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Improper Door Operation

Glenmont, Silver Spring, Braddock Road and Innovation stations

May 9, 2024, September 1, 2024, September 3, 2024, September 23, 2024 and September 24, 2024

Document Purpose:

This WMSC written report on WMATA Metrorail's safety event investigations and review of Metrorail's findings in accordance with the WMSC Program Standard, in conjunction with the attached Metrorail investigation reports that have undergone WMSC staff review and, if necessary, feedback and revision, describes the investigation activities, identifies factors causing or contributing to the safety events, 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 reports) as a unified item for adoption at the Washington Metrorail Safety Commission meeting on June 10, 2025.

WMSC staff recommend adoption of these investigations.

Improper Door Operation

In 2024, there were 25 improper door operations safety events reported by Metrorail to the WMSC. As of June 1, 2025, there have been 13 such events reported, an increase from the 9 events reported during the same time period last year. Starting in December 2023, following the substantial completion of Metrorail safety certification activities Metrorail received WMSC concurrence to activate the Automatic Door Operation (ADO) feature on the Metrorail system incrementally, starting with the Red Line in December 2023. By June 2024, the WMSC provided concurrence for activation of ADO on all Metrorail lines. Direct causes of improper door operations can include human factors (such as pressing a button to open doors on the wrong side or opening doors when the train is not on the platform) or mechanical defects. Investigations into other 2024 improper door events will be addressed in other reports.

The causes of and contributing factors to the events described in more detail below include:

- Lack of a standardized territory familiarization and physical characteristics training that includes assessing this knowledge prior to being assigned to conduct train operations
- Loss of/lack of focus and situational awareness
- Non-compliance with written operational rules and procedures including those related to door operation procedures, station overrun reporting and station stop misalignment
- Obstructed line of sight of 8-car marker at Silver Spring Station due to temporary construction scaffolding

As a result of these investigations, Metrorail implemented corrective actions including:

- Metrorail re-issued RTRA-603-117-00 "September 1st Reopening of Silver Spring, Forest Glen, Wheaton, & Glenmont Following Summer Shutdown"

- Personnel attended refresher training applicable rules and procedures, including door operations and proper hand signals
- Metrorail posted communication signage at the beginning of the scaffolding at Silver Spring Station, alerting train operators to continue to the 8-car marker
- Metrorail assigned a rail supervisor to Silver Spring Station to monitor trains entering the station while construction scaffolding is present

Metrorail is in the process of implementing related corrective action plan CAP C-0183 address the finding that Metrorail created safety risks by not requiring and conducting territory familiarization and physical characteristics training and not assessing knowledge of physical characteristics prior to assigning operations personnel work on a line, in a terminal or yard (Scheduled completion date December 2026).

Safety event summaries:

W-0378 – Glenmont Station – May 9, 2024 (WMATA ID: E24364)

A Train Operator, operating a Red Line train from Glenmont Rail Yard to the mainline in preparation to go into passenger service, manually opened the train's doors on the non-platform side of the train after properly berthing at the 8-car marker at Glenmont Station. The doors were open for approximately three minutes when a Rail Supervisor, who was present on the platform, informed the Train Operator of the improper door operation and instructed the Train Operator to close the doors. The Rail Supervisor reported the event to the Glenmont Rail Yard Terminal Operator, who then reported it to the Radio Rail Traffic Controller in the Control Center. The Rail Supervisor conducted a ground walkaround inspection to ensure there was no one on the roadway and no damage to the train. The Operator was removed from service for post-event toxicology testing, and the Rail Supervisor transported the train back to Glenmont Yard for inspection.

A review of Vehicle Monitoring System data following the event determined there were no mechanical deficiencies that contributed to the safety event and that the Train Operator manually activated the right-side doors open pushbutton. During an investigative interview, the Train Operator indicated they believed they had pressed the Train Berth pushbutton and did not realize their error until notified by the Rail Supervisor. Metrorail policy requires that when a train is operating in manual mode, the train operator shall depress the Train Berth pushbutton and properly berth the train on the platform. This enables the train to automatically open train doors to service the station.

W-0379 – Silver Spring Station – September 1, 2024 (WMATA ID: E24690)

On Sunday, September 1, 2024, a Train Operator manually opened train doors on a passenger-occupied, while not being properly berthed at Silver Spring Station's 8-car marker on two separate occasions. This was the Train Operator's first time operating at Silver Sprins Station. At the time of this event, there was construction scaffolding on the station's platform, which obstructed the line of sight to the 8-car marker. On August 30, 2024, a Rail Operations Personnel Notice (ROPN) was distributed to Rail Transportation personnel regarding the reopening of several Red Line stations following

a summer shutdown for scheduled maintenance that notified personnel of scaffolding on the platform at Silver Spring on the platform and discussed the procedure for properly berthing at the station's 8-car maker.

At 8:30 p.m., after entering Siver Spring Station, the Train Operator stopped their train 191 feet short of the 8-car marker, leaving 2.5 railcars off the platform. Train Operators are required to properly berth all trains, regardless of consist size, at the 8-car marker before servicing a station. An investigative review of onboard operator cab footage showed the operator pressing the Train Berth pushbutton to initiate Automatic Door Operations (ADO). However, ADO failed to initiate due to the train not being properly berthed at the 8-car marker. The Train Operator then manually opened train doors without the required MICC authorization using the Door Open pushbutton.

A Rail Supervisor, who was in the blockhouse at the end of the station's platform, identified that the train had stopped short of the 8-car marker. The Rail Supervisor went out to the platform and motioned for the train to stop, using incorrect hand signals. The supervisor instructed the operator to move the train forward to the 8-car marker, without conducting a ground walkaround as required by Metrorail policy. Customers were offloaded from the train by the Supervisor and the Silver Spring Station Manager. The Rail Supervisor notified the Assistant Operations Manager in the Control Center and requested Foul Time protection for a ground walkaround inspection to ensure no one had fallen onto the roadway. After the inspection determined the roadway was clear, the Rail Supervisor took over train operations to Shady Grove Rail Yard and the Train Operator was removed from service for post-event toxicology testing. The train was removed from service for an inspection, which found no defects that would have contributed to this safety event.

During an investigative interview with the Train Operator on, September 3, 2024, two days after the reported event occurred, the Train Operator indicated they had also performed another improper door operation at Silver Spring Station on the same day as the reported event. CCTV footage and Vehicle Monitoring and Diagnostic System data confirmed that at 5:53 p.m., the Train Operator stopped 188 feet short of the 8-car maker. CCTV also showed that the Train Operator did not visually verify that all doors were on the platform before opening railcar doors.

W-0380 – Braddock Road Station – September 3, 2024 (WMATA ID: E24693)

At 4:20 p.m., the Train Operator of Train 332, which was operating in Automatic Door Operation (ADO) mode, stopped 13 feet short of Braddock Road Station's 8-car maker and manually opened train doors on the non-platform side of the train. Metrorail policy requires train operators to contact a rail traffic controller before performing manual door operations when a train is in ADO mode. The Train Operator did not report the event to a Rail Traffic Controller in the Control Center as required by Metrorail policy. This safety event was only identified when a rider posted a photo of train doors open on the non-platform side of the train at Braddock Road Station via the social media platform "X" (formerly Twitter).

At 4:30 p.m., the Train Operator of Train 332 reported a door problem while at Huntington Station to a Rail Traffic Controller in the Control Center, stating "The doors were popping open." When contacted by the Rail Traffic Controller, the Terminal Supervisor at Huntington indicated that the Train Operator had not reported a door issue. Approximately 43 minutes later, at 5:15 p.m., Maintenance Operations Control personnel in the Control Center notified the Control Center Assistant Operations Manager of the report of an improper door operation at Braddock Road received via "X". An investigative review of data and CCTV footage confirmed the safety event. According to the data reviewed, at 4:20:44, the Train Operator of Train 332 manually opened doors on the non-platform side of the train, then 7 seconds

later, opened doors on the correct side. During this time, doors on the non-platform side of the train remained open. The doors on the platform side of the train were closed 14 seconds later. Doors on the non-platform side of the train were closed at 4:21:36 p.m., approximately 51 seconds after being opened by the Train Operator. The Train Operator continued operating the train in passenger service without reporting the event or performing a ground walk around inspection to ensure no one had fallen onto the roadway.

Due to the delayed safety event identification, the Train Operator was off duty when the event was confirmed. The Train Operator was removed from service when they reported for duty for post-event toxicology testing in accordance with Metrorail policy. During an investigative interview, the Train Operator indicated they only had 5 hours and 15 minutes of sleep and that they were experiencing fatigue at the time of the event, stating they "fighting sleep." Data review determined that there were no faults with the train and that the doors operated as commanded by the Train Operator.

