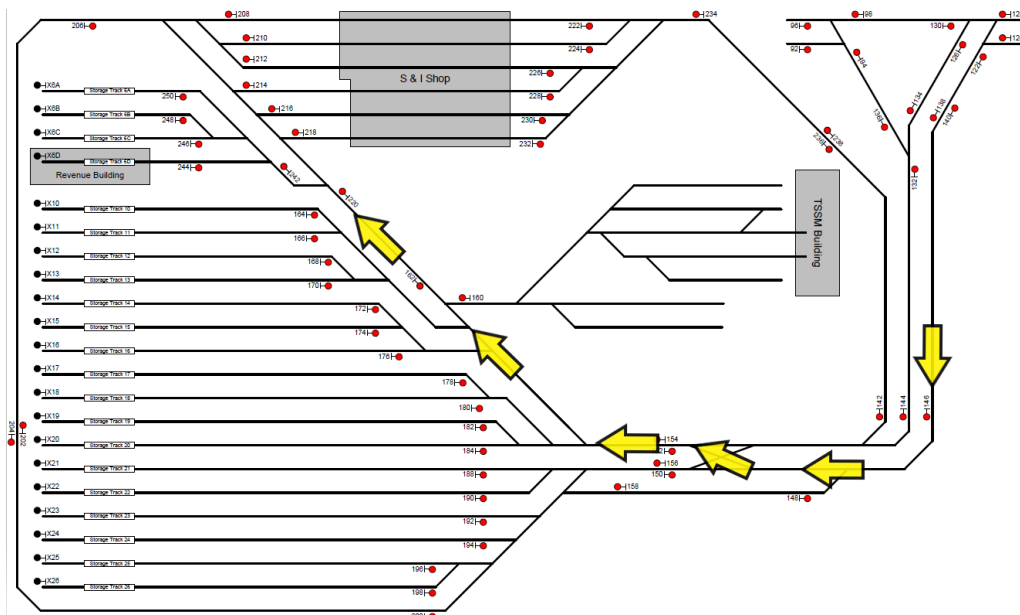


Figure 4 - Depicts PM 54's movement from signal C99-146 past signal C99-162.

At 09:24 hours, CCTV showed PM 54 being operated towards signal C99-162 with the remote station end of the RMM facing towards the direction of travel. CTEM Mechanic #2 was observed acting as a flag person waving for CTEM Mechanic #1 to stop the RMM before entering the roadway crossing area, approximately 10 feet past signal C99-162. After coming to a complete stop, CTEM Mechanic #2 was observed motioning for CTEM Mechanic #1 to proceed, clearing signal C99-162. CTEM Mechanic #1 was observed continuing to move PM 54 past signal C99-220.

Oct 3, 2025 at 10:38:46 AM  
3201 Eisenhower Ave  
Alexandria VA 22314  
United States

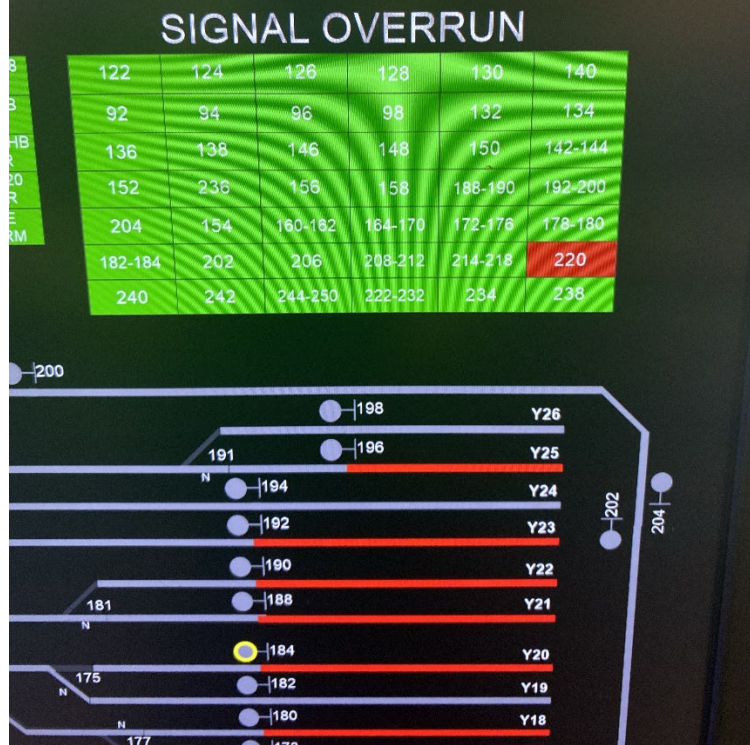


Figure 5 - Depicts the Interlocking board displaying a red signal overrun at signal C99-220.

At 09:25 hours, ARS audio showed the IO attempting to contact CTEM Mechanic #1. At 09:26 hours, the IO notified the MICC OPS 3 Button RTC of the red signal overrun. While speaking with the Button RTC, CTEM Mechanic #1 responded via the radio and was notified that they had moved the RMM past their given block and was instructed not to move the RMM.

The IO then contacted the Automatic Train Control (ATC) Desk Controller to report the incident and requested a supervisor. The IO also instructed CTEM Mechanic #1 to have their supervisor contact the Alexandria Tower.

At 09:28 hours, the Button RTC informed the MICC Rail Section AOM of the incident. SAFE, ATCM, and TRST personnel were dispatched to the scene. After a comprehensive inspection of the RMM, track, signal C99-220, and interlocking switch 223, it was determined that there was no damage to any infrastructure or equipment. There were no injuries as a result of this incident.



*Figure 6 - Depicts PM 54 past signal C99-220 displaying a red aspect.*

At 10:38 hours, CTEM Mechanic #3 contacted the IO to inform them that they were instructed to move PM 54 from the incident location and to return the RMM to the storage track past signal C99-160. After granting CTEM Mechanic #3 a lunar signal at C99-162, CTEM Mechanic #3 was given an absolute block past signal C99-160. At 10:42 hours, CTEM Mechanic #3 reported to the IO that they were past signal C99-160.

A later interview with the CTEM Mechanic #1 revealed that they moved the RMM to permit vehicles to access the roadway crossing and did not check to see if they had a lunar signal.

A review of CTEM Mechanic #1 Training Certifications shows their last CTEM Yard Move recertification occurred September 19, 2023, and they were not in compliance with their biennial training certification.

## Chronological Event Timeline

A review of ARS playback, i.e., phone and radio communications, revealed the following timeline:

