



WMSC Commissioner Brief: W-0258 Red Signal Overrun – Ballston Station – June 10, 2023

Prepared for Washington Metrorail Safety Commission meeting on March 5, 2024

Safety event summary:

During a long-term shutdown for track work (June 3-26, 2023) that led to Metrorail utilizing Ballston Station as a temporary terminal station, the Train Operator of Train 903 moved their train past a red signal controlled by the Rail Operations Control Center without the required permission. The Train Operator communicated only with the Terminal Supervisor, who provided partial movement instructions despite not having control of or responsibility for the interlocking's switches and signals. After improperly passing the red signal, the train continued over a switch that was not aligned for the train's movement, trailing the switch. The Train Operator berthed the train in the station on Track 2, the same track that the train had approached the station on. The Rail Operations Control Center controllers and Terminal Supervisor had intended for the train to berth on Track 1.

Switch 1B, the switch on Track 2 closest to where the train had stopped prior to the red signal, was aligned in the normal position, for a straight-through move on Track 2. Switch 3B, the switch on Track 2 closest to the station platform, was aligned in reverse position for Train 607 that was departing Ballston Station toward Downtown Largo. The signal was red due to this switch alignment that did not provide a clear route through the interlocking and due to Train 607 departing the platform and moving through the interlocking.

Train Approach

As they approached the station, the Train Operator of Train 903 contacted the Terminal Supervisor to report that the train did not have speed commands. Vehicle data show the train was 290-492 feet from the signal at this time (the Train Operator twice initiated movement without speed commands without permission, contrary to Metrorail safety rules). The Terminal Supervisor, who did not have control of this mainline interlocking, provided partial movement instructions: "with a lunar aspect, crossing from track 2 to track 1 and opening the train doors on the platform side." This communication was on the Vienna Terminal radio channel, not the Ops 4 radio channel used by the Rail Operations Control Center desk responsible for movement in this area. The Train Operator then moved the train past the red signal. Under Metrorail rules in this situation, the Train Operator would have needed specific permission and protection from the Rail Operations Control Center to pass a red signal or otherwise move the train without speed commands. Otherwise, a Train Operator is required to move only upon verifying speed commands, a lunar (proceed) signal, and proper rail alignment.

The train movement damaged the switch point of Switch 3B.

After the Train Operator entered the station, the Terminal Supervisor called the Rail Traffic Controller to ask why Train 903 was routed to Track 2. The Controller informed the Terminal Supervisor that the Train Operator overran a red signal.

The Rail Operations Control Center Radio Controller then attempted to contact the Train Operator by radio on the Ops 4 channel, but they got no response due to the Train Operator having switched radio frequencies to the terminal channel. The Terminal Supervisor contacted the Train Operator on the Vienna Terminal channel that they were



communicating on. After properly berthing the train at the platform and opening the doors, the Train Operator exited the train (as would be expected during normal shutdown operations).

During the response, the Radio Controller also attempted to contact ATC Maintenance personnel on the Ops 4 but got no response. The crew contacted the Controller several minutes later to request Foul Time protection to begin their investigation. The protection was later changed to Exclusive Track Occupancy – Local Control.

Metrorail repaired the switch damage and later restored service the following day.

Metrorail had provided operations personnel with a Rail Service Adjustment Bulletin for this shutdown that directed Train Operators to contact the Ballston Station Terminal Supervisor on the Terminal Radio Channel when arriving at the station. In normal operations, Terminal Supervisors may control the mainline interlocking before a train reaches the terminal. Bulletin 154-O/S stated that trains would operate in normal service to K04-08 signal, and train operators would then verify the proper lunar signal, correct rail alignment, and speed commands to properly berth at the station. The bulletin stated in red letters “Notice: When arriving to Ballston terminal, operators must contact the terminal supervisor on Vienna ops.” The Train Operator switched to that radio channel as they approached Ballston Station, leading them to have contact only with the Terminal Supervisor and to be out of contact with the Rail Operations Control Center.

During this event, Metrorail had only one Rail Traffic Controller on the Ops 4 desk, rather than the two that are provided in procedures. The controller was working alone on an overtime shift.

In the interview, the Train Operator demonstrated a lack of understanding of the required procedures to pass a red signal. This, along with a lack of required repeat back, contributed to the Train Operator misinterpreting the instructions from the Terminal Supervisor.

Probable Cause:

The probable cause of this event was inadequate communication of safety and operational processes during planned work activities.

Corrective Actions:

Metrorail distributed personnel notices related to movement with zero speed commands, discussed red signal overruns with Train Operators, and, following other safety events including red signal overruns in July, issued a safety bulletin regarding general attention to duty.

Rail Transportation conducted additional field oversight activities, and is considering implementing “point and call” for signals and other system features to confirm safe movement.

The Safety Department is reviewing train operator training and skills, and has reviewed radio communications and speed command data. ‘

Metrorail is adjusting instructions on rail service advisories for shutdown areas to direct operators to stay on the mainline radio channel after servicing the station prior to the temporary terminal.

Example of related open CAP



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- On February 28, 2024, the WMSC issued an order regarding Metrorail's noncompliance with train operator certification requirements. The WMSC identified through safety event investigations that Metrorail has continued to deviate from its train operator certification procedures and requirements that Metrorail has designed to ensure that train operators have the required safety and operational skills to safely operate trains. Metrorail is required to develop two corrective action plans, and take other steps as a result of this order.



Washington Metropolitan Area Transit Authority
Department of Safety (SAFE)
Office of Safety Investigations (OSI)

FINAL REPORT OF INVESTIGATION A&I E23394

| | |
|---------------------------------------|---|
| Date of Event: | June 10, 2023 |
| Type of Event: | Red Signal Overrun |
| Incident Time: | 23:36 Hours |
| Location: | Ballston Station, track 2 – Signal K04-08 |
| Time and How received by SAFE: | 23:44 Hours SAFE/MAC |
| WMSC Notification Time: | 23:51 Hours |
| Responding Safety Officers: | WMATA: Operations Safety Oversight (OSO) WMSC: None Other: None |
| Rail Vehicle: | Train ID 903 (L7566/65x7515/14x7455/43x7147/46T) |
| Injuries: | None |
| Damage: | Switch 3B was trailed, causing damage to the switch point. |
| Emergency Responders: | None |
| SMS I/A Incident Number: | 20230611#109114MX |

Ballston Station – Red Signal Overrun

June 10, 2023

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Abbreviations and Acronyms

| | |
|--------------|---|
| ARS | Audio Recording System |
| CAP | Corrective Action Plan |
| MAC | Mission Assurance Coordinator |
| MOC | Maintenance Operation Control |
| OSO | Operations Safety Oversight |
| RTC | Rail Traffic Controller |
| AIMS | Automated Information Management System |
| ATCM | Automatic Train Control Maintenance |
| CCTV | Closed-Circuit Television |
| CMOR | Office of Chief Mechanical Officer |
| MSRPH | Metrorail Safety Rules and Procedures Handbook |
| NOAA | National Oceanic and Atmospheric Administration |
| ROCC | Rail Operations Control Center |
| RTRA | Office of Rail Transportation |
| SMS | Safety Measurement System |
| SAFE | Department of Safety |
| TRST | Office of Track & Structures |
| VMDS | Vehicle Monitoring and Diagnostic System |
| WMATA | Washington Metropolitan Area Transit Authority |
| WMSC | Washington Metrorail Safety Commission |

Executive Summary

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

On Saturday, June 10, 2023, at 23:34 hours, the Train Operator of Train ID 903 (L7566/65x7515/14x7455/43x7147/46T) reported to the Terminal Supervisor located at Ballston Station¹ that the train did not have speed commands. The Terminal Supervisor advised the Train Operator, “with a lunar aspect crossing from track 2 to track 1 and to open the train doors on the platform side.”