W-0381 – Innovation Station – September 23, 2024 (WMATA ID: E24749)

A Train Operator, who was operating a train alone for the first time after completing train operator certification and on-the-job training, opened train doors on the non-platform side of the train at Innovation Station. When the 8-car Silver Line Train arrived at the station, the Train Operator stopped the train two feet short of the 8-car marker. The Train Operator did not identify their error. When train doors did not open as is expected (Automatic Door Operations), the Train Operator incorrectly stated to the Radio Rail Traffic Controller in the Control Center that the train was properly berthed and requested to open the doors manually, using the Door Open pushbutton. The Radio Rail Traffic Controller granted the Train Operator permission to open the doors manually. At 11:15:11 a.m., the Train Operator improperly activated the right-side Door Open pushbutton, instead of the left-side Door Open pushbutton. The train doors were open for approximately 10 seconds before the Train Operator, realizing their error, closed the doors and then opened doors on the correct side of the train at 11:15:33 a.m. At 11:20:23 a.m., approximately five minutes after the improper door operation occurred and while still on the platform at Innovation Station, the Train Operator reported the safety event to the Radio Rail Traffic Controller. The Train Operator was instructed to offload customers from the train and to perform a ground walk around to ensure no one had fallen onto the roadway. A Rail Supervisor was dispatched to take over train operation and to remove the Train Operator from service for post-event toxicology testing. The train was transported to Dulles Rail Yard for an inspection, which found no defects that would have contributed to the improper door operation.

W-0382 – Silver Spring Station – September 24, 2024 (WMATA ID: E24755)

A Rail Supervisor, who was operating Red Line Train 126, which consisted of an 8-car consist, stopped 188 feet short of the 8-car marker at Silver Spring Station and opened train doors while two railcars were outside the platform limits. During this time, construction scaffolding on the station's platform obstructed the line of sight to the 8-car marker. Without notifying a Rail Traffic Controller or conducting a ground walkaround as required, Rail Supervisor #1 closed the doors and moved the train without a permissive block. Rail Supervisor #1 stopped the train approximately seven feet beyond the 8-car marker, resulting in a station overrun. The Silver Spring Rail Terminal Supervisor, Rail Supervisor #2, signaled for Rail Supervisor #1 to stop as the train started to pass the 8-car maker and immediately reported the

event to the Button Rail Traffic Controller in the Control Center. The Rail Traffic Controller was initially unable to contact Rail Supervisor #1. A good radio check to another train at Silver Spring Station determined the communication issue was isolated to Train 126. Customers were offloaded from Train 126 onto the station platform, and the Rail Supervisor #2 was instructed to conduct a ground walkaround to ensure no one had fallen onto the roadway. Rail Supervisor #2 was instructed to take over train operations, and Rail Supervisor #1 was removed from service for post-event toxicology testing. The train was removed from service for inspection, which determined that there were no faults that contributed to the safety violations.

WMSC staff observations

Several of these improper door operation events show data that confirms that the train operators involved did not comply with Metrorail policy and procedures for safe operations. The WMSC's noted in its 2022 audit of Metrorail Rail Operations report that "Elements of Metrorail have a culture that accepts noncompliance with written operational rules, instructions, and manuals." As a result the WMSC required that Metrorail " provide consistent supervisory oversight and effective training and safety promotion to ensure that personnel follow all rules and procedures, document compliance with rules and procedures, and ensure that the "just culture" and other principles embodied in the safety management system Metrorail has committed to in its Public Transportation Agency Safety Plan (PTASP) are implemented." Metrorail implemented several corrective steps including preparing a training video for operations personnel, reinforcing reporting of hazards, compliance with rules and mechanisms for reporting, tracking and implementing mitigations to correct such safety issues, when necessary and providing records to the WMSC showing that all train operators received have training information.

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

FINAL REPORT OF INVESTIGATION A&I E24364

Date of Event:	May 9, 2024
Type of Event:	O-15(a): Improper Door Operation
Incident Time:	16:03 hours
Location:	Glenmont Station, track 2
Time and How received by SAFE:	16:28 hours SIO
WMSC Notification Time:	17:26 hours
Responding Safety Officers:	N/A
Rail Vehicle:	Train ID 108 [**L**3130/31x3161/60x3162/63**T**]
Injuries:	N/A
Damage:	N/A
Emergency Responders:	N/A
SMS I/A Number	20240319#11557MX

Improper Door Operation – Glenmont Station

May 9, 2024

Table of Contents

Abbreviations and Acronyms

ADO	Automatic Door Operations
ARS	Audio Recording System
CCTV	Closed-Circuit Television
CM	Chain Marker
CMOR-IIT	Office of Chief Mechanical Officer Incident Investigation Team
MICC	Metro Integrated Command and Communications Center
MOR	Metrorail Operating Rulebook
NOAA	National Oceanic and Atmospheric Administration
OAP	Operations Administrative Policy
RTC	Rail Traffic Controller
RTRA	Office of Rail Transportation
SAFE	Department of Safety
SOP	Standard Operating Procedure
SPOTS	System Performance On-Time Summary
VMS	Vehicle Monitoring 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 Thursday, May 9, 2024, at 16:02 hours, a Brentwood Division Train Operator operating Train ID 108 [**L**3130x3031, 3161x3160, 3162x3163**T**] left Glenmont Yard and entered the platform limits of Glenmont Station, inbound on track 2. The train came to a complete stop at the 8-car marker and was not in service. At 16:03 hours, the Train Operator pushed the right-side open doors pushbutton. The Train Operator was unaware they opened the doors on the non-platform side. The Train Operator was supposed to be operating in automatic door operations (ADO) at the time of the incident.

An Office of Rail Transportation (RTRA) Supervisor was located at the station, noticed the incident, and instructed the Train Operator to close the doors. The RTRA Supervisor reported the incident to Glenmont Yard Tower, instructed the Train Operator to close the doors, and reported the incident to the Metro Integrated Command and Communications Center (MICC) Radio Rail Traffic Controller (RTC).

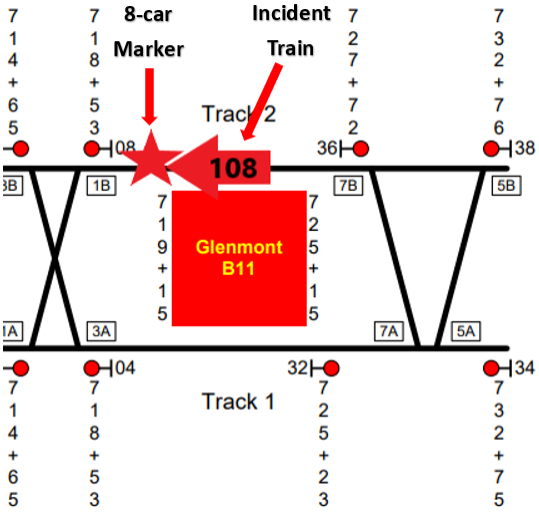
Train ID 108 did not service the station and returned to Glenmont Yard. The Train Operator remained out of service and was transported for post-incident testing.

The probable cause for the Improper Door Operation at Glenmont Station on May 9, 2024, was the Train Operator's lack of situational awareness by unintentionally pressing the open doors pushbutton on the non-platform side.

Incident Site

The Glenmont Station is an indoor station with a center platform. The platform limit at Glenmont Station is Chain Marker (CM) B1/2 719+15 – 725+15.

Field Sketch/Schematics



The above depiction is not to scale.

Purpose and Scope

The purpose of this accident investigation and candid self-evaluation is 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

Upon receiving notification of the Improper Door Operation at the Glenmont Station on May 9, 2024, SAFE team members worked with relevant Washington Metropolitan Area Transit Authority (WMATA) subject matter experts to review the incident's facts and data and conduct the subsequent investigation.

The investigative methodologies included the following:

- Site assessment through document review

- Formal Interviews – SAFE interviewed one individual 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 individual:
    - Train Operator – Train ID 108

- 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 – A collection of relevant work history information and process documentation contained in Metro systems of record. These records include:
    - Metrorail Operating Rulebook (MOR)
    - Standard Operating Procedure (SOP) 40: Procedure for Platform Berthing, Station Servicing, and Overruns
    - National Oceanic and Atmospheric Administration (NOAA)
    - CMOR Incident Report
    - SAFTE-FAST Console biomathematical fatigue modelling
    - RTRA Supervisor’s Report
    - RTRA Manager’s Report
    - Train Operator 30 Day Work History
    - Train Operator Training Record
    - Train Operator Certification Record

- System Data Recording Review – A collection of information contained in Metro Data Recording Systems. This data includes:
    - Audio Recording System (ARS) playback
    - Closed-circuit television (CCTV)
    - Maintenance and Material Management System (Maximo)
    - Vehicle Monitoring System (VMS)

Investigation

On Thursday, May 9, 2024, at 15:54 hours, a Brentwood Division Train Operator operating Train ID 108 [**L**3130x3031, 3161x3160, 3162x3163**T**] contacted Glenmont Yard Tower and advised they were ready for mainline. At 16:02 hours, Train ID 108 entered the platform limits at Glenmont Station, inbound on track 2. The train was not in service and came to a complete stop at the 8-car Marker.

At 16:03 hours, the Train Operator pushed the right-side open doors pushbutton, activating the doors to open opposite side of the platform. The platform side doors were not opened.

The CMOR-IIT determined that based on the VMS data, there was no mechanical failure observed that could have contributed to this incident. The VMS data identified that the right-side doors open pushbutton was activated, opening passenger doors on the non-platform side. At 16:06 hours, the Train Operator closed the doors. As a result, the doors on the non-platform side were open for approximately three minutes. The VMS data indicated the train berth button was not pressed.