| Time           | Description                                                                                                                                                                                                                                                                                                                                                                                          |
|----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 09:08:31 hours | <u>CTEM Mechanic #1</u> : Advised that they were holding at C99-160, requested to go around the loop for testing of blow power.<br><u>Interlocking Operator</u> : Requested to provide a name and number.<br><u>CTEM Mechanic #1</u> : No response. [Radio AL-YD1]                                                                                                                                   |
| 09:10:14 hours | <u>Interlocking Operator</u> : Instructed to verify a lunar at C99-160, granted an absolute block no closer than 10 feet of C99-204 red, and stand by.<br><u>CTEM Mechanic #1</u> : Acknowledged and repeated. [Radio AL-YD1]                                                                                                                                                                        |
| 09:13:55 hours | <u>Interlocking Operator</u> : Instructed to verify a lunar at C99-204, granted an absolute block to clear C99-146, advised to contact, notify, and verify.<br><u>CTEM Mechanic #1</u> : Requested to repeat.<br><u>Interlocking Operator</u> : No response. [Radio AL-YD1]                                                                                                                          |
| 09:16:44 hours | <u>Interlocking Operator</u> : Inquired if the CTEM Mechanic #1 copied the absolute block to clear C99-146.<br><u>CTEM Mechanic #1</u> : No response. [Radio AL-YD1]                                                                                                                                                                                                                                 |
| 09:17:15 hours | <u>Interlocking Operator</u> : Requested a response from the CTEM Mechanic #1.<br><u>CTEM Mechanic #1</u> : Advised holding at C99-204, did not copy anything.<br><u>Interlocking Operator</u> : Instructed to verify a lunar at C99-204, granted an absolute block to clear C99-146, advised to contact, notify, and verify.<br><u>CTEM Mechanic #1</u> : Acknowledged and repeated. [Radio AL-YD1] |
| 09:21:10 hours | <u>CTEM Mechanic #1</u> : Advised clear C99-146.<br><u>Interlocking Operator</u> : Instructed to verify a lunar at C99-146, granted an absolute block to clear C99-162, advised to contact, notify, and verify.<br><u>CTEM Mechanic #1</u> : Acknowledged and repeated. [Radio AL-YD1]                                                                                                               |
| 09:24:55 hours | PM-54 passed signal C99-220. [CCTV]                                                                                                                                                                                                                                                                                                                                                                  |
| 09:25:07 hours | <u>CTEM Mechanic #1</u> : Advised clear C99-162. [Radio AL-YD1]                                                                                                                                                                                                                                                                                                                                      |
| 09:25:34 hours | <u>Interlocking Operator</u> : Radioed for PM 54 CTEM Mechanic #1. [Radio AL-YD1]                                                                                                                                                                                                                                                                                                                    |
| 09:25:46 hours | <u>CTEM Mechanic #1</u> : Responded to the call from the Interlocking Operator. [Radio AL-YD1]                                                                                                                                                                                                                                                                                                       |
| 09:25:50 hours | <u>Interlocking Operator</u> : Radioed for PM 54 CTEM Mechanic #1 a second time. [Radio AL-YD1]                                                                                                                                                                                                                                                                                                      |
| 09:26:21 hours | <u>Interlocking Operator</u> : Contacted the MICC OPS 3 Button RTC to report the red signal overrun. [Phone C99]                                                                                                                                                                                                                                                                                     |
| 09:26:38 hours | <u>CTEM Mechanic #1</u> : Responded to the call from the Interlocking Operator a second time.<br><u>Interlocking Operator</u> : Asked the CTEM Mechanic #1 for their name and call number.<br><u>CTEM Mechanic #1</u> : Responded by providing the requested information. [Radio AL-YD1]                                                                                                             |
| 09:27:18 hours | <u>Interlocking Operator</u> : Informed the CTEM Mechanic #1 that they passed the instructed block. [Radio AL-YD1]                                                                                                                                                                                                                                                                                   |
| 09:28:15 hours | <u>Button RTC</u> : Informed the AOM of the red signal overrun at Alexandria Yard. [Rail 3 Phone]                                                                                                                                                                                                                                                                                                    |
| 09:28:40 hours | <u>Interlocking Operator</u> : Contacted the ATC and requested that a supervisor report to the tower. [Phone C99]                                                                                                                                                                                                                                                                                    |

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| Time           | Description                                                                                                                                                                                                                                                                                                                                                                                      |
|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 09:29:09 hours | <u>AOM</u> : Informed the OM of the red signal overrun at Alexandria Yard. [Rail 3 Phone]                                                                                                                                                                                                                                                                                                        |
| 09:30:05 hours | <u>Interlocking Operator</u> : Contacted the MOC and requested that a supervisor respond. [Phone C99]                                                                                                                                                                                                                                                                                            |
| 09:31:40 hours | <u>OM</u> : Informed the SIO of the red signal overrun at Alexandria Yard. [Emergency Mgmt Phone]                                                                                                                                                                                                                                                                                                |
| 09:32:26 hours | <u>Button RTC</u> : Asked the Interlocking Operator the switch involved in the red signal overrun at signal C99-220.<br><u>Interlocking Operator</u> : Replied switch 223 and informed the Button RTC that ATC was with them in the tower.<br><u>Button RTC</u> : Acknowledged the message and instructed the Interlocking Operator not to move PM 54 until after SAFE had arrived. [C99 Phone]  |
| 09:38:45 hours | <u>Interlocking Operator</u> : Instructed the CTEM Mechanic #1 not to move PM 54, due to the red signal overrun.<br><u>CTEM Mechanic #1</u> : Acknowledged and repeated.<br><u>Interlocking Operator</u> : Instructed the CTEM Mechanic #1 to have their supervisor contact the tower by landline.<br><u>CTEM Mechanic #1</u> : Acknowledged and repeated. [Radio AL-YD1]                        |
| 09:40:57 hours | <u>Track Supervisor #1</u> : Informed the Interlocking Operator that they were the On-Call Supervisor and were notified by MOC regarding the red signal overrun at Alexandria Yard involving PM 54.<br><u>Interlocking Operator</u> : Acknowledged the message and instructed the Track Supervisor to contact Central. [C99 Phone]                                                               |
| 09:43:50 hours | <u>Track Supervisor #1</u> : Informed the Interlocking Operator that they were the direct Supervisor for the CTEM Mechanic #1 involved in the red signal overrun.<br><u>Interlocking Operator</u> : Acknowledged the message and instructed the Track Supervisor to contact Central. [C99 Phone]                                                                                                 |
| 10:03:32 hours | <u>ATCM</u> : Requested permission to enter the roadway to inspect switch 222.<br><u>Interlocking Operator</u> : Informed the ATCM that the third rail was energized and granted permission to inspect switch 223. ATCM was instructed to provide an update. [Radio AL-YD1]                                                                                                                      |
| 10:05:51 hours | <u>ATCM</u> : Informed the Interlocking Operator that switch 223 was laying in the reverse position. They did not observe any damage to the switch, but would have to inspect further once PM 54 was moved.<br><u>Interlocking Operator</u> : Acknowledged the message. [Radio AL-YD1]                                                                                                           |
| 10:12:34 hours | <u>SAFE</u> : Radioed for the Interlocking Operator. [Radio AL-YD1]                                                                                                                                                                                                                                                                                                                              |
| 10:15:08 hours | <u>ATCM</u> : Requested permission to add three (3) persons to their work crew to inspect switch 223.<br><u>Interlocking Operator</u> : Acknowledged the message.<br><u>ATCM</u> : Stated SAFE was on location.<br><u>Interlocking Operator</u> : Granted ATCM permission to add three personnel to their group to inspect switch 223.<br><u>ATCM</u> : Acknowledged the message. [Radio AL-YD1] |
| 10:38:09 hours | <u>CTEM Mechanic #3</u> : Informed the Interlocking Operator that they were instructed to move PM 54 from signal C99-220 to the storage track past signal C99-160.<br><u>Interlocking Operator</u> : Instructed the CTEM Mechanic #3 to stand by.<br><u>CTEM Mechanic #3</u> : Acknowledged and repeated.                                                                                        |

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| Time           | Description                                                                                                                                                                                                                         |
|----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                | <u>Interlocking Operator</u> : Instructed the CTEM Mechanic #3 to verify the lunar aspect at signal C99-162, with an absolute block clearing signal C99-160.<br><u>CTEM Mechanic #3</u> : Acknowledged and repeated. [Radio AL-YD1] |
| 10:42:23 hours | <u>CTEM Mechanic #3</u> : Informed the Interlocking Operator that PM 54 had cleared signal C99-160 and was back in the storage track.<br><u>Interlocking Operator</u> : Acknowledged and repeated. [Radio AL-YD1]                   |

*Note: Times above may vary from other systems' timelines based on clock settings.*

## Closed-Circuit Television (CCTV)



Figure 7 - Depicts PM 54 moving past signal C99-162 into their permitted block.



Figure 8 - Depicts PM 54 continuing to move past its permitted block.

## Digital Images and Photographs



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Oct 3, 2025 at 10:14:15 AM  
Alexandria VA 22314  
United States



## Infrastructure

### Communications and Signaling

#### Communications and Signal Engineering

### EXECUTIVE SUMMARY

On October 3, 2025, at 9:22:23 hours, track circuits 157T, 171T, 144T, and 223T were vacant. The route was set from signal C99-154 to signal C99-220. Switch 171 was in set in the Normal position, switch 223 was set in the Reverse position, signal C99-220 had a Red/Stop signal since 09:16:53 hours.

The incident train (PM 54) came from track circuit 157T at 09:24:16 hours. At 09:24:58 hours, PM 54 passed switch 171 and entered track circuit 144T. Signal 220 was at Red/Stop, but at 09:25:37.9 the train overrun switch 223 (at Reverse), entered track circuit 223T and stopped. Overrun alarm (223SFORS at clear) went on. At 09:25:47.8 the route was set for the reverse

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move of incident train. The signal 162 got Lunar, and the switch 171 moved from Normal to reverse.