At 23:36 hours, the Train Operator overran signal K04-08 displaying a red aspect, then continued to berth the train at Ballston Station on track 2.

At 23:37 hours, the Rail Operations Control Center (ROCC) Radio Rail Traffic Controller (RTC) made multiple attempts to contact Train ID 903 without success. The Terminal Supervisor contacted ROCC and was informed that Train ID 903 overran the red signal at K04-08.

The Button RTC notified the Assistant Operations Manager (AOM), the Maintenance Operations Center (MOC), and the Rail Operations Information Center (ROIC) of the event. The Office of Automatic Train Control Maintenance (ATCM) and the Office of Track and Structures (TRST) were dispatched to Ballston Station.

ROCC suspended train service between Ballston Station and Clarendon Station.

ATCM inspected the Ballston Station interlocking and reported damage to Switch 3B, that needed repair before the interlocking could be returned to service.

On Sunday, June 11, 2023, at 05:42 hours, ATCM reported that the interlocking repair was complete and normal service could resume to Ballston Station.

At 05:46 hours, the involved train was dispatched from Ballston Station to New Carrollton Yard.

The Office of Rail Transportation (RTRA) removed the Train Operator and Terminal Supervisor from service at the time of the incident. The train was placed out of service, removed from operation, and transported without customers to New Carrollton Yard for post-incident inspection.

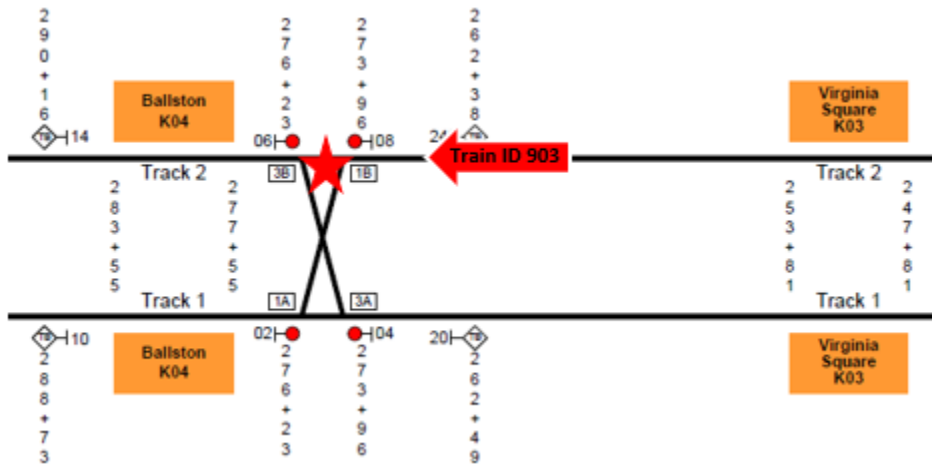
The probable cause of the Red Signal Overrun event on June 10, 2023, at Ballston Station, was a miscommunication and lack of awareness by the Rail Supervisor when they provided unclear instructions to the Train Operator to move the train without having control of the interlocking. A contributing factor was a lack of oversight of movement without speed commands and confusion by the Train Operator when they contacted the Terminal Supervisor instead of ROCC when the train stopped without speed commands.

Incident Site

Ballston Station, Track 2 – Signal K04-08

¹ Ballston Station was the western end of the line station due to track work.

Field Sketch/Schematics



The above depiction is not to scale.

Purpose and Scope

This accident investigation and candid self-evaluation aims to collect and analyze available facts, determine the probable cause(s) of the incident, identify contributing factors, and make recommendations to prevent a recurrence.

Investigative Methods

The investigative methodologies included the following:

- Physical Site Assessment
- Formal Interviews – SAFE interviewed three 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). SAFE interviewed the following individuals:
 - Train Operator (Train ID 903)
 - Terminal Supervisor
 - Radio Rail Traffic Controller
- 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 record systems. These records include:
 - Metrorail Safety Rules and Procedures Handbook (MSRPH)
 - National Oceanic and Atmospheric Administration (NOAA)
 - Employee Training Procedures & Records
 - Employee 30-Day Work History
 - Rail Operations Control Center (ROCC) Incident Report
 - Maximo Data

- System Data Recording Review – Collection of information contained in Metro Data Recording Systems. This data includes:
 - Audio Recording System (ARS) playback
 - Advanced Information Management System (AIMS)
 - Closed-Circuit Television (CCTV)
 - The Office of Chief Mechanical Officer (CMOR) Incident Investigation Team (IIT) Vehicle Monitoring and Diagnostic System (VMDS)

Investigation

Between June 3, 2023, and June 26, 2023, Ballston Station was the temporary end-of-the-line terminal due to the Orange and Silver Line Extended Shutdown (Summer Construction). During this shutdown, there was no rail service from Ballston Station to Vienna Station and Ballston Station to McLean Station. The role of the Terminal Supervisor was to monitor the appropriate mainline radio frequency in order to observe communications between problem trains and ROCC, and to verify that Train Operators are available in the operating cab, keyed up and ready to move at least two minutes before their scheduled departure time. The role of ROCC was the safe and effective control over train mainline activities, maintaining and disseminating procedures on remote terminal operations.

On Saturday, June 10, 2023, at 23:31 hours, Train ID 903 arrived and serviced Virginia Square Station on track 2. When Train ID 903 departed Virginia Square Station, the train lost speed commands approaching Ballston Station due to signal K04-08 displaying a red signal. At 23:33 hours, Train ID 607 departed Ballston Station from track 2, crossed over to track 1, then continued to Downtown Largo Station.

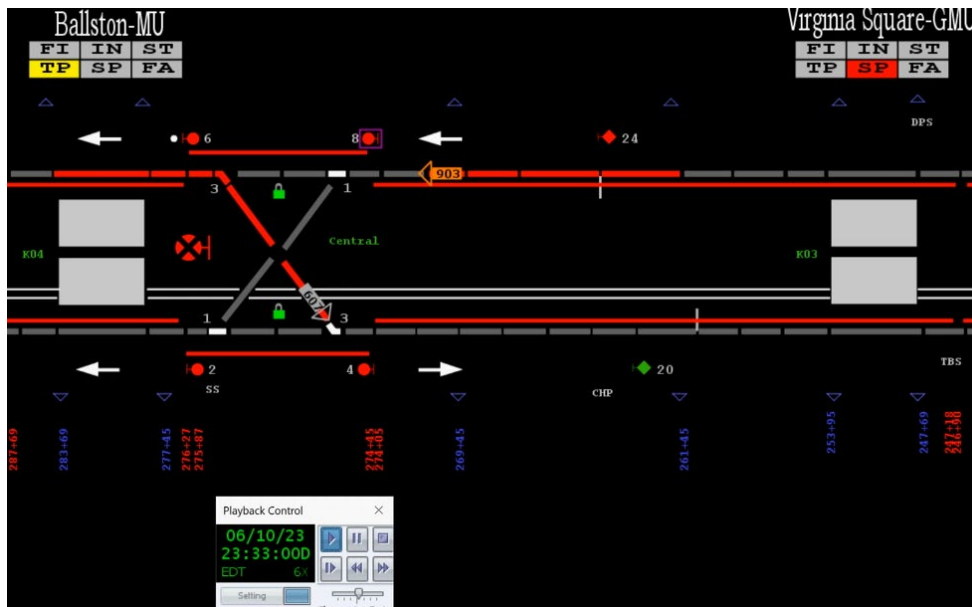


Figure 1 – Train ID 903 located outside of Ballston Station at K04-08 signal red as Train ID 607 traversed the interlocking at 23:33 hours.