The Train Operator was interviewed regarding the incident. The Train Operator stated they were unaware that the train's non-platform side doors had been opened until the RTRA Supervisor notified them of the incident and instructed them to close the doors.

The RTRA Supervisor's written report stated that after briefly talking with and then walking away from the Train Operator, they noticed all the train door signal lights were illuminated but the doors on the platform side were closed. However, the non-platform side doors were opened. The RTRA Supervisor stated that they instructed the Train Operator to close the doors and reported the incident to Glenmont Yard Tower, which reported to the MICC Radio RTC.

The CCTV video shows Train ID 108 (Lead Car 3130) entering and stopping at the 8-car marker, the door signals were illuminated, the non-platform side doors opened and closed, and the interaction between the Train Operator and RTRA Supervisors.

Train ID 108 did not service the station, returning to Glenmont Yard. The Train Operator remained out of service and was transported for post-incident testing.

Chronological Event Timeline

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

Time	Description
15:48:16 hours	Car 3130 keyed up in Glenmont Yard and began to move toward Glenmont Station. [VMS]
15:54:59 hours	Train Operator: Contacted Glenmont Yard Tower and advised Train ID 108 (L3130) was ready for mainline. Glenmont Tower: Acknowledged ready for mainline. [GM-YD2]
15:57:25 hours	Train Operator: The radio is "terrible." Glenmont Yard Tower: Instructed the Train Operator to go when lunar was given. [Glenmont Yard Control Tower Telephone]
16:02:58 hours	Train ID 108 (Lead Car 3130) arrived and came to a complete stop at Glenmont Station, Track 2. [VMS]
16:03:03 hours	The right door open pushbutton was activated, opening the non-platform side doors. [VMS]
16:06:35 hours	The right door closed pushbutton was activated. [VMS]

Time	Description
16:07:18 hours	Non-platform side doors were opened. [CCTV C-B11-P-045]
16:08:09 hours	RTRA Supervisor: Approached and spoke with the Train Operator. [CCTV C-B11-P-044]
16:09:19 hours	Train Operator: Contacted Glenmont Terminal. Terminal Supervisor: You have “2 minutes”. [GM-YD1]
16:10:03 hours	RTRA Supervisor: Noticed non-platform side doors were open. [CCTV C-B11-P-044]
16:10:27 hours	Terminal Supervisor: “Do not put that train in service. Do not put that train service. Close the Door.” Train Operator: No response. [GM-YD1]
16:10:34 hours	The RTRA Supervisor spoke with the Train Operator. [CCTV C-B11-P-044]
16:10:45 hours	Terminal Supervisor: “How do you copy Operator? Do not put that train in service.” Train Operator: No response. [GM-YD1]
16:10:56 hours	Non-platform side doors got closed. [CCTV C-B11-P-044]
16:10:59 hours	Car 3130 keyed down. [VMS]
16:11:26 hours	Train Operator: Responded (“Yeah”) to Glenmont Terminal. Advised Glenmont Terminal that train doors opened on the non-platform side. Terminal Supervisor: Instructed the Train Operator, “Stay right there.” [GM-YD1]
16:12:54 hours	Terminal Supervisor: Advised MICC that the Train opened non-platform side doors at Glenmont Station, coming out from Glenmont Yard. MICC RTC: Advised to perform a walk around the train. [VAHQ ROCC Rail 2]
16:15:21 hours	Train Operator left the train, being placed out of service. [CCTV C-B11-P-044]
16:15:57 hours	Train ID 108 keyed up on the opposite end in car 3163, facing Glenmont Yard. [VMS]
16:20:45 hours	Terminal Supervisor: Advised the Button RTC that a good ground walkaround was complete. [VAHQ ROCC Ops. 1]

***Note: Times above may vary from other systems’ timelines based on clock settings and reporting sources.*

Office of Chief Mechanical Officer (CMOR) – Incident Investigation Team (IIT)

The CMOR-IIT determined that based on the VMS data, there was no mechanical failure observed that could have contributed to this incident. The VMS data recorded the right open doors pushbutton was activated that open and close doors opposite side of the platform. The berth button was not pressed.

Time	Description of Events
15:48:16.684	Car 3130 keyed up in Glenmont Yard and begins to move towards Glenmont station platform.
16:02:58.488	Train comes to a complete stop at Glenmont Station, Track #2.
16:03:03.725	Right Door Open pushbutton activated, energizing Right door open trainlines and opening right side passenger doors opposite of the platform side.
16:03:13.848	Car 3130 keyed down.
16:03:30.772	Car 3130 keyed back up.
16:06:35.028	Right Door Closed pushbutton activated.
16:06:42.932	DCKR goes HIGH, indicating All doors fully closed and locked.
16:10:59.880	Car 3130 keyed down.
16:15:21.564	Train keyed up on opposite end in car 3163, facing Glenmont Yard.
16:15:57.208	Train begins to move from the platform to the yard.

Figure 2 – Train 304 VMS Sequence of Events.

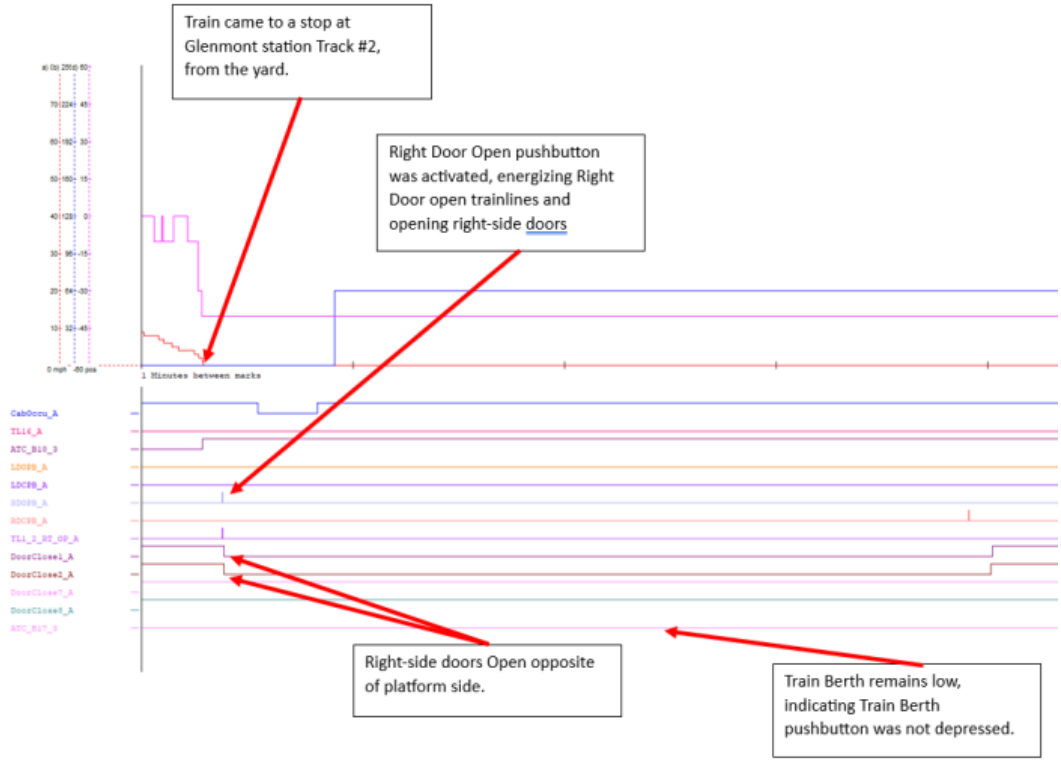


Figure 3 – Lead Car 3130 VMS Event Recorder data.

CCTV Pictures

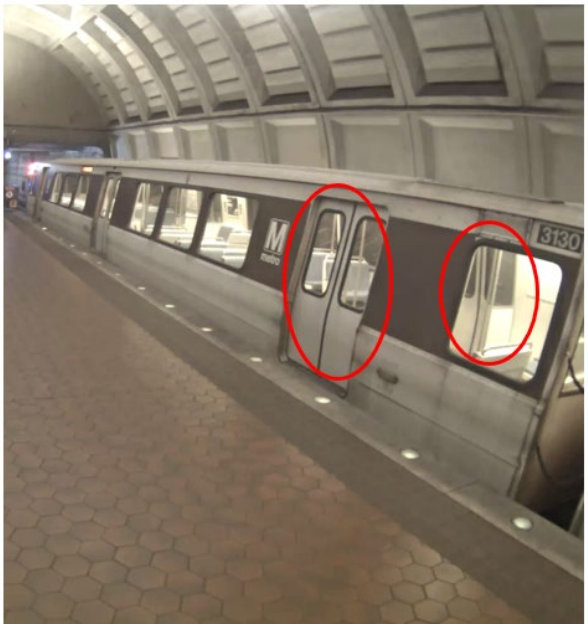


Image 1 – At 16:07:15 hours, Train ID 108 (Lead Car 3130) arrived and stopped at Glenmont Station. The doors were not opened.

Image 2 – At 16:07:18 hours, Train ID 108
door lights were illuminated. The non-platform side doors were opened.