At 09:25:52.9 the Overrun alarm went off (223SFORS at SET).

At 10:42:12.4 the incident train vacated 223T, cleared the switch 223 and the overrun alarm went On. The train cleared track circuit 144T, passed the switch 171 (at Reverse) and continued moving to 171T and to MOW track.

### **Interview Findings and Written Statements**

*As part of the investigation launched into the event, Safety interviewed three (3) people. The interviews identified the following key findings associated with this event. The findings detailed below include reported information from involved personnel and may conflict with other data sources contained in the report.*

#### **Interlocking Operator**

- Stated they received a request from CTEM Mechanic #1 to move PM 54 around the yard loop to test the unit.
- Gave CTEM Mechanic #1 an absolute block past signal C99-162, which is at the roadway crossing.
- Did not inform CTEM Mechanic #1 that signal C99-220 would display a red aspect.
- Observed PM 54 was operating as a single unit, giving the unit enough space to clear signal C99-162 without having to pass signal C99-220.
- Stated that rail vehicles have the right of way at roadway crossings and do not have to move to permit vehicular traffic to pass.
- Did not receive a request from CTEM Mechanic #1 to move past their permitted block.

#### **CTEM Mechanic #1**

- Was operating PM 54 around the Alexandria Yard loop to inspect the RMM for a propulsion issue.
- Was given a block to pass signal C99-162 and hold their position.
- Was informed by a TRST Crew that they were coupling a Prime Mover and Flatcar and PM 54 would have to wait to re-enter the storage track.
- Observed signal C99-220 displayed a red aspect.
- Normally clears the roadway crossing when they have to hold for an extended period of time.
- Observed radio communication issues at Alexandria Yard prior to the incident.

#### **CTEM Mechanic #2**

- Was monitoring diagnostic equipment attached to PM 54 to inspect the RMM for a propulsion issue.
- Observed a glare in the camera near the remote station and went to assist CTEM Mechanic #1 by flagging the RMM through the roadway crossing.
- Heard the instructions given by the Interlocking Operator for CTEM Mechanic #1 to pass signal C99-162.
- Did not observe signal C99-220 displaying a red aspect.

## Weather

On Friday, October 3, 2025, at the time of the incident, NOAA recorded the temperature as 60°F, with partly cloudy skies, winds 1.6 mph, and 77% humidity. [Alexandria, Virginia]. Weather was not a contributing factor in this incident (Weather source: NOAA) – Location: [Alexandria, Virginia].

## Related Rules and Procedures

### Metrorail Operating Rulebook

#### 1.6 Rules & Special Instructions

1.6.2 Failure of any employee to abide by established rules and procedures, failure to comply with the verbal instructions of supervisors, or failure to use sound judgment, regardless of the time, place, or circumstance, to compromise the safety of the public or fellow employees will result in the employee's immediate removal from service, pending an investigation. Disciplinary action will include permanent disqualification from safety sensitive positions or dismissal.

1.6.8 All employees operating or working on or about mainline or yard tracks shall immediately comply with all instructions issued by the Interlocking Operator or Rail Traffic Controller, consistent with customer safety.

#### 3.3 Signals Requiring a Stop

Rail vehicles shall not be operated past or closer than a point 10 feet in approach of an interlocking signal or lamp displaying a red aspect, a red flag, or a dark interlocking signal, except at a bump post or entering a pocket track, or unless authorized by the Rail Traffic Controller or the Interlocking Operator and the move is consistent with customer safety.

## SARE-05-0020 Roadway Maintenance Machine Equipment Operator Performance Standardization Program Manual

### Appendix A: Task Proficiency Standards - Yard Movement

| Task                 | Quality Level 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Quality Level 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Quality Level 3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                      | <ul style="list-style-type: none"><li>Makes clear and concise radio transmissions.</li><li>Complies with operating and safety rules and procedures.</li><li>Makes certain that radio communications are transmitted to and received from the proper person.</li><li>Does not take any action until positive that all transmissions and receptions are heard, fully understood, and acknowledged.</li><li>Obtains permission from the tower, terminal, or OCC prior to taking actions which require such permission.</li><li>Maintains radio on proper frequency.</li></ul> | <ul style="list-style-type: none"><li>Complies with operating and safety rules and procedures, notwithstanding any other errors or omissions.</li><li>Is occasionally on the wrong frequency.</li></ul>                                                                                                                                                                                                                                                                                                                                                                                | <ul style="list-style-type: none"><li>Violates operating or safety rules or procedures.</li><li>Does not make certain that radio communications are transmitted to and received from the proper person.</li><li>Acts without being positive that transmissions are heard, fully understood, and acknowledged.</li><li>Fails to obtain permission from proper authority prior to taking actions which require such permission.</li><li>Is consistently on wrong frequency.</li></ul>                                                                                                                                                                                               |
| <b>Yard Movement</b> | <ul style="list-style-type: none"><li>Abides by all applicable operating or safety rules and procedures.</li><li>Maintains constant contact with the tower and requests permission for all movements (on controlled track).</li><li>Remains within all speed limits and crosses all switches at 10 mph or less.</li><li>Checks alignment, sounds horn, and executes safety stops as appropriate.</li><li>Moves vehicle only after obtaining permission and an Absolute Block from the tower.</li></ul>                                                                     | <ul style="list-style-type: none"><li>Occasionally fails to sound horn prior to movement or when approaching personnel on roadbed.</li><li>Has difficulty communicating with the tower. Messages are confused or unclear, but eventually can determine the proper course of action.</li><li>Remains within all speed limits and crosses all switches.</li><li>Moves vehicle only after obtaining permission and an Absolute Block from the tower.</li><li>Abides by all applicable operating and safety rules and procedures, notwithstanding any other errors or omissions.</li></ul> | <ul style="list-style-type: none"><li>Fails to check switch alignment.</li><li>Fails to stop at any signal showing a red aspect.</li><li>Consistently fails to sound horn prior to each movement or when approaching personnel on the roadbed.</li><li>Fails to execute proper safety stops.</li><li>Fails to stop at all road crossings.</li><li>Fails to advise tower and request permission for all movement. Moves without first obtaining an Absolute Block.</li><li>Fails to observe all applicable speed limits.</li><li>Violates any other operating or safety rules or procedures.</li><li>Communication with the tower is consistently confusing and unclear.</li></ul> |

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## Human Factors

### *CTEM Mechanic #1*

#### Evidence of Fatigue

SAFE evaluated incident data for signs and symptoms of fatigue that may have been present at the time of the incident. No signs or symptoms of fatigue were detected from the available data. Video of the incident was reviewed for signs of CTEM Mechanic #1's fatigue. No signs or symptoms of fatigue were evident from the video. CTEM Mechanic #1 reported feeling fully alert at the time of the incident. CTEM Mechanic #1 reported experiencing no symptoms of fatigue in the time leading up to the incident.

#### Fatigue Risk

SAFE evaluated incident data for fatigue risk factors. No significant risk was identified. The incident time of day did not suggest an increased risk of fatigue-related impairment. CTEM Mechanic #1 reported keeping a regular sleep schedule in the days leading up to the incident. CTEM Mechanic #1 worked AM shifts in the days leading up to the incident. The employee was awake for 4.9 hours at the time of the incident. The employee reported 7 hours of sleep in the 24 hours preceding the incident. The off-duty period was 15.5 hours which provides an opportunity for 7-9 hours of sleep. This was a comparable amount to the employee's usual workday sleep durations. CTEM Mechanic #1 reported no issues with sleep. The employee worked AM shifts in the days leading up to the incident.

### *CTEM Mechanic #2*

#### Evidence of Fatigue

SAFE evaluated incident data for signs and symptoms of fatigue that may have been present at the time of the incident. No signs or symptoms of fatigue were detected from the available data. Video of the incident was reviewed for signs of fatigue in CTEM Mechanic #2. No signs or symptoms of fatigue were evident from the video. CTEM Mechanic #2 reported feeling fully alert at the time of the incident. CTEM Mechanic #2 reported experiencing no symptoms of fatigue in the time leading up to the incident.