The Audio Recording System (ARS) revealed that at 23:34 hours, the Train Operator of Train ID 903 contacted the Terminal Supervisor located at Ballston Station on the Vienna Terminal Radio Ops and reported that the train did not have speed commands. The Terminal Supervisor responded to the Train Operator, “with a lunar aspect, crossing from track 2 to track 1 and opening the train doors on the platform side.”

At 23:36 hours, the Train Operator overran signal K04-08 displaying a red aspect, then continued to berth the train at Ballston Station on track 2.



Image 1 – Camera view from Train ID 903 passing K04-08 signal displaying a red aspect.

At 23:37 hours, the ROCC Radio RTC made multiple attempts to contact Train ID 903 without success. The Terminal Supervisor contacted ROCC to ask why the train was routed to the Track 2 platform and was informed that Train ID 903 overran the red signal at K04-08.

At 23:37 hours, the Button RTC informed the AOM of the event.

At 23:38 hours, the Radio RTC contacted the multiple Rail Supervisors over Radio Ops 4 and confirmed that Train ID 903 was berthed on the platform at Ballston Station.

At 23:38 hours, the Button RTC notified MOC of the event and reported that switches 3A and 3B were out of correspondence at Ballston Station interlocking.

At 23:43 hours, the Button RTC informed ROIC of the event.

At 23:46 hours, the Radio RTC announced that train service was suspended between Ballston Station and Clarendon Station.

MOC requested that ATCM and TRST respond to Ballston Station.

At 00:26 hours, ATCM personnel reported to ROCC that they were located at Ballston Station. At 00:53 hours, ATCM personnel requested and were granted foul time to perform an interlocking inspection with the Office of Safety Oversight (OSO) personnel. At 01:47 hours, ATCM personnel reported that OSO personnel were clear of the roadway and reported that after performing an inspection of the Ballston Station interlocking, damage to Switch 3B was observed, and would require maintenance before the interlocking could be returned to service.



Image 2 – Image of damage at switch point 3B.

At 01:52 hours, the Radio RTC advised the ATCM personnel that they had permission to take control of the interlocking panel at Ballston Station to perform maintenance. At 02:51 hours, TRST personnel reported being located at Ballston Station to assist with making repairs.

At 05:42 hours, ATCM personnel reported that the maintenance to the interlocking was complete, all personnel were clear from the roadway, and normal service could resume to Ballston Station.

At 05:46 hours, Train ID 903 (703) was dispatched from Ballston Station to New Carrollton Yard.

Chronological Event Timeline

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

| Time | Description |
|----------------------|--|
| June 10, 2023 | |
| 23:31:04 hours | Train ID 903 arrived at Virginia Square Station, track 2. [Spots] |
| 23:32:15 hours | Train ID 903 departed Virginia Square Station, track 2. [Spots] |
| 23:32:42 hours | Train ID 903 is held at K04-08 signal. [AIMS]. |
| 23:33:13 hours | Train ID 607 departed Ballston Station, track 2. [Spots] |
| 23:34:44 hours | Train ID 903: Reported on track 2, no readouts. <u>Terminal Supervisor</u> : Instructed Train ID 903 with a lunar, crossing over 2 to 1 make an 8-car stop, doors on the platform side only. <u>Train ID 903</u> : Acknowledged and repeated. [Radio VNA-YD] |
| 23:36:30 hours | Train ID 903 overran K06-08 signal red. [AIMS] |
| 23:36:45 hours | Train ID 903 arrived at Ballston Station, track 2. [CCTV] |
| 23:37:01 hours | <u>Terminal Supervisor</u> : Inquired why Train ID 903 was routed to track 2. <u>Button RTC</u> : Informed that Train ID 903 overran K04-08 signal. [Phone, Ops 4] |
| 23:37:36 hours | <u>Radio RTC</u> : Attempted to contact Train ID 903 multiple times. [Radio, Ops 4] |

| Time | Description |
|----------------|---|
| 23:37:51 hours | <u>Terminal Supervisor</u> : Contacted Train ID 903 and requested Train Operator identification. [Radio VNA-YD] |
| 23:37:57 hours | <u>Button RTC</u> : Informed the AOM of the event. [Phone, Rail 3] |
| 23:38:01 hours | Train ID 903 berthed at the 8-car marker, track 2. [CCTV] |
| 23:38:15 hours | Train ID 903, doors opened on the platform side. [CCTV] |
| 23:38:21 hours | <u>Radio RTC</u> : Attempted to contact the Rail Supervisor at Ballston Station. <u>Rail Supervisor #1</u> : Acknowledged. <u>Radio RTC</u> : Requested if Train ID 903 had properly berthed at Ballston Station. <u>RTRA Supervisor #1</u> : Acknowledged and attempted to contact Rail Supervisor #2. [Radio, Ops 4] |
| 23:38:41 hours | Train Operator exited from rail car 7566. [CCTV] |
| 23:38:43 hours | <u>Button RTC</u> : Advised MOC that Switch 3A and 3B were out of correspondence at Ballston Station. [Phone, Ops 4] |
| 23:39:17 hours | <u>Radio RTC</u> : Attempted to contact Rail Supervisor #2 at Ballston Station. <u>Rail Supervisor #2</u> : Acknowledged. <u>Radio RTC</u> : Requested if they can confirm that Train ID 903 had properly berthed at Ballston Station on track 2. <u>Rail Supervisor #2</u> : Acknowledged and advised that they were in the Station not on the platform. [Radio, Ops 4] |
| 23:40:40 hours | <u>Button RTC</u> : Advised Rail Supervisor #2 that their screen reflected that Train ID 903 had run a red signal at Ballston Station. [Phone, Ops 4] |
| 23:43:45 hours | <u>Button RTC</u> : Informed ROIC of the event. [Phone, Ops 4] |
| 23:44:06 hours | <u>Button RTC</u> : Advised MOC that when Train ID 903 went straight through the interlocking on track 2. Switches 3A and 3B went out of correspondence. [Phone, CTF ROCC MOC] |
| 23:46:18 hours | <u>Radio RTC</u> : Announced that train service was suspended between Ballston Station and Clarendon Station. [Radio Ops 4] |
| 23:46:43 hours | <u>Button RTC</u> : Advised MOC Train ID 903 overran K04 08-06 red, placing Switch 3 out of correspondence. MOC advised they would dispatch ATC to inspect any damaged components. [Phone, CTF ROCC MOC] |
| 23:47:21 hours | Train ID 903, doors closed. Train out of service. [CCTV] |
| 23:47:22 hours | <u>Button RTC</u> : Advised ROIC that Clarendon Station would be serviced as the end of the line. [Phone, Ops 4] |
| 00:04:21 hours | <u>MOC</u> : Advised AOM on expected arrival time of ATCM to Ballston Station to assess switch damage. [Phone, ATCM MOC CTF ROCC] |
| 00:05:15 hours | <u>MAC</u> : Contacted OSO with expected arrival time of ATCM. Advised that train was berthed at the station. [Telephone, MAC OSO] |