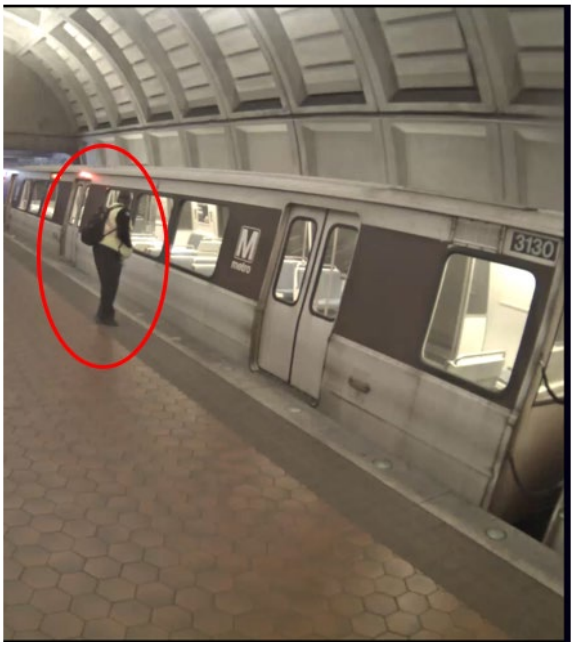


Image 3 – At 16:10:03 hours, the RTRA Supervisor
noticed the door lights were illuminated, noticing the non-platform side doors had been opened.

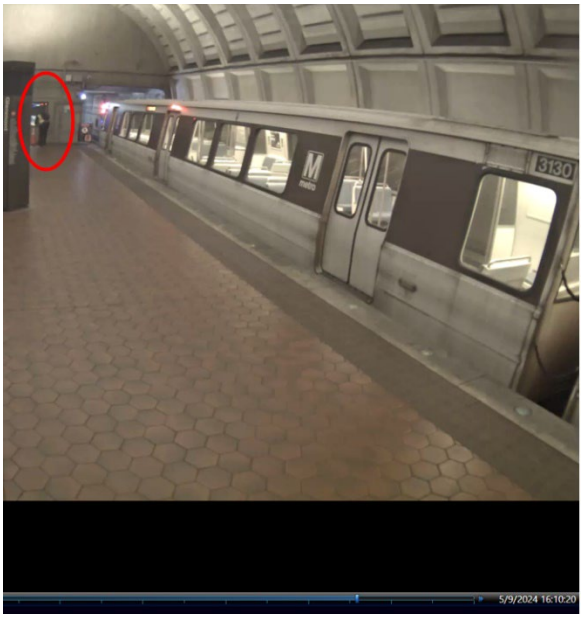


Image 4 – CCTV: At 16:10:03 hours, the RTRA Supervisor advised the Terminal Supervisor of the incident.

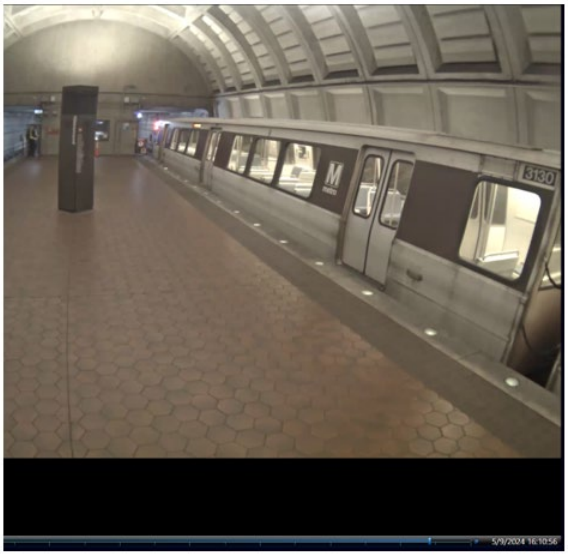


Image 5 – At 16:10:56 hours, the non-platform doors were closed.

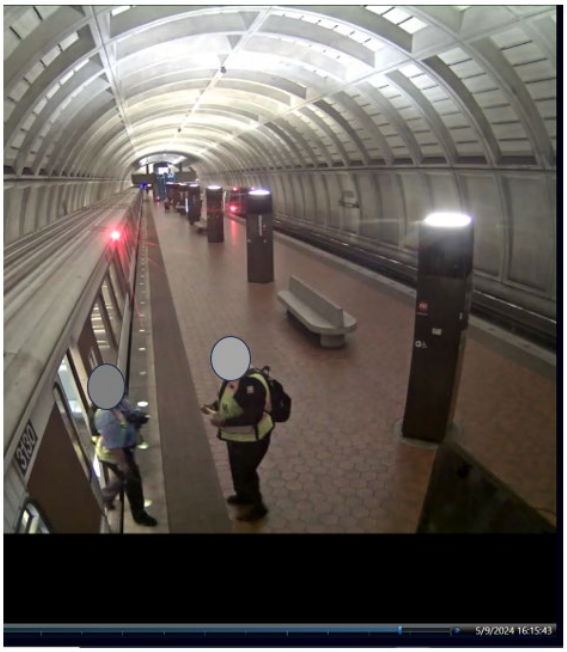


Image 6 – At 16:15:43 hours, the Train Operator was removed from service.

System Performance On-Time Summary (SPOTS)

The SPOTS report recorded that the right, non-platform side, doors were opened during the incident at Glenmont Station.

Select Platform: b11-2 **and/or Select ID:** Leave blank to remove criteria

Select Date: May 9 2024 **Select Times (0-24HRS): From** 16:00 **To** 17:00

Generate Report

ID	Platform	length	dcode	Right door open	Right door close	dwell	Left door open	Left door close	dwell	Head Arrived	Tail cleared	Headway (door open to door open) door open to door open
	B11-2	0	0	16:07:50	16:10:58	188				16:06:28	16:21:23	-
113	B11-2	0	13				16:29:16	16:29:31	15	16:23:34	16:30:27	21:26
120	B11-2	6	12	16:34:09	16:34:15	6	16:38:57	16:40:08	71	16:33:17	16:40:41	4:53
124	B11-2	6	12				16:46:05	16:49:39	214	16:43:35	16:50:08	11:56
128	B11-2	8	12	16:54:14	16:57:27	193	16:57:28	16:59:55	147	16:53:35	17:00:26	8:09

Figure 1: This shows that the non-platform side doors were opened for three minutes.

Interview and Written Statement Findings

As part of the investigation launched into the event, SAFE interviewed one person. The interview 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 stated they unintentionally pushed the right-side open doors pushbutton, instead of the train berth button.
- The Train Operator was unaware that they opened the non-platform side doors. The platform side doors were not opened.
- The Train Operator stated that they knew the berthing and door operating procedures.
- The Train Operator explained that they have to break their sleep pattern every morning to take their child to school, i.e., “in bed by 2:30 am and up at 6:30 am” to take their child to school by 8:00 am.
- The Train Operator stated they sleep until 12:00 pm after taking their child to school.

RTRA Supervisor Written Report

- The RTRA Supervisor reported that they noticed the Train Operator properly berthed their train at the 8-car Marker.
- The RTRA Supervisor reported that they noticed all the door signal lights were illuminated but the doors were closed on the platform side.
- The RTRA Supervisor reported that they noticed the off-platform side doors were open.
- The RTRA Supervisor reported that they instructed the Train Operator to close the doors and reported the incident to the Radio RTC.
- The RTRA Supervisor conducted a ground walk-around.

Weather

On May 9, 2024, NOAA recorded the average temperature as 78°F and 65% relative humidity. No significant weather was observed. The weather did not contribute to this incident (Weather source: NOAA) – Location: [Washington, DC].

Related Rules and Procedures

The MOR, in part, states the following:

Guiding Safety Principles

1.1.3 Employees shall not permit unnecessary conversation, reading, lounging or any other action or condition of mind to divert their attention from the safe and performance of duty.

SOP 40: Procedure for Platform Berthing, Station Servicing and Overruns

6.2 Door Opening Procedures

6.2 Door Opening Procedures

6.2.1 When train is operating in Mode 1 and the Door Mode Selector is in the Auto/Manual position:

6.2.1.1 The doors should automatically open when the train arrives and is properly berthed at the station.

6.2.2 When train is operating in Mode 2 and the Door Mode Selector is in the Auto/Manual position, to automatically open the doors, the Rail Vehicle Operator shall:

6.2.2.1 Depress the Train Berth pushbutton at three (3) miles per hour (mph) or less; and

6.2.2.2 Properly berth the train on the platform.

Human Factors

Fatigue

Conditions at the time of the incident were evaluated to distinguish whether evidence of fatigue was present. Video of the incident was not available to ascertain whether signs of fatigue were present. The Train Operator reported feeling moderately alert at the time of the incident and reported experiencing no symptoms in fatigue in the time leading up to the incident.

Fatigue Risk

Incident data was evaluated for fatigue risk factors. The incident time of day (16:03 hours) does not suggest an increased risk of fatigue-related impairment. The Train Operator worked evening shifts in the days leading up to the incident. The Train Operator reported a total of 6 hours of sleep in the last sleep period preceding the incident and was awake for 4 hours at the time of the incident. The off-duty period preceding the incident was 15 hours, which, given the Train Operator's reported 40-minute commute, provided the opportunity for 7-9 hours of sleep. The Train Operator reported usual workday sleep durations of 6 hours and no issues with sleep.