#### Fatigue Risk

SAFE evaluated incident data for fatigue risk factors. No significant risk was identified. The incident time of day did not suggest an increased risk of fatigue-related impairment. CTEM Mechanic #2 reported keeping a regular sleep schedule in the days leading up to the incident. CTEM Mechanic #2 worked AM shifts in the days leading up to the incident. The employee was awake for 4.9 hours at the time of the incident. The employee reported 7.5 hours of sleep in the 24 hours preceding the incident. The off-duty period was 15.4 hours, which provides an opportunity for 7-9 hours of sleep. This was a comparable amount to the employee's usual workday sleep durations. CTEM Mechanic #2 reported no issues with sleep. The employee worked AM shifts in the days leading up to the incident.

#### Post-Incident Toxicology Testing

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|                                    |
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WMATA's Drug and Alcohol Program determined that the CTEM Mechanic #1 complied with the Drug and Alcohol Policy and Testing Program Policy 7.7.3/7.

WMATA's Drug and Alcohol Program determined that the CTEM Mechanic #2 complied with the Drug and Alcohol Policy and Testing Program Policy 7.7.3/7.

### **Findings**

- Interlocking Operator gave CTEM Mechanic #1 an absolute block past signal C99-162
- CTEM Mechanic #1 moved the RMM past signal C99-220 without authorization.

### **Immediate Mitigation to Prevent Recurrence**

- CTEM Mechanic #1 was removed from service.
- CTEM Mechanic #2 was removed from service.
- PM 54 was inspected, and no damages were found.
- Signal C99-220 was inspected, and no damages were found.
- Interlocking Switch 223 was inspected, and no damages were found.

### **Probable Cause Statement**

The probable cause of the Red Signal Overrun at Alexandria Yard event on Friday, October 3, 2025, was complacency by CTEM Mechanic #1, who passed signal C99-220 displaying a red signal without permission. Specifically, CTEM Mechanic #1 did not adhere to the procedures within the MOR Section 3.3 Signals Requiring a Stop.

### **Recommended Corrective Actions**

| <b>Corrective Action Code</b> | <b>Description</b>                                                                                                                                                | <b>Responsible Party</b> | <b>Estimated Completion Date</b> |
|-------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|----------------------------------|
| 130943_SAFEC<br>APS_CTEM_001  | CTEM Mechanic #1 received discipline in accordance with their departmental disciplinary action matrix. (CF-1)                                                     | CTEM SRC                 | Completed                        |
| 130943_SAFEC<br>APS_CTEM_002  | CTEM Mechanic #1 attended Yard Move recertification training.                                                                                                     | CTEM                     | Completed                        |
| 130943_SAFEC<br>APS_TSMT_001  | The Office of Technical Skills Maintenance Training (TSMT) will provide CTEM Leadership with a periodic report regarding personnel pending training requirements. | TSMT                     | Completed                        |
| 130943_SAFEC<br>APS_OSO_001   | A 6-month audit of CTEM Mechanic Yard Move Certifications.                                                                                                        | OSO                      | Completed                        |

## **Appendices**

### **Appendix A – Interview Summaries**

*The below narratives summarize the incident and represent the statements made by the involved individual. As such, times and details may present a conflict with the data contained in systems of record.*

#### **Rail Transportation**

##### ***Interlocking Operator (IO)***

The IO is a Metro employee with 26 years of service and 11 years of experience as an IO. The IO holds a Roadway Worker Protection (RWP) Level 2 certification that expires in October 2026.

During the formal interview, the IO stated that CTEM Mechanic #1 requested to leave the storage track with PM 54 to go around the yard loop for testing. Once going around the loop, the CTEM Mechanic was going to return PM 54 to the storage track. PM 54 was moving behind another unit that requested to go around the loop, so the IO was moving both units in absolute blocks. Once PM 54 cleared signal C99-146, the first unit was given an absolute block to clear C99-162, then to clear signal C99-160 and return to the storage track. Once the first unit returned to the storage track PM 54 was given an absolute block to clear signal C99-162. The IO observed CTEM Mechanic #1 clear signal C99-162 with PM 54, and the unit continued to move towards the next governing signal, which was signal C99-220 displaying a red aspect. The IO attempted to radio CTEM Mechanic #1, but did not receive any response. The IO stated they did not give signal C99-220 a lunar aspect because PM 54 was moving as a single unit and had sufficient space to clear signal C99-162 without passing the next signal.

The IO believed the CTEM Mechanic moved PM 54 past their permitted block to clear the roadway crossing. The IO stated that rail vehicles have the right of way at roadway crossings and do not have to move to permit vehicular traffic to pass. In addition, the IO did not receive a request from CTEM Mechanic #1 to move past their permitted block.

#### **CTEM**

##### ***CTEM Mechanic #1***

The CTEM Mechanic #1 is a Metro employee with 12 years of service and 12 years of experience as a CTEM Mechanic. The CTEM Mechanic holds a Roadway Worker Protection (RWP) Level 2 certification that expires in February 2026.

During the formal interview, the CTEM Mechanic #1 stated that their assignment for the day was to examine PM 54 for low propulsion power. They received permission to operate the RMM around the loop at Alexandria Yard. Their last instructions from the Interlocking Operator were to pass signal C99-162 and hold their position. The CTEM Mechanic #1 stated there was a Track and Structures (TRST) crew coupling a Prime Mover and Flatcar exited signal C99-160. The CTEM Mechanic #1 believed they would be holding at C99-162 until the TRST crew cleared signal C99-160 storage track.

CTEM Mechanic #1 stated that the area past signal C99-162 encompassed the roadway crossing. The CTEM Mechanic stated that their past practice was to move past the roadway because the Prime Mover would obstruct the roadway crossing. The Interlocking Operator would normally

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provide additional lunar signals to allow the Prime Mover and any coupled Flatcars to clear the roadway crossing. CTEM Mechanic #1 stated that they never had to request an additional block from the Interlocking Operator. CTEM Mechanic #1 stated they were assisted by CTEM Mechanic #2, acting as their flag person, who did not observe any issues as the RMM was moving past signal C99-220. CTEM Mechanic #1 admitted they observed signal C99-220 displaying a red aspect and continued to move past it. CTEM Mechanic #1 stated they have passed signal C99-220 displaying a red aspect previously without issue.

When asked, CTEM Mechanic #1 stated that all CTEM Mechanics must receive training to operate RMMs. The CTEM Mechanic stated they must recertify annually to operate RMMs. CTEM Mechanic #1 also stated they did not request a lunar signal to move PM54 further back when they observed the RMM was blocking the roadway crossing. The CTEM Mechanic #1 also stated that they experienced radio communication issues in Alexandria Yard before the incident occurred. They did not have a handheld radio and were using PM 54's radio to communicate with the Interlocking Operator.

When asked CTEM Mechanic #1 stated that their last instructions from the Interlocking Operator was to pass signal C99-162 and hold. They did not recall if they were advised that the next governing signal would display a red aspect.

#### *CTEM Mechanic #2*

The CTEM Mechanic #2 is a Metro employee with 7 years of service and 1.5 years of experience as a CTEM Mechanic. The CTEM Mechanic holds a Roadway Worker Protection (RWP) Level 2 certification that expires in August 2026.

During the formal interview, the CTEM Mechanic #2 stated that they are qualified to operated RMMs. It was decided before the move that CTEM Mechanic #1 would operate PM 54 and CTEM Mechanic #2 would monitor their diagnostic equipment for any issues with the RMM. CTEM Mechanic #2 stated as they approached signal C99-162, they were with CTEM mechanic #1 in the operator's cab. CTEM Mechanic #2 observed a glare from the camera at remote station end of the RMM. They informed CTEM Mechanic #1 they would go to the remote station to flag any vehicles through the roadway crossing and give the CTEM Mechanic #1 the signal to proceed once the roadway crossing was clear. CTEM Mechanic #2 stated once the RMM was moving they were no longer needed to assist with flagging. CTEM Mechanic #2 stated they were not assigned as a Flag person but did so to ensure that the RMM did not collide with any vehicles or persons using the roadway crossing. CTEM Mechanic #2 stated they signaled for CTEM Mechanic #1 to stop the RMM to allow vehicles to cross the roadway. They then proceed to give CTEM Mechanic #1 a signal to proceed. Once CTEM Mechanic #2 observed the operator's cab was blocking the roadway they began walking back towards the operator's cab. CTEM Mechanic #2 stated they did not observe signal C99-220 or its red aspect.