| June 11, 2023 | |
|------------------------------|--|
| 00:06:03 hours | <u>Radio RTC</u> : Broadcasted operational instructions to trains. Trains would reverse direction at Clarendon Station after servicing station. And head to New Carrollton or Largo Town Center. [Radio, OPS 4] |
| 00:15:00 hours | OSO personnel arrived at Ballston Station. [CCTV] |
| 00:26:38 hours | <u>ATCM</u> : Arrived on scene. Contacted Buttons RTC to request ETO for panel inspection of signal interlocking. <u>Buttons RTC</u> : Acknowledged ATCM. Instructed ATCM to make a request for ETO over the radio. [Telephone, CTF, MOC, ROCC] |
| 00:31:46 hours | <u>ATCM</u> : Contacted Buttons RTC to ascertain if the switches at K04-08 had been clamped. <u>Buttons RTC</u> : Informed ATCM that switches had not been clamped. [Telephone, CTF MOC ROCC ATCM] |
| 00:46:26 – 00:48:17 hours | <u>Radio RTC</u> : Attempted radio contact with ATCM crew at Ballston station. [Radio, OPS 4] |
| 00:53:03 – 00:54:48 hours | <u>ATCM</u> : Contacted Radio RTC to request foul time to enter roadway with a crew and SAFE for interlocking inspection and investigation. <u>Radio RTC</u> : Acknowledged. Granted foul time. [Radio, OPS 4] |
| 01:47:18 – 01:48:26 hours | <u>ATCM</u> : Contacted Radio RTC to request permission to have Local Control over panel at K04. <u>Radio RTC</u> : Acknowledged. Inquired if SAFE was finished with their investigation. <u>ATCM</u> : Advised Radio RTC that SAFE had completed its investigation. [Radio, OPS 4] |
| 01:52:56 hours | <u>Radio RTC</u> : Contacted ATCM to say that they have permission to take control of the panel at K04. And to notify when they have control. <u>ATCM</u> : Acknowledged. [Radio, OPS 4] |
| 01:53:41 hours | <u>ATCM</u> : Contacted Radio RTC and informed them they have control of the panel at K04. [Radio, OPS 4] |
| 02:51:51 – 02:54:06 hours | <u>TRST</u> : Requested foul time to enter roadway and join ATCM at K04. <u>Radio RTC</u> : Acknowledged. Contacted ATCM. <u>ATCM</u> : Acknowledged TRST and grant permission to join roadway with them. [Radio, OPS 4] |
| 05:27:08 – 05:28:57 hours | <u>Radio RTC</u> : Requested update on interlocking repairs. And any additional speed couplers. <u>ATCM</u> : Advised that testing is almost completed and will advise. <u>Radio RTC</u> : Acknowledged. |
| 05:42:36 hours | <u>ATCM</u> : Contacted Radio RTC to announce that ATCM and TRST cleared the roadway. Interlocking is back in service. The panel is under ROCC control. <u>Radio RTC</u> : Acknowledged. [Radio, OPS 4] |
| 05:46:30 hours | <u>Radio RTC</u> : Instructed Train ID 903 (703) to depart Ballston Station to New Carrollton Yard. [Radio, OPS 4] |

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

The Office of Chief Mechanical Officer (CMOR) / Vehicle Monitoring and Diagnostic System (VMDS)

Based on the NVR Video and ER data, Train ID903, Cars (L7566-65X7515-14X7544-45X7147-46T), departed from Virginia Sq- GMU (K03), Track #2, in the direction of Ballston Station (K04). Lead car 7566 ER data confirmed that before the red signal overrun at K0408, the train lost speed commands and was placed in stop and proceed mode twice during the incident. The train overran the red signal at a speed of 10Mph with the Master Controller in the Coast position. The emergency brakes were not initiated. After overrunning the red signal, train ID 903 continued towards Ballston 8-car marker.

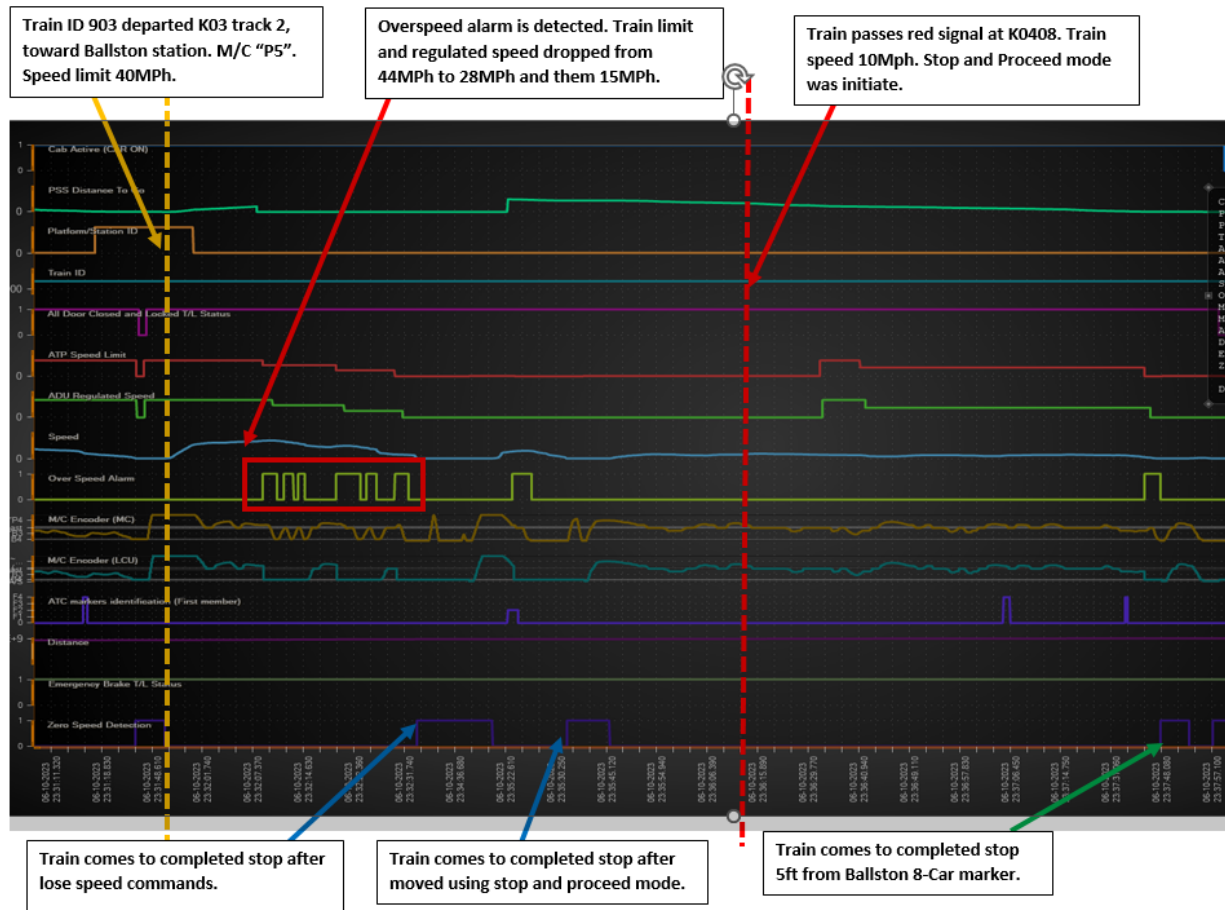
Based on VMDS and ER data, there was no fault with the train that contributed to the cause of this incident. The train performed as designed.