A biomathematical fatigue modeling application (SAFTE-FAST Console) was used to further evaluate fatigue risk factors that may have been present in the Train Operator's schedule. The analysis was based on the Train Operator's work schedule, reported sleep from the day before the incident, and reported habitual sleep durations. The estimated performance effectiveness at the time of the incident was 88.8%. There were no major risk factors for fatigue identified.

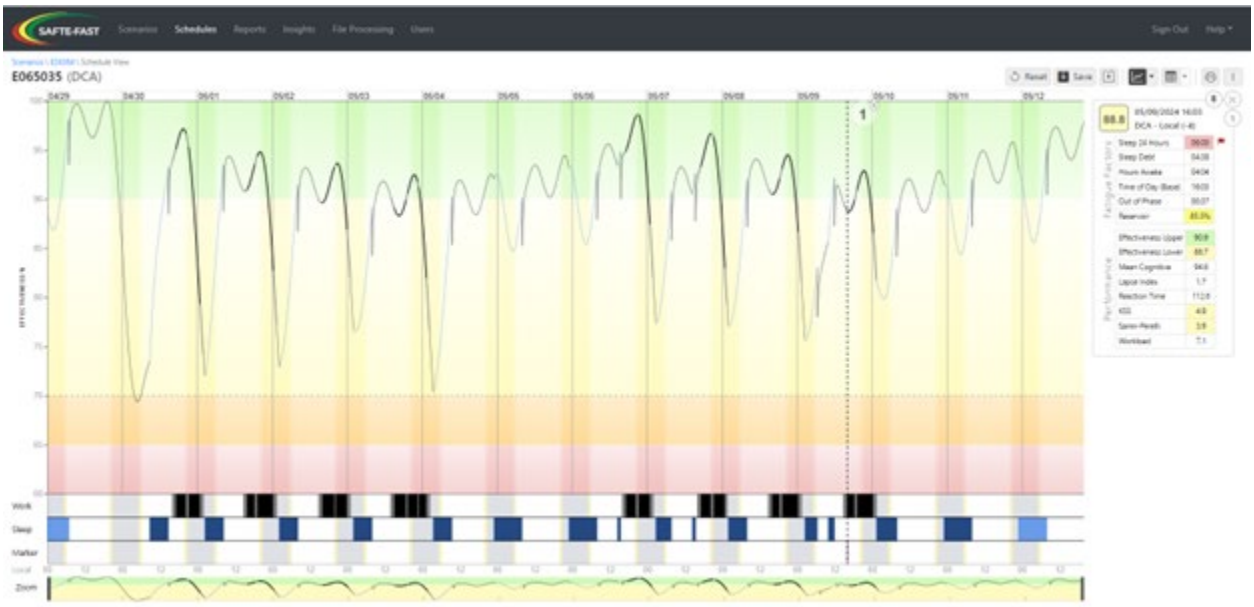


Figure 4 – Biomathematical Fatigue Modeling using SAFTE-FAST Console

Modeling analysis output shows estimated performance effectiveness during the incident work shift and for the week leading up to the work shift, based on the Train Operator work and reported sleep schedule. Estimates were based on the Train Operator's work schedule, reported sleep from the day preceding the incident, and reported habitual sleep durations (6 hours a day). Bold portions of the modeled curve show work (in black) and sleep times (in blue). Effectiveness is shown on the vertical axis, with colored fields in the chart background signifying ranges of effectiveness scores including high effectiveness (>90%) in green, and low effectiveness (<65%) in red. Time is shown on the horizontal axis. Markers for work and sleep times are shown in the lanes above the time of day on the horizontal axis.

Post-Incident Toxicology Testing

WMATA's Drug and Alcohol Program determined that the Train Operator complied with the Drug and Alcohol Policy and Testing Program 7.7.3/6. The test results were negative.

Findings

- The Train Operator reports to Brentwood Division and was certified as a Train Operator in October 2023.
- Train ID 108 was not in service at the time of the incident.
- The Train Operator pushed the right-side open doors pushbutton at Glenmont Station, thinking they pushed the train berth button.
- The Train Operator was unaware they activated the doors on the non-platform side. The platform side doors were not opened.
- The RTRA Supervisor was at the station, noticed the incident, and instructed the Train Operator to close the doors.
- The RTRA Supervisor reported the incident to the Radio RTC.
- The RTRA Supervisor conducted a ground walk around.
- The Train Operator remained out of service and was transported for post-incident testing.
- Train ID 108 remained out of service and returned to Glenmont Yard.

Immediate Mitigation to Prevent Recurrence

- In adherence to Standard Operating Procedure 102-1, which outlines the protocol for Removing an employee from Service for involvement in an operational safety event, the Radio RTC dispatched a Rail Supervisor to relieve the Train Operator from duty for post-incident testing.
- In accordance with the Office of the Chief Mechanical Officer CMOR-IIT Operations Administrative Policy 102.06, the ROCC promptly removed Train ID 108 from revenue service for post-incident investigative measures. This action adhered to the Rail Vehicle Event Investigation Policy, ensuring a comprehensive incident examination.

Probable Cause Statement

The probable cause for the Improper Door Operation at Glenmont Station on May 9, 2024, was the Train Operator's lack of situational awareness by unintentionally pressing the open doors pushbutton on the non-platform side.

Recommended Corrective Actions

Corrective Action Code	Description	Responsible Party	Estimated Completion Date
11557_SAFE CAPS_RTRA _001	The Train Operator will have to complete refresher training with an emphasis on door operation procedures,	RTRA SRC	Completed

Appendices

Appendix A – Interview Summary

The below narrative summarizes the incident and represents the statements made by the involved individual. As such, times and details may present a conflict with the data contained in systems of record.

The Train Operator stated that they have been a WMATA employee since May 2023. They have been certified as a Train Operator since October 2023.

The Train Operator stated that the day of the incident started normal and that they were alert and fit for duty.

The Train Operator explained that they try to get as much sleep as possible during the day because their sleep is broken due to their shift and their child's school in the morning. They are a new Train Operator, lacking seniority for a preferred schedule.

The Train Operator did not experience any mechanical issues with Lead Car 3130.

The Train Operator explained there are always radio communication issues at the yard but that did not affect this incident.

The Train Operator explained their understanding of the door operating procedures. Currently, they are using automatic door operations (ADO) with the train berth button and if manual operation was required, Central would be contacted for permission.

The Train Operator explained that in hindsight, upon stopping at the 8-car marker, they pressed the open-door pushbutton and not the train berth button. The Train Operator stated they did not know how they opened the non-platform side doors.

The Train Operator reiterated they were unaware that they opened the non-platform side doors, and that would be accidental and unintended. They believed they had a "brain freeze."

The Train Operator stated after the incident, the RTRA Supervisor even took a few minutes and then realized the non-platform side doors were open. The RTRA Supervisor came inside the train. The Train Operator heard from the Tower, Don't move, close the door and key down. The RTRA Supervisor conducted a ground walkaround.

The Train Operator explained they break their sleep, totaling 6 – 7 hours. They sleep from 2 am to 6 am, then they take their child to school by 8 am. They took a nap for approximately 3 hours before reporting for work.

Appendix B – Certifications

TRAIN OPERATOR AND ROAD SUPERVISOR JOB TASK PROFICIENCY EVALUATION

Name:	[redacted]	Emp.No:	[redacted]	Division:	Rail Training	Date:	10-16-2023

Reason for Certification: *Please place a check in an area below.*

☑ Certification: Student ☐ Pre-certification: Student ☐ Division Request ☐ Re-Certification ☐ Return to Duty ☐ Other _____

Exam Administered	Score	Date Taken
MOR attempt # 1	95 %	8-30-23
TVOIM/TOIM attempt # 1	87 %	8-30-23
Supervisor Combination attempt #	%	
Practical attempt #: 1	QL- 1	10-16-23

Equipment *(current/working condition)*	Yes	No
MOR	✓	
Perm/Temp/Special Orders	✓	
Troubleshooting Guide	✓	
Flashlight	✓	
Safety Vest	✓	
Footwear	✓	
Identification (One Badge, RWP) Exp 5/24	✓	

Comments:

Signatures:	Date:
Employee: [redacted]	10/16/23
Examiner: [redacted]	10-16-2023

RTRA-906-01-00 TRAIN OPERATOR AND ROAD SUPERVISOR JOB TASK PROFICIENCY EVALUATION Page 1

Document 1 – Train Operator's Certification, Page 1 of 2

TRAIN OPERATOR AND ROAD SUPERVISOR JOB TASK PROFICIENCY EVALUATION (continuation sheet) Emp No.: [redacted] Date: 10-16-2023