CTEM Mechanic #2 stated once the RMM cleared the roadway crossing CTEM Mechanic #1 contacted the Alexandria Tower. The Interlocking Operator asked CTEM Mechanic #1 for their name and payroll number. The Interlocking Operator then informed CTEM Mechanic #1 that they had passed their block.

When asked, CTEM Mechanic #2 stated while they were in the operator's cab that the last instructions they heard from the Interlocking Operator were to clear signal C99-162. There were no instructions given to clear the roadway crossing. CTEM Mechanic #2 stated they did not have a handheld radio at the time of the incident.



## Appendix B – CTEM Mechanic #1 Written Statement

|  <b>Witness or Employee Statement Form</b>                                                             |               |                                                                                             |                                                            | TO BE COMPLETED AND<br>DISTRIBUTED WITHIN 24 HOURS |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|---------------------------------------------------------------------------------------------|------------------------------------------------------------|----------------------------------------------------|
| Washington Metropolitan Area Transit Authority                                                                                                                                          |               |                                                                                             |                                                            |                                                    |
| <b>Involved Person or Witness (Use this Block for Non-WMATA Involved Person or Witness)</b>                                                                                             |               |                                                                                             |                                                            |                                                    |
| Name                                                                                                                                                                                    |               | Phone Number                                                                                |                                                            | E-Mail                                             |
|                                                                                                                                                                                         |               |                                                                                             |                                                            |                                                    |
| Address                                                                                                                                                                                 |               |                                                                                             |                                                            |                                                    |
|                                                                                                                                                                                         |               |                                                                                             |                                                            |                                                    |
| <b>Incident information</b>                                                                                                                                                             |               |                                                                                             |                                                            |                                                    |
| Date                                                                                                                                                                                    | Incident Time | Date/Time Reported                                                                          | Location                                                   |                                                    |
| 10-3-2025                                                                                                                                                                               | 9:45AM        | 10-3-2025                                                                                   | C99                                                        |                                                    |
| Incident ID# (from OCC) - Completed by Supervisor                                                                                                                                       |               |                                                                                             | SMS Incidents/Accidents Report#<br>Completed by Supervisor |                                                    |
| What happened prior to the incident/accident?                                                                                                                                           |               |                                                                                             |                                                            |                                                    |
| CLEARING signal 162 AND ROAD CROSSING - fouled<br>signal 220                                                                                                                            |               |                                                                                             |                                                            |                                                    |
| Describe the incident/accident                                                                                                                                                          |               |                                                                                             |                                                            |                                                    |
| AS ABOVE                                                                                                                                                                                |               |                                                                                             |                                                            |                                                    |
| What happened after the incident/accident?                                                                                                                                              |               |                                                                                             |                                                            |                                                    |
| Tower told me to HAVE SUPERVISOR CONTACT tower                                                                                                                                          |               |                                                                                             |                                                            |                                                    |
| Please indicate the area of the injury by placing an X on the corresponding body parts below. To specify which side of the body is involved, please use "L" for left and "R" for right. |               |                                                                                             |                                                            |                                                    |
| <br>FRONT                                                                                            |               | <br>BACK |                                                            |                                                    |
| Turn Over to Complete Employee and Injury Information                                                                                                                                   |               |                                                                                             |                                                            | ➔                                                  |

Figure 9 - CTEM Mechanic #1's Written Statement, page 1 of 2.

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**Witness or Employee Statement Form** TO BE COMPLETED AND  
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|                                                                                                                                           |                                           |                                                                              |                      |
|-------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|------------------------------------------------------------------------------|----------------------|
| <b>Complete all fields (Write N/A if field does not apply)</b>                                                                            |                                           |                                                                              |                      |
| <b>Involved Personnel (Use this block for WMATA Employees and Contractors)</b>                                                            |                                           |                                                                              |                      |
| Name (Last Name, First Name, MI)                                                                                                          |                                           | Witness? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | D.O.B.               |
| [Redacted]                                                                                                                                |                                           |                                                                              | [Redacted]           |
| Employee ID                                                                                                                               | Union                                     |                                                                              |                      |
| [Redacted]                                                                                                                                | 689                                       |                                                                              |                      |
| Phone Number                                                                                                                              | Job Title                                 | Department/Division (Company)                                                |                      |
| [Redacted]                                                                                                                                | AA Mech                                   | CTEM                                                                         |                      |
| Last Day Worked (Prior to)                                                                                                                | Hours Worked (in last 24 hours)           | Date/Time Shift Began                                                        |                      |
| 4-21-2025                                                                                                                                 | 8 hrs                                     | 10-3-25                                                                      |                      |
| On Overtime? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No                                                          | Personal Protective Equipment used (list) |                                                                              |                      |
|                                                                                                                                           |                                           |                                                                              |                      |
| <b>Secondary Employment (Write None if employee does not have secondary employment)</b>                                                   |                                           |                                                                              |                      |
| Name of Secondary Employer                                                                                                                |                                           | <input type="checkbox"/> Full Time <input type="checkbox"/> Part Time        | Work Hours           |
| None                                                                                                                                      |                                           |                                                                              |                      |
| Secondary Employer Full Address                                                                                                           |                                           |                                                                              |                      |
|                                                                                                                                           |                                           |                                                                              |                      |
| Date of Hire                                                                                                                              | Supervisor                                | Phone Number                                                                 |                      |
|                                                                                                                                           |                                           |                                                                              |                      |
| <b>Injury Information (Complete for all involved people. If there is no injury, write None in Date of Injury)</b>                         |                                           |                                                                              |                      |
| Date of Injury                                                                                                                            | Time of Injury                            | Date/Time Injury Reported                                                    | Body Part(s) Injured |
| None                                                                                                                                      |                                           |                                                                              |                      |
| Location (Address) where injury occurred (check one: <input type="checkbox"/> MD <input type="checkbox"/> VA <input type="checkbox"/> DC) |                                           |                                                                              |                      |
|                                                                                                                                           |                                           |                                                                              |                      |
| Witness Information (Name, Phone Number, Email, address)                                                                                  |                                           |                                                                              |                      |
|                                                                                                                                           |                                           |                                                                              |                      |
| Did Another Person Cause this Injury? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No                                 |                                           | Name of Responsible Party                                                    |                      |
|                                                                                                                                           |                                           |                                                                              |                      |
| Responsible Party Insurance Carrier/Agent                                                                                                 |                                           | Phone Number                                                                 |                      |
|                                                                                                                                           |                                           |                                                                              |                      |
| Are you able to Continue Work? <input type="checkbox"/> Yes <input type="checkbox"/> No                                                   |                                           | Name/Address of facility where you will seek treatment                       |                      |
|                                                                                                                                           |                                           |                                                                              |                      |
| Doctor's Phone Number                                                                                                                     |                                           | Date you will see your doctor                                                |                      |
|                                                                                                                                           |                                           |                                                                              |                      |

Employee, please read before signing:

- (1) This form is only to be used for Employees who are injured on the job.
- (2) All persons having a workers' compensation claim that was caused by the act of another is required to have the written approval of the Authority before agreeing to or signing any settlement for the injuries or lost wages that were paid as part of the whole by the Authority or its insurer to the employee as workers' compensation benefits.
- (3) Any Employee who willfully makes any materially false or misleading statements or representations for the purpose of obtaining any benefits under workers' compensation or leave provisions of the Authority may be subject to prosecution, disciplinary action up to and including dismissal and may adversely affect the employee's rights to workers' compensation benefits.

THIS IS TO CERTIFY THAT I HAVE READ THE ABOVE GUIDELINES AND UNDERSTAND THEM FULLY AND THE INFORMATION I HAVE PROVIDED IS TRUE AND CORRECT.

Employee Signature: [Redacted] Date: 10-3-2025

Original: RISK Copy: (1) SMS Incidents/Accidents (SAFE) (2) Employee File (3) Employee

Figure 10 - CTEM Mechanic #1's Written Statement, page 2 of 2.