See timeline of Events below:

| Time | Description of Events | Master Controller | Train Speed | Regulated Speed | Limiting Speed | Distance to Ballston platform limits. |
|--------------|---|-------------------|-------------|-----------------|----------------|---------------------------------------|
| 23:31:50.160 | Train ID 903, departed Virginia Sq-GMU (K03), track #2, with the Master Controller in the P5 Power position, Limiting and Regulated speed limits set to 40MPH respectfully. | P5 | 0MPH | 40 MPH | 40MPH | 2,374 feet. |
| 23:32:01.140 | Master Controller is moved from "P5" to "P1-P4" Power Position, train speed 31.3MPH, 267.78ft. after departing Virginia Sq (K03). | P1-P4 | 31MPH | 40 MPH | 40MPH | 2,106.22 feet. |
| 23:32:09.640 | Train limiting speed limit decreased to 28 MPH, overspeed alarm is detected, train speed is 39MPH, LCU applied B4 rate. Brake sequence initiated. | B4 | 39MPH | 40 MPH | 28 MPH | 1,647.2 feet. |
| 23:32:10.720 | Train Regulated speed limit decreased to 28 MPH, train speed is 39 MPH. | B4 | 39MPH | 28 MPH | 28 MPH | 1,584.4 feet. |
| 23:32:10.820 | Master Controller is moved to "B4" brake mode, train speed 39Mph. Overspeed condition continue. | B4 | 39 MPH | 28 MPH | 28 MPH | 1,579.39 feet. |
| 23:32:13.400 | Master Controller is moved to "B1-B3", LCU remain train at "B4" position. Over speed alarm continue. | B1-B3 | 34 MPH | 28 MPH | 28 MPH | 1,441.42 feet. |
| 23:32:15.710 | Master Controller is moved back to "B4". Train continues experience an over speed. | B4 | 28 MPH | 28 MPH | 28 MPH | 1,338.7 feet. |
| 23:32:16.130 | Master Controller is moved to "B1-B3". Over speed alarm is disable. Train speed is below limit speed | B1-B3 | 27 MPH | 28 MPH | 28 MPH | 1,321.87 feet. |
| 23:32:16.430 | Master Controller moved to "Coast". Train speed 27.3Mph. | Coast | 27 MPH | 28 MPH | 28 MPH | 1,310.2 feet. |
| 23:32:17.050 | Master Controller moved to "P1-P4". Train speed 26.1 Mph. | P1-P4 | 26 MPH | 28 MPH | 15 MPH | 1,286.84 feet. |
| 23:32:20.240 | Train limiting speed decreased to 15MPH, Overspeed alarm is detected, train speed is 27.33Mph. | P1-P4 | 27 MPH | 28 MPH | 15 MPH | 1,164.31 feet. |
| 23:32:21.120 | Train regulated speed limit decreased to 15MPH, Overspeed alarm continues, LCU applied "B4" rate. Master Controller remain in "P1-P4". | P1-P4 | 27 MPH | 15 MPH | 15 MPH | 1,128.19 feet. |
| | Master Controller is placed in "B4" | | | | | |

| | | | | | | |
|--------------|--|--------------|---------------|---------------|---------------|-----------------------|
| 23:32:23.110 | braking mode. LCU remain in B4 rate. Train speed 25Mph. | B4 | 25 MPH | 15 MPH | 15 MPH | 1,051.28 feet. |
| 23:32:29.200 | Master Controller is move to "B1-B3 position. Overspeed alarm is disable. Train speed is 11.4MPH. | B1-B3 | 11 MPH | 15 MPH | 15 MPH | 896.88 feet. |
| 23:32:29.620 | Master Controller is moved to "Coast". Train speed is 10.7MPh. | Coast | 10 MPH | 15 MPH | 15 MPH | 890.73 feet. |
| 23:32:31.760 | Train loses speed commands. LCU applied "B4". Master controller in "B1-B3". Train speed 8.5MPH | B1-B3 | 8 MPH | 0 MPH | 0 MPH | 863.49 feet. |
| 23:32:40.440 | Train come to completed stop. Master Controller in "B5". Train is 492.13 feet from K0408 signal. | B5 | 0 MPH | 0 MPH | 0 MPH | 842.13 feet. |
| 23:35:13.740 | Stop and Proceed mode is initiated. Limiting and regulated speed remain at 0Mph. | B5 | 0 MPH | 0 MPH | 0 MPH | 842.13 feet. |
| 23:35:18.100 | Master Controller is placed in "P5". Train continues to move toward Ballston station track #2. | P5 | 0 MPH | 0 MPH | 0 MPH | |
| 23:35:23.540 | Train reaches stop and proceed maximum speed allow 16.0 Mph. Overspeed alarm is detected. Stop and proceed mode is disable. | P1-P4 | 16 MPH | 0 MPH | 0 MPH | 764.4 feet. |
| 23:35:35.800 | Train come to completed stop. Master Controller in "B5". Train is 290.95 feet from K0408 signal. | B5 | 0 MPH | 0 MPH | 0 MPH | 640.95 feet. |
| 23:35:41.950 | Stop and Proceed mode is initiated 2 nd time. Limiting and regulated speed remain at 0Mph. | B5 | 0 MPH | 0 MPH | 0 MPH | 640.95 feet. |
| 23:35:45.680 | Mater Controller is placed in "P1-P4" power mode. Train continues to move toward Ballston station track#2. | P1-P4 | 0 MPH | 0 MPH | 0 MPH | 640.95 feet. |
| 23:36:14.540 | Train passes K0408 signal at a speed of 10.23Mph. Master Controller position in Coast. Video confirmed signal showed red. | Coast | 10 MPH | 0 MPH | 0 MPH | 350 feet. |
| 23:36:34.680 | Train speed limit and regulated are regain. Train continues towards Ballston station track 2. | Coast | 8 MPH | 40 Mph | 40 MPH | 70 feet |
| 23:36:41.020 | Train ID 903 entered Ballston station platform limits at a speed of 7.2 Mph. | B1-B3 | 7 MPH | 40 MPH | 40 MPH | platform |
| 23:36:41.960 | Limiting speed and regulated speed decreased to 22 Mph. Train speed 6.2Mph. | B1-B3 | 6 MPH | 22 MPH | 22 MPH | platform |
| 23:37:46.070 | Train comes to a complete stop at Ballston station track 2. 5ft shorted from the 8-car marker. | B5 | 0 MPH | 0 MPH | 0 MPH | |
| 23:37:53.690 | Stop and Proceed mode is initiated. Train began to move toward the 8-car marker. | P1-P4 | 0 MPH | 0 MPH | 0 MPH | |
| 23:38:02.110 | Train comes to a complete stop at Ballston station 8-car marker. | B5 | 0 MPH | 0 MPH | 0 MPH | |

ER Graph lead car 7566.



Automatic Train Control (ATC)

ATCM inspected the Ballston Station interlocking and reported that switch 3B was trailed and damaged. ATCM performed maintenance and corrections, and then the interlocking was returned to service.

Office of Rail Transportation (RTRA)

RTRA determined that the Train Operator and Terminal Supervisor would receive refresher training according to the Rules and Procedures outlined within the MSRPH.

RTRA developed signage to be placed for every shutdown at the 8-car marker of the station before the station location of the temporary terminal. The sign instructed Train Operators to remain on the ROCC Operation Channels.

Interview Findings

As part of the investigation launched into the event, SAFE interviewed three employees. 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.