CATEGORIES / SUBCATEGORIES	QUALITY LEVEL	REMARKS (*Remarks are required for a quality level score of 2 or 3*) – ALL TIMES (*are in minutes*)
I. Preparation for Service	/	Cars Used: 7716 x 7584
1. Exterior Inspection	/	# 7717 Rotary Drum c/o, # 7585 Barrier Uns, # 7584 Holding Brake c/o
2. Interior Inspection - Trailing Cab	/	# 7716 Door 7/8 c/o
3. Interior Inspection - Each Car	/	# 7717 Horn c/o, # 7585 Tail-Marker TLCB
4. Interior Inspection – Oper. Cab	/	# 7584 Missing EEK
5. Rolling Test / Rolling Brake Test	/	
		Time Allotted: 35:00 / Actual Time: 30 :16
II. Mainline Operation	/	
6. Communications	/	
7. Door Oper. & Station Stopping	/	
8. Use of Horn	/	
9. Speed Adherence/Manual Oper.	/	
10. Turn Back Moves	/	Location: J03 Time Allotted: 02:00 / Actual Time: / :11
11. Manual Route Selection	/	Location: J01-16
12. EV Shutoff	/	Time Allotted: 00:30 (01:00) / Actual Time: 00:15
III. Yard Operation	/	
13. Communications	/	
14. Yard Movements	/	
15. Coupling	/	Time Allotted: 08:00 (12:00) / Actual Time: 6:15 Cars Used: 7667 + 7731
16. Uncoupling	/	Time Allotted: 05:00 (07:30) / Actual Time: 4 :22 Cars Used: < 7730 > 7716
17. Isolation (Self-Recovery)	/	Time Allotted: 15:00 (22:30) / Actual Time: 13:06 Cars Used: 7730 x 7716
18. Manual Switch Operation	/	#159
IV. Miscellaneous	/	
19. Recovery Train Operation	/	Time Allotted: 12:00 (18:00) / Actual Time: 10 :38 Cars Used: 7716 + 7730
20. Troubleshooting	/	#1. NO Brakes OFF (Friction Brake TLCB No Reset) Time 7:57 min
		#2. NO All Doors Closed (Pass Door EEDR) Time 5:00 min

RTRA-906-01-00 TRAIN OPERATOR AND ROAD SUPERVISOR JOB TASK PROFICIENCY EVALUATION Page 2

Document 2 - Train Operator's Certification, Page 2 of 2

Appendix C – Supervisor Report

RTRA Supervisors' Report
WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

DEPARTMENT OF OPERATIONS-RAIL SERVICE
Office of Rail Transportation

Date:	Incident Time:	Incident Location (Station Mezzanine#)	Track/Mezzanine#
5-9-24	1612	GLENMONT PLATFORM	TRACK 2

Equipment Number (Train ID & Car Numbers; Escalator/Elevator #, Room #)
ID 108 3130 - 3161 - 3162

Incident Description
TRAIN DOORS OPEN OFF PLATFORM SIDE

WMATA Personnel Involved	Employee #	Rule Violation	Home Division	Post Incident
[redacted]	[redacted]		BRENTWOOD	YES
[redacted]	[redacted]		GLENMONT	NO

Name	Address	Injury?
Name	Address	Injury?
Name	Address	Injury?

Arrival Time	Unit Number	Person In Charge	Remarks
1600	10	[redacted]	TERMINAL SUPERVISER

Chronological Account of Incident
Note time for each entry; include statement of Employee or Witness at conclusion

1612:- I WAS OFF, AFTER FINISHING MY TOUR OF DUTY TODAY WHICH WAS FROM 0430 TO 1600 HRS. I SAW OPERATOR [redacted] TRAIN PROPERLY BERTHED AT THE 8 CAR MARK TRACK 2 B// PLATFORM. [redacted] WAS SITTING IN THE SEAT WAITING FOR UNIT 10 TO GIVE [redacted] PERMISSION TO PUT THE TRAIN IN SERVICE. I WENT OVER TO HER TO TELL [redacted] BE SAFE AND HAVE A GOOD SHIFT. AS I WALKED OFF I NOTICED ALL THE DOOR SIGNAL LIGHTS WERE ILLUMINATED, BUT THE

Supervisor Submitting Report (include payroll #)	Date	Report Reviewed by	Date
[redacted]	5-9-24	[redacted]	5/9/24

Document 1 – Supervisor Report, Page 1 of 2

RTRA Supervisor's Report

Page 2 of 2

Details(continued from front)

DOORS WERE CLOSED ON THE PLATFORM SIDE. WHEN I LOOK CLOSER I NOTICED THE DOORS WERE OPEN ON THE OFF PLATFORM SIDE. I TOLD [redacted] TO CLOSE THE DOORS, I REPORTED IT TO UNIT 10, WHICH IN TURN NOTIFIED M.I.C.C. I ASKED [redacted] WHAT HAPPENED, [redacted] TOLD ME SHE INITIATED A.O.O. DOOR OPERATION. I DID A GROUND WALK AROUND AND LAYED INCIDENT TRAIN UP IN GLENMONT YARD, TRACK 11.

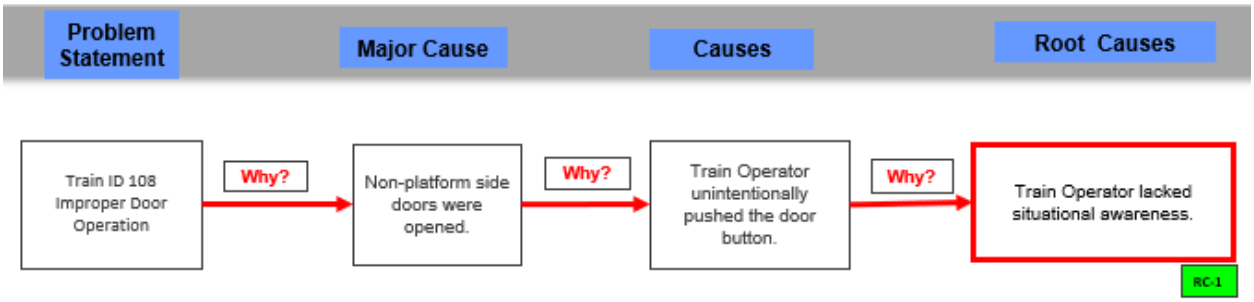
Key Findings (Detail below)

Supervisor Submitting Report (Initials [redacted]) | Report Reviewed By (Initials [redacted])

REPORT MUST BE FAXED TO ROCC 301-618-1012 at end of tour

Document 2 – Supervisor Report, Page 2 of 2

Appendix D – Why-Tree Analysis


Problem Statement
Major Cause
Causes
Root Causes
Train ID 108 Improper Door Operation
Why?
Non-platform side doors were opened.
Why?
Train Operator unintentionally pushed the door button.
Why?
Train Operator lacked situational awareness.
RC-1

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

FINAL REPORT OF INVESTIGATION A&I E24690

Date of Event:	September 1, 2024
Type of Event:	O-15(a): Improper Door Operation
Incident Time:	20:30 hours
Location:	Silver Spring Station, Track 2
Time and How received by SAFE:	20:37 hours / MICC Notification
WMSC Notification Time:	21:20 hours
Responding Safety Officers:	None
Rail Vehicle:	Train ID 140 (**L**7674/75**x**7503/02**x**7430/31**x**7721/20**T**)
Injuries:	None
Damage:	None
Emergency Responders:	None
SUDS I/A Incident Number:	20240901#119502MX

September 1, 2024
Table of Contents

Abbreviations and Acronyms

ADO	Automatic Door Operations
ADU	Aspect Display Unit
AIMS	Advanced Information Management System
ARS	Audio Recording System
CCTV	Closed-Circuit Television
CMNT	The Office of Car Maintenance
CMOR	The Office of the Chief Mechanical Officer
ER	Event Recorder
IIT	Incident Investigation Team
MICC	Metro Integrated Command and Communications Center
MOR	Metrorail Operating Rulebook
NOAA	National Oceanic and Atmospheric Administration
OAP	Operations Administrative Policy
ROPN	Rail Operations Personnel Notice
RTC	Rail Traffic Controller
RTRA	Office of Rail Transportation
RVO	Rail Vehicle Operator
SAFE	Department of Safety
SPOTS	System Performance On-Time Summary
SUDS	Safety Universal Data System
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 Sunday, September 1, 2024, at 20:30 hours, Train ID 140, an eight (8) car, 7000 series consist (**L**7674/75**x**7503/02**x**7430/31**x**7721/20**T**), arrived at Silver Spring Station, on Track 2, in the direction of Shady Grove Station. The Rail Vehicle Operator (RVO) stopped 191 feet short of the eight-car marker with five and one-half (5.5) cars within the platform limits, manually performed a door operation, and opened the doors on the platform side of the consist, two and one-half (2.5) cars remained outside the platform limits. The RVO serviced the station, closed the doors, and began to move the train. A Rail Operations Rail Supervisor standing near the 8-car marker motioned for the RVO to stop. The Rail Supervisor questioned the RVO, and it was revealed that the RVO had an eight (8) car consist and serviced the station with cars outside of the platform limits. The Rail Supervisor instructed the RVO to move the train to the 8-car marker and place the train out of service. The Rail Supervisor and a Station Manager offloaded the train and verified that the train was clear of customers.

At 20:34 hours, the Rail Supervisor contacted the Metro Integrated Command and Communications Center (MICC) Assistant Operations Manager and reported the incident. The Rail Supervisor then contacted the OPS-1 Radio Rail Traffic Controller (RTC) to request foul time to perform a ground walkaround inspection. The ground walkaround revealed no persons on the roadway. The Rail Supervisor then walked towards the lead car, assumed operation of the train, and continued to Shady Grove Station.