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## Appendix C – CTEM Mechanic #2 Written Statement



### Witness or Employee Statement Form

TO BE COMPLETED AND

Washington Metropolitan Area Transit Authority

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| Involved Person or Witness (Use this Block for Non-WMATA Involved Person or Witness)                                                                                                                                                                                                              |               |                    |                                                            |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|--------------------|------------------------------------------------------------|
| Name                                                                                                                                                                                                                                                                                              | Phone Number  | E-Mail             |                                                            |
| Address                                                                                                                                                                                                                                                                                           |               |                    |                                                            |
| Incident Information                                                                                                                                                                                                                                                                              |               |                    |                                                            |
| Date                                                                                                                                                                                                                                                                                              | Incident Time | Date/Time Reported | Location                                                   |
| 10/3/2025                                                                                                                                                                                                                                                                                         | 1100          | 10/3/2025          | Alex Yard                                                  |
| Incident ID# (from OCC) – Completed by Supervisor                                                                                                                                                                                                                                                 |               |                    | SMS Incidents/Accidents Report#<br>Completed by Supervisor |
| What happened prior to the incident/accident?<br>We were testing equipment for performance issue.                                                                                                                                                                                                 |               |                    |                                                            |
| Describe the incident/accident<br>[redacted] was told by Tower [redacted] could clear signal C99/162. [redacted] cleared it but was in the road crossing so proceeded to clear the road crossing. I did go to the back of the unit to be sure no vehicles would be struck as the unit crossed it. |               |                    |                                                            |
| What happened after the incident/accident?<br>Tower notified us to hold.                                                                                                                                                                                                                          |               |                    |                                                            |

Please indicate the area of the injury by placing an X on the corresponding body parts below. To specify which side of the body is involved, please use "L" for left and "R" for right.



FRONT



BACK

Turn Over to Complete Employee and Injury Information



Figure 11 - CTEM Mechanic #2's Written Statement, page 1 of 2.

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**Witness or Employee Statement Form**

TO BE COMPLETED AND

Washington Metropolitan Area Transit Authority DISTRIBUTED WITHIN 24 HOURS

Complete all Fields (Write N/A if field does not apply)

Involved Personnel (Use this Block for WMATA Employees and Contractors)

|                                                                                  |                                                                              |                                                                                                                                                                                                                         |                                                                          |       |
|----------------------------------------------------------------------------------|------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|-------|
| Name (Last, First, Middle Initial)                                               | Witness? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | D.O.B.                                                                                                                                                                                                                  | Employee ID                                                              | Union |
| [Redacted]                                                                       |                                                                              | [Redacted]                                                                                                                                                                                                              | [Redacted]                                                               | 689   |
| Phone Number                                                                     | Job Title                                                                    | Department/Division (Company)                                                                                                                                                                                           | Time asleep, before the incident?                                        |       |
| [Redacted]                                                                       | CTEM Mech.                                                                   | CTEM                                                                                                                                                                                                                    | Fell Asleep 8:30 Wake up 4:30                                            |       |
| Last Day Worked (Prior to)                                                       | Hours Worked (in last 24 hours)                                              | Date/Time Shift Began                                                                                                                                                                                                   | Was this the sleep schedule for the last seven days, including days off? |       |
| 10/2/25                                                                          | 8                                                                            | 0555                                                                                                                                                                                                                    | Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>      |       |
| On Overtime? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | Personal Protective Equipment used (list)                                    | How alert were you immediately prior to the incident? Fully Alert <input checked="" type="checkbox"/> Moderately Alert <input type="checkbox"/> Drowsy <input type="checkbox"/> Fighting Sleep <input type="checkbox"/> |                                                                          |       |
|                                                                                  | Safety Vest                                                                  |                                                                                                                                                                                                                         |                                                                          |       |

Secondary Employment (Write None if employee does not have secondary employment)

|                                 |                                                                       |              |
|---------------------------------|-----------------------------------------------------------------------|--------------|
| Name of Secondary Employer      | <input type="checkbox"/> Full Time <input type="checkbox"/> Part Time | Work Hours   |
| None                            |                                                                       |              |
| Secondary Employer Full Address |                                                                       |              |
| Date of Hire                    | Supervisor                                                            | Phone Number |
|                                 |                                                                       |              |

Injury Information (Complete for all involved People. If there is no injury, write None in Date of Injury)

|                                                                                                                                           |                |                                                        |                      |
|-------------------------------------------------------------------------------------------------------------------------------------------|----------------|--------------------------------------------------------|----------------------|
| Date of Injury                                                                                                                            | Time of Injury | Date/Time Injury Reported                              | Body Part(s) Injured |
|                                                                                                                                           |                | NO injury                                              |                      |
| Location (Address) where injury occurred (check one: <input type="checkbox"/> MD <input type="checkbox"/> VA <input type="checkbox"/> DC) |                |                                                        |                      |
|                                                                                                                                           |                |                                                        |                      |
| Witness Information (Name, Phone Number, Email, address)                                                                                  |                |                                                        |                      |
|                                                                                                                                           |                |                                                        |                      |
| Did Another Person Cause this Injury? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No                                 |                | Name of Responsible Party                              |                      |
| Responsible Party Insurance Carrier/Agent                                                                                                 |                | Phone Number                                           |                      |
| Are you able to Continue Work? <input type="checkbox"/> Yes <input type="checkbox"/> No                                                   |                | Name/Address of facility where you will seek treatment |                      |
| Doctor's Phone Number                                                                                                                     |                | Date you will see your doctor                          |                      |
|                                                                                                                                           |                |                                                        |                      |

Employee, please read before signing:

- (1) This form is only to be used for Employees who are injured on the job.
- (2) All persons having a workers' compensation claim that was caused by the act of another is required to have the written approval of the Authority before agreeing to or signing any settlement for the injuries or lost wages that were paid as part of the whole by the Authority or its insurer to the employee as workers' compensation benefits.
- (3) Any Employee who willfully makes any materially false or misleading statements or representations for the purpose of obtaining any benefits under workers' compensation or leave provisions of the Authority may be subject to prosecution, disciplinary action up to and including dismissal and may adversely affect the employee's rights to workers' compensation benefits.

THIS IS TO CERTIFY THAT I HAVE READ THE ABOVE GUIDELINES AND UNDERSTAND THEM FULLY AND THE INFORMATION I HAVE PROVIDED IS TRUE AND CORRECT.

Employee Signature: [Redacted] Date: 10/3/25

Original: RISK

Copy: (1) SMS Incidents/Accidents (SAFE)

(2) Employee File

(3) Employee

Figure 12 - CTEM Mechanic #2's Written Statement, page 2 of 2.

Incident Date: 10/03/2025 Time: 09:26 hours  
Final Report v.1 – Red Signal Overrun  
E251750

Drafted By: SAFE 708 – 11/10/2025  
Reviewed By: SAFE 707 – 12/28/2025  
Approved By: SAFE 707 – 12/28/2025

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## Appendix D – Signal Engineering Investigation Report

|                                                                                   |                                                |                                               |
|-----------------------------------------------------------------------------------|------------------------------------------------|-----------------------------------------------|
|  | Washington Metropolitan Area Transit Authority |                                               |
|                                                                                   | INVESTIGATION REPORT                           | C99_Incident Analysis Report-E251750-20251003 |

### SIGNAL ENGINEERING INVESTIGATION REPORT

REQUEST NUMBER: C99-E251750-20251003

REQUESTER: [REDACTED]

DATE: 2025 Oct 15

BY: [REDACTED]

COSI – SIGNAL ENGINEERING

Approved: 10/15/2025

Signal Engineering Incident Analysis 1.0  
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*Figure 13 - Signal Engineering Investigation Report, page 1 of 4.*

Incident Date: 10/03/2025 Time: 09:26 hours  
Final Report v.1 – Red Signal Overrun  
E251750

Drafted By: SAFE 708 – 11/10/2025  
Reviewed By: SAFE 707 – 12/28/2025  
Approved By: SAFE 707 – 12/28/2025

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Incident Title: Red Signal Overrun at Signal C99-220, switch 223.