Train Operator

- The Train Operator was certified on January 29, 2023.
- The Train Operator was operating Train ID 903 toward Ballston Station from Virginia Square Station on track 2.
- Train ID 903 experienced a loss of speed commands outside of Ballston Station.
- The Train Operator contacted the Ballston Station Terminal Supervisor on the Terminal Radio Channel (Vienna) to report that their train had a red signal.
- The Train Operator stated they were following the instructions provided on the Rail Service Adjustment Bulletin (RSAB) and only contacted the Terminal Supervisor upon arriving at Ballston Station.
- The Train Operator entered Stop and Proceed mode without notifying the ROCC at Ballston Station.
- The Train Operator overran the red signal K04-08 and did not notify the ROCC of the event.

Terminal Supervisor

- The Terminal Supervisor gave instructions to the Train Operator of Train ID 903 at Ballston Station, which was similar to instructions that may come from the RTC to pass a signal displaying a stop indication.
- The Terminal Supervisor did not state that Train ID 903 had permission to pass a red signal or a signal displaying a stop indication.

ROCC Radio RTC

- The RTC, on the day of the incident, was working alone As Directed on an overtime shift of 4 hours.
- The RTC did not give the Train Operator on Train ID 903 authority to pass the red signal, K04-08 at Ballston Station.
- The RTC could not contact the Train Operator on Train ID 903 because the Train Operator had switched the train radio from OPS-4 to the Vienna yard channel.

Weather

On June 10, 2023, at the time of the incident, NOAA recorded the temperature as 70°F, with clear skies, winds of 8 mph, and 27% humidity. The weather did not contribute to this incident (Weather source: NOAA) – Location: Arlington VA.

Related Rules and Procedures

- RTRA Operations Personnel Notice Update: Stop and Proceed Mode on 7000 Series Railcars.
- WMATA Permanent Order No. T-20-28 – Modifications to Operating Rule 3.79 moving a train with zero speed commands.
- MSRPH Operating Rule 3.67: 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 ROCC or the Interlocking Operator and the move is consistent with customer safety as specified in Rule 3.1
- RTRS-202-02-00 – Office of Rail transportation Terminal Standards

Training, Certification, and Incident History

Train Operator

- The Train Operator's first certification attempt was rated QL-3 on January 11, 2023, which required recertification.
- The Train Operator's second certification attempt was rated QL-1 on January 17, 2023.
- The Train Operator has been in rail service since January 29, 2023.
- The Train Operator had a previous operational violation of a station overrun at McPherson Square, track 2, on February 25, 2023.

Human Factors

Evidence of Fatigue

Train Operator

Conditions were evaluated at the time of the incident to distinguish whether evidence of fatigue was present. The Train Operator reported feeling fully alert at the time of the incident. The Train Operator reported experiencing no symptoms of fatigue in the time leading up to the incident.

Terminal Supervisor

Conditions were evaluated at the time of the incident to distinguish whether evidence of fatigue was present. The Terminal Supervisor reported feeling fully alert at the time of the incident. The Terminal Supervisor reported experiencing no symptoms of fatigue in the time leading up to the incident.

ROCC Radio RTC

Conditions were evaluated at the time of the incident to distinguish whether evidence of fatigue was present. The RTC reported feeling fully alert at the time of the incident. The RTC reported experiencing no symptoms of fatigue in the time leading up to the incident.

Fatigue Risk

Train Operator

The incident data was evaluated for fatigue risk factors for the Train Operator. Risk factors for fatigue were not present for the Train Operator. Since fatigue evidence and risk factors were absent, the biomathematical fatigue modeling application (SAFTE-FAST Web SFC) was not applied.

Terminal Supervisor

The incident data was evaluated for fatigue risk factors for the Terminal Supervisor. Risk factors for fatigue were not present for the Terminal Supervisor. Since fatigue evidence and risk factors were absent, the biomathematical fatigue modeling application (SAFTE-FAST Web SFC) was not applied.

ROCC Radio RTC

The incident data was evaluated for fatigue risk factors for the RTC. Risk factors for fatigue were not present for the RTC. Since fatigue evidence and risk factors were absent, the biomathematical fatigue modeling application (SAFTE-FAST Web SFC) was not applied.

Post-Incident Toxicology Testing

WMATA's Drug and Alcohol Program determined that the Train Operator complied with and did not violate the Drug and Alcohol Policy and Testing Program 7.7.3/6.

WMATA's Drug and Alcohol Program determined that the Terminal Supervisor complied with and did not violate the Drug and Alcohol Policy and Testing Program 7.7.3/6.

Findings

- Train ID 903 was operated in Stop and Proceed Mode at Ballston Station by the Train Operator after communication with the Terminal Supervisor, but not with ROCC.
- The Train Operator overran red signal K04-08 at Ballston Station, track 2.
- Ballston interlocking does not have automatic signals. RTCs have the set the routes.
- The Train Operator was not given permission to pass a signal displaying a stop indication.
- The Terminal Supervisor gave the Train Operator instructions that were similar to instructions given to pass a signal displaying stop but advised they could move "on a lunar."

Immediate Mitigation to Prevent Recurrence

- RTRA removed Train Operator from service and transported the Train Operator for post-incident toxicology testing.
- RTRA removed the Terminal Supervisor from service and transported for post-incident toxicology testing.
- The train was removed from revenue service for post-incident inspection.
- ATCM conducted track and switch inspections, repairs, and verified the area was safe for service.

Probable Cause Statement

The probable cause of the Red Signal Overrun event on June 10, 2023, at Ballston Station, was a miscommunication and lack of awareness by the Rail Supervisor when they provided unclear instructions to the Train Operator to move the train without having control of the interlocking. A contributing factor was a lack of oversight of movement without speed commands and confusion by the Train Operator when they contacted the Terminal Supervisor instead of ROCC when the train stopped without speed commands.

Recommended Corrective Actions

| Corrective Action Code | Description | Responsible Party | Estimated Completion Date |
|-------------------------------|--|--------------------------|----------------------------------|
| 109114_SAFE CAPS_RTRA_01 | Re-distribute the Personnel Notice regarding Stop and Proceed train operations. | RTRA | Completed |
| 109114_SAFE CAPS_RTRA_02 | Conduct a Red Signal Overrun Campaign mandating Division Managers to discuss red signal overruns and review MSRPH Operating Rule 3.67 with Train Operators. | RTRA | Completed |
| 109114_SAFE CAPS_RTRA_03 | Develop signage to be placed at the 8-car marker of the station before the station location of the temporary terminal. Signage developed will instruct Train Operators to remain on the ROCC Operation Channels. | RTRA | 08/31/2023 |
| 109114_SAFE CAPS_RTRA_04 | RTRA to implement the following: <ul style="list-style-type: none">• Increase QC audits on Zero Speed Commands.• Increase QC audits on SOP 40 (Door Operations)• Lessons Learned on recent red signal overrun, requiring a signature upon receipt for all operational personnel.• Increase Spot Checks on new operators.• Enact the 60 Day cycle of the "30/60/90 New Operator Evaluations" to focus on situational awareness during unusual situations on the mainline.• Seek resources outside of ROQT to build and implement Point and Call defensive ops program. | RTRA | Completed |
| 109114_SAFE CAPS_SAFE_01 | Publish a Safety Bulletin dated July 24, 2023, for all staff, emphasizing the importance of paying attention and being in the right frame of mind to reduce the impact of a potential 'summer spike' of safety events. | SAFE | Completed |
| 109114_SAFE CAPS_SAFE_02 | Provide Oversight on the following components: <ul style="list-style-type: none">• Skill Survey of Train Operators• Train Operator Course Audit• Dropped Speed Command Data Audit• Oversight of Rail Operations and Radio Communications. | SAFE | 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.