In adherence to Standard Operating Procedure 102-01-02, which outlines the protocol for Removing an Employee from Service for involvement in an operational safety event, the RVO of Train ID 140 was removed from duty and sent for post-incident testing.

In accordance with the Office of the Chief Mechanical Officer (CMOR) Incident Investigation Team (IIT) Operations Administrative Policy (OAP) 102.06, the Metro Integrated Command and Communications Center (MICC) promptly initiated the removal of Train ID 140 from revenue service for post-incident investigative measures. This action adhered to the Rail Vehicle Event Investigation Policy, ensuring a comprehensive examination of the incident.

No injuries or damages were reported as a result of this incident. The CMOR IIT investigation revealed that no fault of the train contributed to the incident and the train functioned as designed.

On Tuesday, September 3, 2024, the RVO of Train ID 140 was interviewed, and during the interview, it was revealed that on September 1, 2024, at 17:53 hours, the RVO performed a similar Improper Door Operation by opening the train doors with rail cars remaining outside the platform limits at Silver Spring Station on Track 2. This incident was not previously reported. The RVO was operating the same consist (**L**7674/75**x**7503/02**x**7430/31**x**7721/20**T**) during both incidents. A review of Silver Spring Station Closed Circuit Television (CCTV) and the train's Vehicle Monitoring and Diagnostic System (VMDS) confirmed that the RVO stopped 188 feet from the 8-car marker and serviced the station with doors open outside the platform limits.

No persons were observed entering the roadway, and no injuries or damages were reported as a result of this incident. The CMOR IIT investigation revealed that no fault of the train contributed to the incident, and the train functioned as designed.

The probable cause of both improper door operation incidents at the Silver Spring Station on September 1, 2024, was an obstructed line of sight to the 8-car marker blocked by scaffolding on the platform.

Contributing to this incident was the RVO's unfamiliarity with the station. The RVO was certified as a Rail Vehicle Operator on April 4, 2024, and was assigned to the Red Line during the work selection pick on June 1, 2024. September 1, 2024, was the RVO's first day operating at Silver Spring Station due to an extended rail service shutdown of Silver Spring, Forest Glen, Wheaton, and Glenmont Stations.

Incident Site

Silver Spring Station, Track 2. Silver Spring Station is an above-ground aerial station with a center platform. The station has ballasted tracks and an interlocking at this station. There are turnbacks on the inbound and outbound ends of the station. There is scaffolding 188 feet onto the platform due to ongoing maintenance.

Field Sketch/Schematics

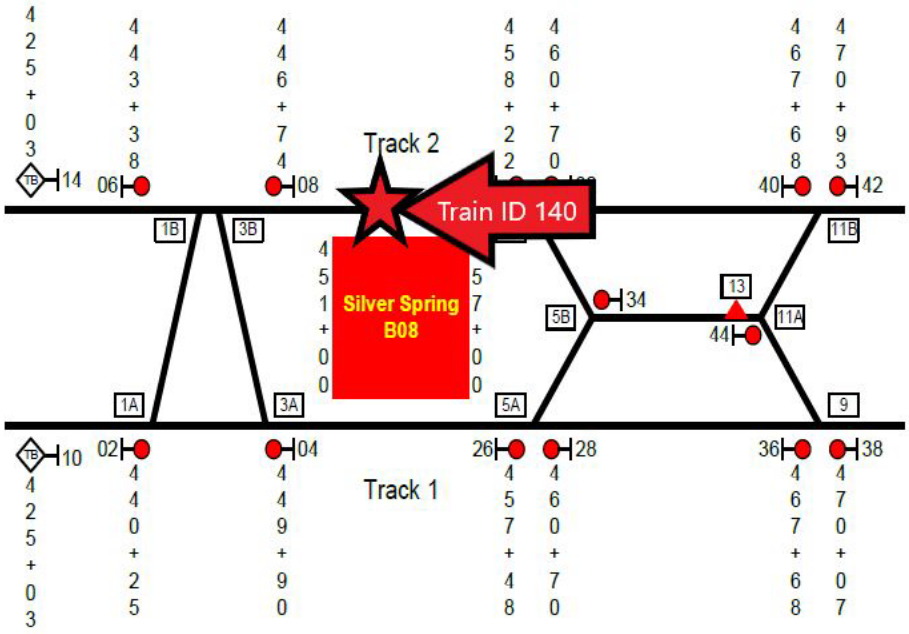


Figure 1 - depicts the location where Train ID 140 stopped short on the Silver Spring Station, Track 2, and opened doors outside of the platform limit.

The above depiction is not to scale.

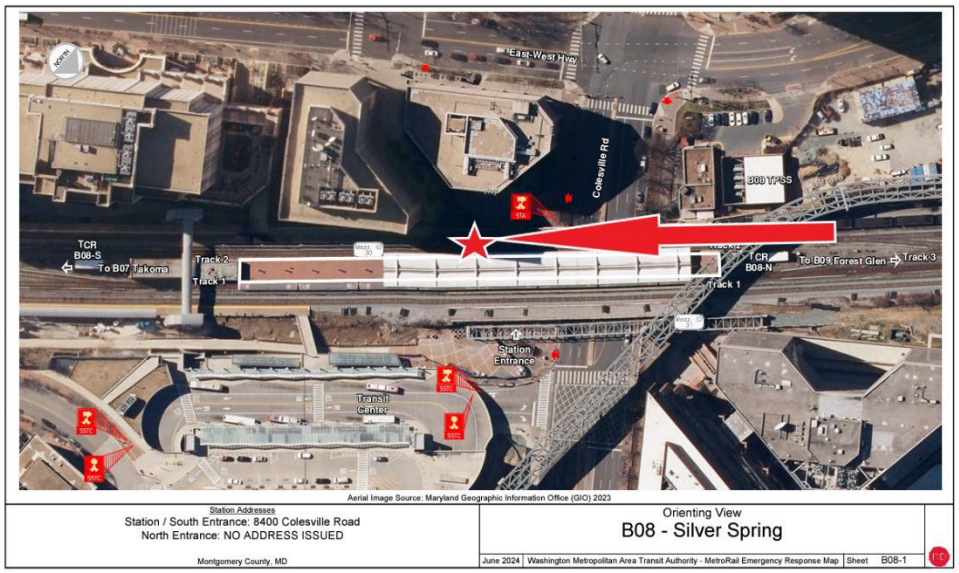


Figure 2 - aerial view depicting the location where Train ID 140 stopped short on the Silver Spring Station, Track 2, and opened doors outside of the platform limit.

The above depiction is not to scale.

Purpose and Scope

The purpose of this accident investigation and candid self-evaluation is 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:

- Site Assessment through video and document review.

- Formal Interviews – SAFE interviewed two (2) 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 ID 140 RVO
  - Rail Supervisor

- 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:
  - Train ID 140 RVO's Training Records
  - Train ID 140 RVO's Certifications
  - Train ID 140 RVO's 30-Day work history review
  - Metrorail Operating Rulebook (MOR)
  - National Oceanic and Atmospheric Administration (NOAA)
  - Metro Integrated Command and Communications (MICC) 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
    - The Office of Chief Mechanical Officer (CMOR) Incident Investigation Team (IIT) Vehicle Monitoring and Diagnostic System (VMDS)
    - Closed-Circuit Television (CCTV)
    - System Performance On-Time Summary (SPOTS) Report
    - Advanced Information Management System (AIMS) Data

Investigation

On Friday, August 30, 2024, a Rail Operations Personnel Notice (ROPN) was distributed to Rail Transportation personnel, informing them of the reopening of Silver Spring, Forest Glen, Wheaton, and Glenmont Stations following the extended summer shutdown. The notice discussed the specific procedure for RVOs to properly berth their trains at the 8-car marker using Automatic Door Operations (ADO) at Silver Spring Station due to construction scaffolding on the platform.

On September 1, 2024, at 17:42 hours, Train ID 134, an eight (8) car, 7000 series consist (L7674/75x7503/02x7430/31x7721/20T), departed Glenmont Station, inbound towards Shady Grove Station. At 17:53 hours, Train ID 134 arrived at Silver Spring Station on Track 2. The RVO stopped short of the 8-car marker, pressed the train berth button with no response, and entered manual door operations without permission. A review of the Silver Spring Station CCTV revealed that the RVO opened the platform side doors before visually verifying that all cars were on the platform. The RVO serviced the station, with cars 188 feet outside the platform limits. It should be noted that no persons were observed exiting any doors outside the platform limits. The RVO then closed the doors and continued in revenue service to Shady Grove Station. This incident was not reported until September 3, 2024, when the RVO was interviewed.