Incident Date/Time: 2025 Oct 3 09:08-09:30

Incident Location: C99 Alexandria Yard

**EXECUTIVE SUMMARY:**

At 9:22:23 track circuits 157T At 09:22:23.9 track circuits 157T, 171T, 144T, AND 223T were vacant. The route was set from signal 154 to signal 220.

Switch 171 was in Normal position, switch 223 in Reverse position, signal 220 at Red/Stop since 09:16:53.5.

The incident train (PM 54) came from track circuit 157T (09:24:16.5). At 09:24:58.1 it passed switch 171 and entered track circuit 144T.

Signal 220 was at Red/Stop, but at 09:25:37.9 the train overrun switch 223 (at Reverse), entered track circuit 223T and stopped. Overrun alarm (223SFORS at clear) went on.

At 09:25:47.8 the route was set for the reverse move of incident train. The signal 162 got Lunar, and the switch 171 moved from Normal to reverse.

At 09:25:52.9 the Overrun alarm went off (223SFORS at SET).

At 10:42:12.4 the incident train vacated 223T, cleared the switch 223 and the overrun alarm went On.

The train cleared track circuit 144T, passed the switch 171 (at Reverse) and continued moving to 171T and to MOW track.

Approved: 10/15/2025

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*Figure 14 - Signal Engineering Investigation Report, page 2 of 4.*

|                                                                                   |                                                |                                               |
|-----------------------------------------------------------------------------------|------------------------------------------------|-----------------------------------------------|
|  | Washington Metropolitan Area Transit Authority |                                               |
|                                                                                   | INVESTIGATION REPORT                           | C99_Incident Analysis Report-E251750-20251003 |

|                                                                         |                                                   |                    |                                                        |                             |                      |                                                                                                              |          |      |
|-------------------------------------------------------------------------|---------------------------------------------------|--------------------|--------------------------------------------------------|-----------------------------|----------------------|--------------------------------------------------------------------------------------------------------------|----------|------|
| COSI-SIGNAL<br>ENGINEERING                                              | Washington Metropolitan<br>Area Transit Authority |                    |                                                        | Detailed Incident Analysis  |                      |                                                                                                              |          |      |
|                                                                         |                                                   |                    |                                                        | Report Num:                 | C99-E251750-20251003 |                                                                                                              |          |      |
|                                                                         |                                                   |                    |                                                        | Requestor:                  | [REDACTED]           |                                                                                                              |          |      |
|                                                                         |                                                   |                    |                                                        | Date:                       | 2025 Oct 13          |                                                                                                              |          |      |
|                                                                         |                                                   |                    |                                                        | From:                       | [REDACTED]           |                                                                                                              |          |      |
|                                                                         |                                                   |                    |                                                        | To:                         | [REDACTED]           |                                                                                                              |          |      |
| Reported Data:                                                          |                                                   |                    | Time:                                                  | 02:00-04:00                 |                      | Train ID                                                                                                     |          |      |
| Description:                                                            | Track 144T / Signal C99-220 Overrun               |                    |                                                        | Interlocking Control: C99-D |                      |                                                                                                              |          |      |
| Requested Analysis: Investigate Incident                                |                                                   |                    |                                                        |                             |                      |                                                                                                              |          |      |
| INITIAL STATE AS OF: [10/03/2025 09:19:00] (Microlok's real time clock) |                                                   |                    |                                                        |                             |                      |                                                                                                              |          |      |
| Name                                                                    | STATE                                             | AUTO               | NAME                                                   | STATE                       | AUTO                 | NAME                                                                                                         | STATE    | AUTO |
| SIGNAL 220                                                              | RED/STOP                                          | NO                 | SWITCH 203                                             | NORMAL                      | -                    | TRACK 220T                                                                                                   | VACANT   | -    |
|                                                                         |                                                   |                    | SWITCH 205                                             | NORMAL                      | -                    | Track 201T                                                                                                   | OCCUPIED | -    |
|                                                                         |                                                   |                    | SWITCH 223                                             | REVERSE                     |                      | Track 223T                                                                                                   | VACANT   | -    |
|                                                                         |                                                   |                    | SWITCH 171                                             | NORMAL                      |                      | TRACK 144T                                                                                                   | VACANT   | -    |
|                                                                         |                                                   |                    |                                                        |                             |                      | TRACK 171T                                                                                                   | VACANT   | -    |
|                                                                         |                                                   |                    |                                                        |                             |                      | TRACK 157T                                                                                                   | VACANT   | -    |
| RECORDED EVENT DATA                                                     |                                                   |                    |                                                        |                             |                      |                                                                                                              |          |      |
| TIME                                                                    | LOCATION                                          | STATUS/<br>CONTROL | AIMS DESCRIPTION                                       |                             |                      | COMMENTS                                                                                                     |          |      |
| 09:22:13.9                                                              | C99                                               |                    | 201TR (bit 132) is SET                                 |                             |                      | Track circuit 201T Vacant                                                                                    |          |      |
|                                                                         |                                                   |                    | 171RWC (bit 1227) is clear<br>171NWC (bit 1226) is SET |                             |                      | Switch 171 moves from Reverse to Normal                                                                      |          |      |
| 09:24:16.5                                                              | C99                                               |                    | 157TR (bit 154) is clear                               |                             |                      | Track circuit 157 occupied                                                                                   |          |      |
| 09:24:58.1                                                              | C99                                               |                    | 171TR (bit 157) is clear                               |                             |                      | Track circuit 171 (branch between 157T and 144T) occupied                                                    |          |      |
| 09:25:07.0                                                              | C99                                               |                    | 144TR (bit 130) is clear                               |                             |                      | Train passed switch171 and entered track circuit 144T                                                        |          |      |
| 09:25:37.9                                                              | C99                                               |                    | 223TR (bit 137) is SET                                 |                             |                      | Train passed 144T, signal 220 (at RED since 09:16:53.5), switch 223 (at reverse), and entered 223T           |          |      |
| 09:25:37.9                                                              | C99                                               |                    | 223SGORS (bit 468) is clear                            |                             |                      | Signal 220 overrun alarm                                                                                     |          |      |
| 09:25:47.8                                                              | C99                                               |                    | 162HG (bit 248) is SET<br>171RWC (bit1227) is SET      |                             |                      | The reverse route for incident train is ready: switch 171 in Reverse, sig. 162 Lunar                         |          |      |
| 09:25:52.9                                                              | C99                                               |                    | 223NGORS (bit 468) is SET                              |                             |                      | After 15 s signal overrun alarm removed                                                                      |          |      |
| 10:42:12.4                                                              | C99                                               |                    | 223SGORS (bit 468) is clear                            |                             |                      | Incident train revers ends, leaves 223T, passes switch 223 and enters 144T area.<br>Signal 220 overrun alarm |          |      |

Approved: 10/15/2025

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Figure 15 - Signal Engineering Investigation Report, page 3 of 4.

Incident Date: 10/03/2025 Time: 09:26 hours  
Final Report v.1 – Red Signal Overrun  
E251750

Drafted By: SAFE 708 – 11/10/2025  
Reviewed By: SAFE 707 – 12/28/2025  
Approved By: SAFE 707 – 12/28/2025

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## INVESTIGATION REPORT

C99\_Incident Analysis Report-E251750-20251003

|                                                    |     |                                                               |                                                                                                                                                                  |
|----------------------------------------------------|-----|---------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 10:42:39.0                                         | C99 | 171TR (bit 157) is clear                                      | Incident train passes 144T, passes sig. 162 (at Lunar), crosses switch 171 (at Reverse), reaches another branch of track circuit 171T, and continue to MOW track |
| Additional observations, outside of incident scope | C99 | 203NWC – status unsteady (column M of the chart)              | Switch 223 needs adjustment                                                                                                                                      |
|                                                    |     | Track relay 157TR (column AA of the chart) shows some bobbing | Probably this track circuit needs adjustment.                                                                                                                    |

Circuit Power Failure: Yes ☐ No ☒ Processor Failure: Yes ☐ No ☒ Power Transfer: Yes ☐ No ☒

## DISTRIBUTION LIST

- COSI Executive Leadership
- Signal Engineering Asst. Director
- Signal Engineering Managers
- Signal Maintenance Personnel
- MICC Personnel
- SAFE Personnel
- RTRA Rail Operations, Stations
- Reliability Engineering

Approved: 10/15/2025

Signal Engineering Incident Analysis 1.0

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Figure 16 - Signal Engineering Investigation Report, page 4 of 4.