Train Operator

The Train Operator is a WMATA employee with eight years of service and five months of experience as a Train Operator. The Train Operator holds a Roadway Worker Protection (RWP) Level 2 certification that expires in August 2023.

The Train Operator stated they were operating their train on track 2 from Virginia Square Station to Ballston Station when they encountered a red signal. The Train Operator contacted the Terminal Supervisor via radio and said they had a red signal. The Train Operator stated that the Terminal Supervisor replied, "you have a lunar signal, crossing over from one track 1 to track 2."

The Train Operator stated that they followed the Terminal Supervisor's instructions; however, the train did not go through the crossover switch and continued past the red signal on track 1. The Train Operator stated that since the Terminal Supervisor is their superior, they understood the instruction was to pass the red signal.

RTRA Supervisor

The Utility Supervisor is a WMATA employee with 18 years of service and two years as a Terminal Supervisor. The Supervisor holds a Roadway Worker Protection (RWP) Level 2 certification that expires in May 2024.

The Supervisor stated that they were working as the Terminal Supervisor on June 10, 2023, at Ballston Station when the Train Operator of Train ID 903 announced over the radio that their train has a red signal.

The Supervisor stated they replied to the Train Operator, "With your lunar at Kilo 04-08, you will be crossing over from track 2 to track 1, to the 8-car marker and open doors platform side only." The Supervisor stated that they have no control of the interlocking, so they cannot control the red signal.

ROCC Radio Rail Traffic Controller (RTC)

The Rail Traffic Controller is a WMATA employee with nine years of service and 17 months as an RTC. The RTC holds a Roadway Worker Protection (RWP) Level 4 certification that expires in February 2024.

The RTC stated that they were working the console, OPS-4, alone. This was an overtime assignment lasting 4 hours.

The RTC stated they had not set any signals for trains to operate on the Orange Line at Ballston. The console was set to automatic operations due to having to answer the telephone. The RTC stated that once Train ID 903 overran the red signal at Ballston, they noticed that alarms were active.

The RTC stated they tried to contact the Train Operator; however, there was no communication due to the Train Operator having switched to the Vienna yard channel.

Appendix B – Rail Service Adjustment Bulletin

| RAIL SERVICE ADJUSTMENT BULLETIN | | | |
|--------------------------------------|--|--|--|
| RSA Bulletin # | 154-O/S | Line(s) Affected: Orange & Silver Line | |
| Type of Operation | Total Shutdown – Vienna (K08) to Ballston (K04) | | |
| Begin Date / Time | Saturday, June 3rd, 2023, at 4:00AM | End Date/Time | Monday, June 26th, 2023, at 4:00AM |
| Work Area(s) | Shutdown - Vienna to East Falls Church | Personnel on ROW? | Yes (Adhere to SOP 07-06) |
| Modified Schedule Provided? | Yes | Refer to posted schedules, headways, and paddles. | |
| Specifics of Operation | <p>From New Carrollton: Trains will operate normal service to no closer than ten (10) feet of K04-08 signal. Train Operators will then verify a flashing lunar, correct rail alignment and speed commands at K04-08 signal, crossing over from track #2 to track #1 and properly berth at the 8-car marker where service will terminate.</p> <p>From Downtown Largo: Trains will operate normal service to no closer than ten (10) feet of K04-08 signal. Train operators will then verify a lunar at K04-08 signal to continue straight through to track #2 and properly berth at the 8-car marker where service will terminate.</p> <p>From Ballston: All Orange Line trains will depart Ballston track #1 after verifying a lunar at K04-02 signal. Trains will then operate normal service to New Carrollton. All Silver Line trains will depart Ballston track #2, after verifying a flashing lunar at K04-06 signal. Trains will then crossover from track #2 to track #1 and operate normal service to Downtown Largo.</p> <p>Notice: When arriving to Ballston terminal, operators must contact the terminal supervisor on Vienna ops.</p> | | |
| Supervisor & ROCC Instructions | <ol style="list-style-type: none"> Supervisor(s) will be on duty at their designated location 30 minutes prior to the beginning of the operation and contact ROCC via radio and remain on duty until the last train has cleared the area. Supervisor(s) will ensure that Train Operators and Station Managers are aware of operational specifics. ROCC will advise operators of the shutdown operation and receive an acknowledgement from each one that they have received and understand the radio transmission regarding the shutdown operation. ROCC will ensure that the triangles are in place prior to implementing shutdown operations. ROCC will ensure that electronic safeguards (prohibited exits) will be initiated to prevent Class 1 vehicles from entering the work area. Road Supervisor(s) will ensure that all safety warning triangles are in the proper location. | | |
| Station Manager Special Instructions | <p>Ballston station:</p> <ol style="list-style-type: none"> Ensure that all customers are directed to the appropriate track for all trains for both orange and silver lines. Make announcements advising customers of the destination of arriving trains when possible. Contact ROCC to confirm the completion of the shutdown operation. | | |
| Train Operator Special Instructions | <ol style="list-style-type: none"> Note that operators should be aware of their destination before departing the terminals: New Carrollton - 20, Downtown Largo - 73 and Ballston - 62 Ensure the Relief Operator is aware of RSA Bulletin 154-O/S. If the Relief Operator is not aware, the relief operator must not move the train until contacting ROCC or Supervisor. SOP 3.122 When trains are operated against the normal direction of traffic, the Train Operator shall alert customers on the platform by sounding the horn in a series of short blasts prior to station entry and until the train is berthed in the station. <p>Special Note: To ensure a smooth shutdown operation, all employees are reminded to monitor radio communications and make 8-car stops at all times.</p> | | |
| Safety Equipment | <input checked="" type="checkbox"/> Safety Warning Triangle(s) | <input type="checkbox"/> Lanterns; Strobe lights | <input type="checkbox"/> Shunt Straps |
| | | <input type="checkbox"/> Barricades | <input checked="" type="checkbox"/> ROCC to Place Prohibit Exits |
| Bus Shuttle? | Yes | Shuttle bus service will be provided between Ballston and McLean and between Ballston and Vienna. Also be governed by train operator announcements for more details regarding shuttle bus service. | |
| Other Work Areas | | | |
| Line | Date & Time | Work Location | |
| Red | None | None | |
| Blue | None | None | |
| Silver | June 3, 2023 @ 4am to June 26, 2023 @ 4am | Ballston to McLean | |
| Green | | | |
| Yellow | | | |

Document 1 – RTRA Rail Service Adjustment Bulletin, Page 1 of 1

Appendix C – Maximo Work Order

Incident Date: 06/10/2023 Time: 23:36 hours
Final Report – Red Signal Overrun
E23394

Drafted By: SAFE 708 – 08/04/2023
Reviewed By: SAFE 707 – 08/04/2023
Approved By: SAFE 70 – 08/09/2023

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17936779
Type: CM

Washington Metropolitan Area Transit Authority
Maintenance and Material Management System
Work Order Details



Page 1 of 2
MX76PROD

Status: CLOSE
06/13/2023 10:00

Work Description: K04 K2 - ATC [REDACTED] REPORTS SWITCH 3B HAS A DAMAGED SWITCH POINT
Job Plan Description:

DUE TO SWITCH 3B BEING TRAILED BY TRAIN #903.