Incident Date: 10/03/2025 Time: 09:26 hours  
Final Report v.1 – Red Signal Overrun  
E251750

Drafted By: SAFE 708 – 11/10/2025  
Reviewed By: SAFE 707 – 12/28/2025  
Approved By: SAFE 707 – 12/28/2025

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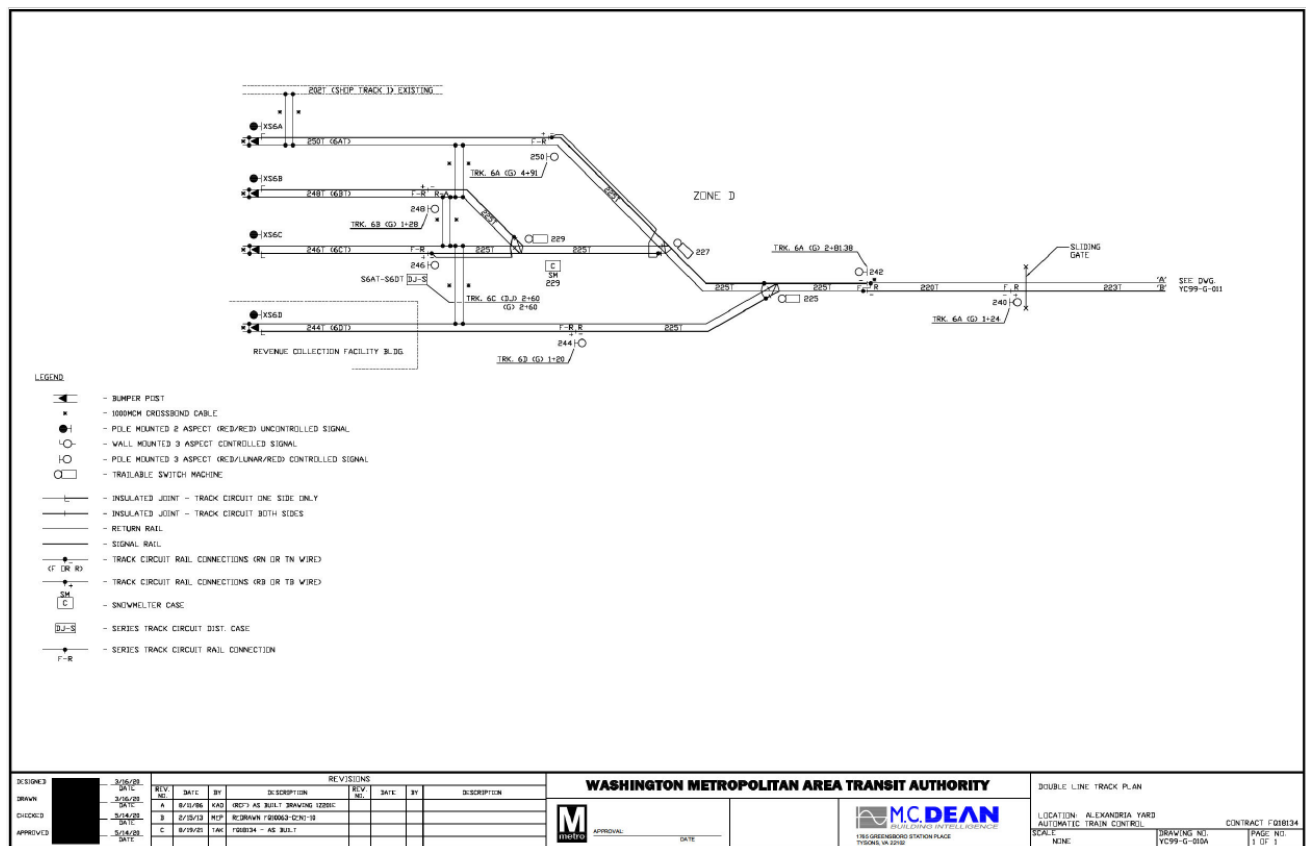


Figure 17 - Book of Plans Map Alexandria Yard Zone D.

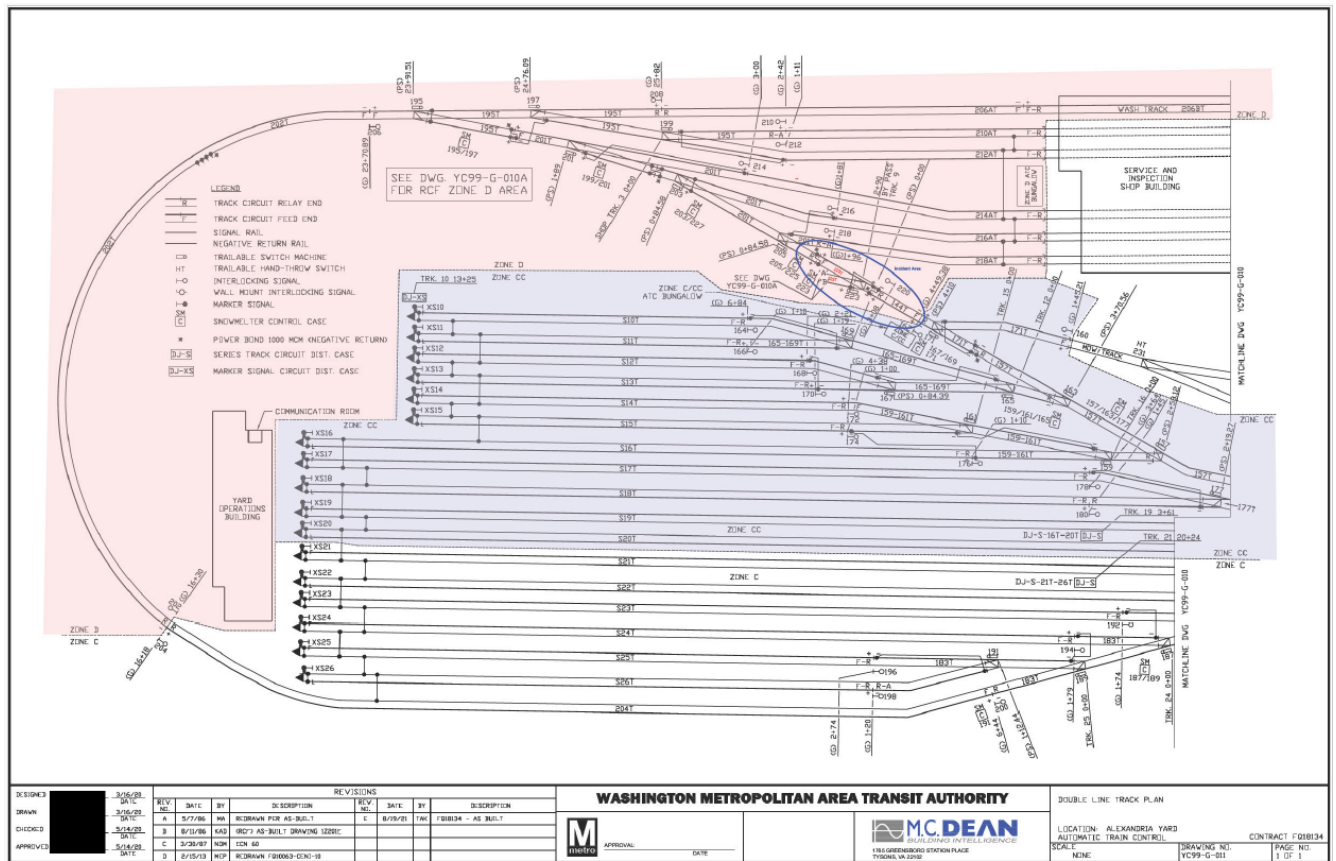


Figure 18 - Book of Plans Map Alexandria Yard Zone D/Zone CC.

## Appendix E – Why-Tree Analysis