| Work Information | | | |
|--------------------------|----------------------------------|--|--------------------------------|
| Asset: TK2 | K-LINE, TRACK 2 EQUIPMENT PARENT | Owning Office: TRST | Parent: |
| Asset Tag: | | Maintenance Office: TRST-TRAK | Create Date: 06/11/2023 02:08 |
| Location: K | ORIM, K Line, Vienna | Labor Group: TRST-TRAK-ALEX | Actual Start: 06/13/2023 10:00 |
| Work Location: | | Crew: | Actual Comp: 06/13/2023 10:00 |
| Failure Class: TRSTSW | TRST, TURNOUT/SWITCHES | GL Account: WMATA-02-33660-50499360-042-*****QPR** | |
| Problem Code: D01 | BATTERED | Supervisor: | Target Start: |
| Requested By: [REDACTED] | | Requestor Phone: [REDACTED] | Target Comp: |
| Chain Mark Start: 276 | | Chain Mark End: 276 | Scheduled Start: |

| Related Records | | | |
|-------------------|--------|------------|-------------|
| Failure Reporting | | | |
| Cause | Remedy | Supervisor | Remark Date |
| Remarks: | | | |

| Log | | | | | |
|---------|-----------|------------|--|--|---|
| Date | Class | Created By | Subject | Description | Long Description |
| 6/13/23 | WORKORDER | [REDACTED] | | | Defect will be entered in optmax / maxtrax during mainline switch inspection |
| 6/11/23 | | MAXADMIN | Maximo WO# 17936779 has been opened by MOC | <p>Thank you for contacting MOC. Work Order #17936779 has been opened to resolve the following reported issue.</p><div>Work Order Description: K04 - ATC [REDACTED] REPORTS SWITCH 3B HAS A DAMAGED SWITCH POINT Asset Number: TK04 Facility Location: K04 Should you require further assistance or have a question about this work order please contact MOC. Thank you.</div><div>MOC</div> </div> RICH TEXT --> | |

Document 2 – Maximo Work Order #17936779, Page 1 of 2



17936779
Type: CM

Washington Metropolitan Area Transit Authority
Maintenance and Material Management System
Work Order Details



Page 2 of 2
MX76PROD

Status: CLOSE
06/13/2023 10:00

Work Description: K04 K2 - ATC [REDACTED] REPORTS SWITCH 3B HAS A DAMAGED SWITCH POINT
Job Plan Description:

| Log | | | | | |
|---------|-------|------------|---------------------------------------|---|------------------|
| Date | Class | Created By | Subject | Description | Long Description |
| 6/13/23 | | MAXADMIN | Maximo WO# 17936779 has been resolved | <div> Thank you for contacting MOC. Work Order #17936779 reported to MOC has been resolved.</div><div> Work Order Description: K04 K2 - ATC [REDACTED] REPORTS SWITCH 3B HAS A DAMAGED SWITCH POINT Asset Number: TK2 Facility Location: K04 Reported Date: 6/11/23 2:08 Should you require further assistance or have a question about this work order please contact MOC. Thank you.</div><div>MOC</div> </div> RICH TEXT --> | |

| Child Work Order | | | | | | | | | | |
|------------------|-------------|-------|---------------|---------------|--------------|--------------|--------------|------------|------------|--------|
| Work Order | Description | Asset | Failure Class | Position Code | Problem Code | Start Marker | Start Offset | End Marker | End Offset | Status |

Document 3 - Maximo Work Order #17936779, Page 2 of 2

Incident Date: 06/10/2023 Time: 23:36 hours
Final Report – Red Signal Overrun
E23394

Drafted By: SAFE 708 – 08/04/2023
Reviewed By: SAFE 707 – 08/04/2023
Approved By: SAFE 70 – 08/09/2023

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Appendix D – RTRA Red Signal Overrun Bulletin



Increased Red Signal Overrun Occurrences

Since June, there have been four (4) red signal overruns...

- Saturday, June 10, 2023: Ballston, Track #2
- Tuesday, July 11, 2023: Mt. Vernon Square, Track #1
- Friday, July 21, 2023: West Falls Church, Track #2
- Sunday, July 23, 2023: National Airport, Track #1

Please adhere to established operating procedures at all times to prevent red signal overruns.

A Rail Operations Supervisor and/or RTRA Division Manager will be meeting with operators to discuss the following rule:

***Operating Rule 3.67** – 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, unless authorized by ROCC or the Interlocking Operator and the move is consistent with customer safety as specified in Rule 3.1. ROCC or Interlocking Operator shall give permission to pass a red signal or dark aspect after the switches have been blocked or clamped for the required move in accordance with SOP #35. Once this has been verified the train or track unit will be given permission to pass the red signal or dark aspect at a speed no greater than 5mph.*

If you have questions or concerns, immediately notify a Rail Operations Supervisor and/or RTRA Division Manager. **Please be safe.**

Document 4 – RTRA Red Signal Overrun Bulletin, Page 1 of 1

SAFETY BULLETIN

WMATA-WIDE

SB 23-07-C
Version # 1
Issue Date: 7/24/23**Be Present: Avoiding the “Summer Spike”****OVERVIEW**

The Bureau of Labor Statistics reports a seasonal increase in safety events during June, July, August, and September, commonly called the “Summer Spike.” This rise in incidents can be attributed to various things, including an increase in severe weather conditions (heatwaves, intense thunderstorms, hurricanes, smoke/poor air quality), personal reasons (vacations, childcare), as well as high-profile and high-stress work projects (Green Line shutdown, bus bridges, training, etc.). Recent WMATA incident data shows that the Summer Spike is starting to show, with increased injuries, station and red signal overruns, and roadway worker protection violations. While [summer safety messages](#) typically focus on the physical stresses of summertime work, it’s essential to think more broadly about safety at this time of year.

This means giving equal attention to the body and the mind in everything we do. Many things are happening around us in our physical environment, and distractions can occupy our minds at any time. The constant challenges and noise make it challenging to stay fully present in the moment.

Recognizing and adjusting when our minds are not fully focused or present while completing a work task becomes crucial. What does it mean to be truly present? We are often physically present somewhere, but our focus and attention are not. This disconnect from the present moment can be extremely dangerous at work.

HOW TO BE PRESENT

Being fully present in any given moment can be challenging for various reasons. As individuals, we vary, but a few tips that can help you become more in the moment and attentive when you find your mind wandering.

- Take note of how well you are focusing and where your mind is. From there, make the conscious choice to improve your focus and attention if needed.
- When participating in a discussion or receiving directions, ensure you actively listen to the person speaking. One way to improve listening skills is to treat the information as something you must teach to a coworker. Receiving information with the understanding that you will be responsible for passing it on can help ensure you actively listen to the person speaking.
- Eliminate distractions from the physical work area. Things such as noise, clutter, chemicals, people, equipment, etc., can significantly impact your ability to fully pay attention to what you are doing at any given moment at work. Eliminating distractions can make a difference in focusing on the task.
- Identify any personal concerns causing your mind to wander and not be fully present at work. If it’s not possible to eliminate them, utilize the Employee Assistance Program (EAP). Metro’s EAP is available to all employees and their immediate family members and provides free and confidential supportive services that promote mental, emotional, and physical well-being (202-636-7181 or EAP@wmata.com).

In addition to this message, please revisit the recent [Safety Bulletin on Safety Staying Focused](#) (May 2023) for information on distraction types and tips.

*For questions regarding this Safety Bulletin
or other safety-related issues, contact the
Safety Hotline at 202-249-SAFE (7233).*



Appendix F – Root Cause Analysis