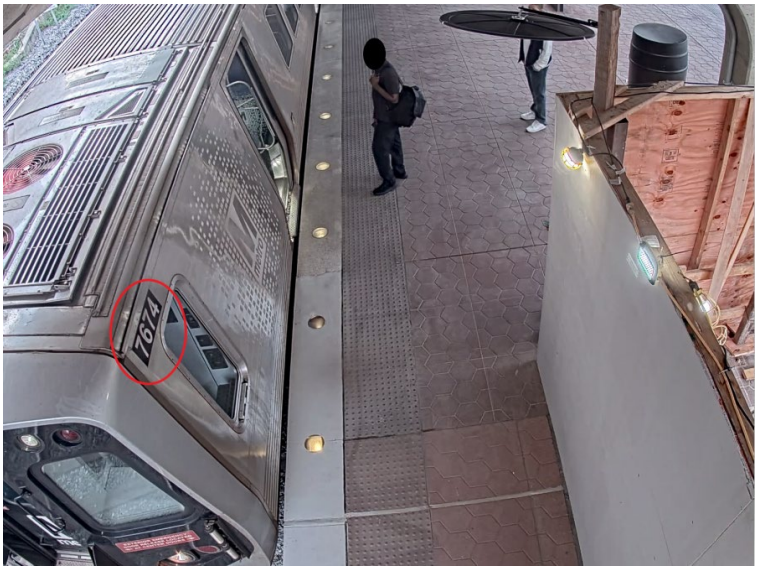


Figure 3 - depicts Train ID 134 opening the platform side doors before visually verifying all cars were on the platform.

Figure 4 - depicts 2.5 cars outside of the platform limits with doors opened at 17:53 hours.

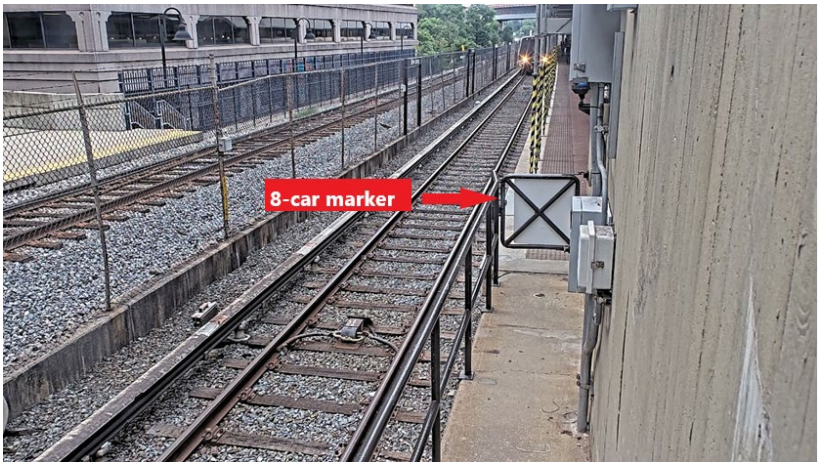


Figure 5 - depicts the obstructed line of sight to the 8-car marker due to scaffolding poles on the platform.

At 19:00 hours, the train began its inbound trip from Shady Grove Station to Glenmont Station as Train ID 141, with 7720 as the lead car, without incident.

At 20:19 hours, the train began its inbound trip from Glenmont Station to Shady Grove Station as Train ID 140, with 7674 as the lead car. At 20:30 hours, Train ID 140 arrived at Silver Spring Station on Track 2. The RVO stopped short of the 8-car marker. Cab CCTV from car 7674 showed the RVO pressing the Train Berth button, attempting to initiate ADO as the train came to a stop. After ADO failed to open due to the train not being properly berthed, the RVO initiated Manual Door Operation without MICC authorization. The RVO serviced the station, with cars 191 feet outside the platform limits.

Figure 6 - Car 7674 CCTV cab-facing camera depicting the RVO attempting to initiate Automatic Door Operation.

Figure 7 - depicts the Train Operation acknowledging Manual Door Operation on the platform side of the consist.

Figure 8 - depicts Train ID 140 doors opening before the RVO visually observing the platform.

Figure 9 - depicts Train ID 140 trailing car doors opened off the platform at 20:30 hours.

At 20:31 hours, Train ID 140 closed the platform side doors and placed the train at a point of power, exiting the station. A Rail Supervisor assigned to Silver Spring Station exited the blockhouse supervisor's office near the 8-car marker and waved down Train ID 140. It should be noted that a review of the Station CCTV revealed that the Rail Supervisor did not use the appropriate hand signal to direct the RVO to stop the train. The Rail Supervisor questioned the RVO and discovered the RVO had an eight (8) car consist and had serviced the station before reaching the 8-car marker.

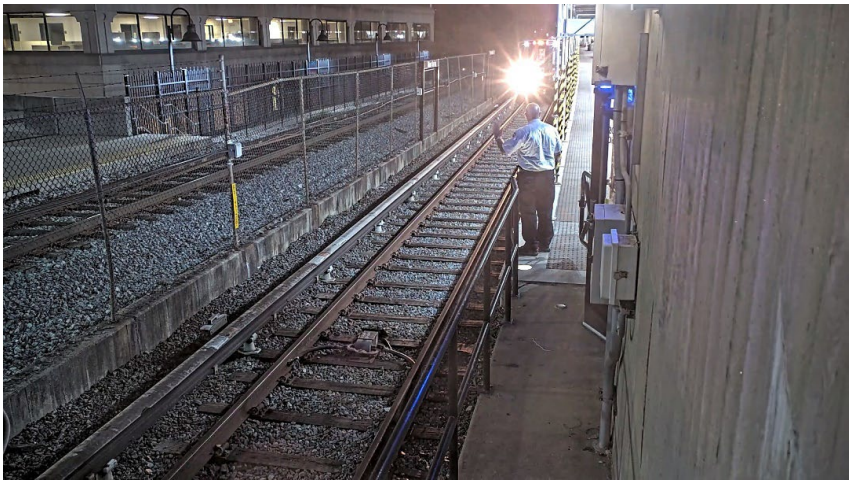


Figure 10 - depicts the Rail Supervisor waving down Train ID 140 as the train approached.

Station CCTV depicted the Rail Supervisor instructing the RVO to move the train to the 8-car marker. VMDS confirms that the train moved four (4) feet and came to a complete stop two (2) feet from the 8-car marker. The OPS 1 Radio RTC attempted to contact Train ID 140 to see if they were experiencing any issues. The Rail Supervisor informed them of the improper door operation incident and stated they would be offloading the train, performing a ground walkaround inspection, and taking control of the train.

A Station Manager assisted the Rail Supervisor in offloading the train. At 20:40 hours, the Rail Supervisor contacted the OPS 1 Radio RTC to request foul time on track 2 at Silver Spring Station to perform a ground walkaround inspection. Foul time was granted, and a good track inspection was performed. No persons were observed in the roadway. It should be noted that Station CCTV revealed that the Rail Supervisor was wearing a backpack underneath their Safety Vest as they were fouling the roadway.

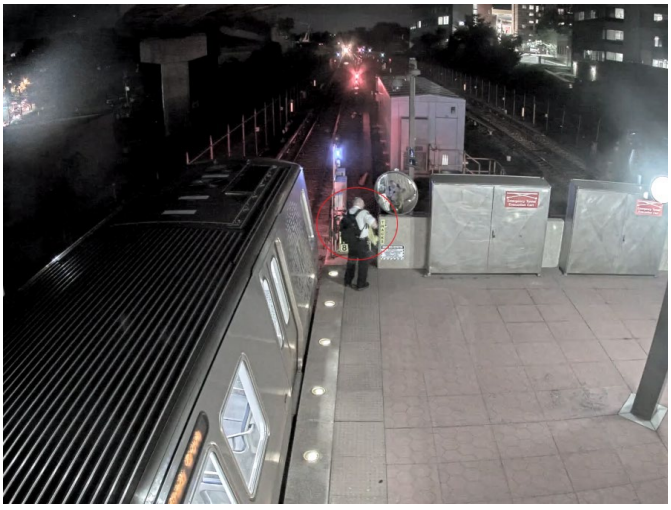


Figure 11 - depicts the Rail Supervisor placing a safety vest over their backpack.

At 20:43 hours, the Rail Supervisor relinquished their foul time and returned to lead car 7674. The Rail Supervisor was instructed to contact the MICC Operations Manager (OM). The OM asked the Rail Supervisor if improper door operation was due to an ADO malfunction. The Rail

Supervisor asked the RVO who stated they were utilizing ADO at the time of the incident. The OM instructed the train to be removed from service and notified the Shady Grove Yard Car Maintenance (CMNT) Superintendent to request permission to move the train to Shady Grove Yard and request a detailed analysis. The OM received permission to send the train to Shady Grove Yard. The Train ID was changed to non-revenue ID 740. At 21:04 hours, the Rail Supervisor operated the train to Shady Grove Station.

Chronological Event Timeline

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

Time	Description
17:53:21 hours	Train ID 134 arrived at Silver Spring Station (B08), track 2, stopped short of the 8-car marker, and opened the platform side doors with 188 feet of the consist off of the station platform. [AIMS][VMDS][CCTV]
17:53:58 hours	Train ID 134 closed the platform side doors and exited the station. [VMDS][CCTV]
20:27:41 hours	Train ID 140: Reported having no speed commands on approach to Silver Spring Station on track 2. Radio RTC: Instructed the RVO to verify that they had a lunar aspect at signal B08-42 32 and granted a permissive block to the 8-car marker on track 2 at Silver Spring Station. Train ID 140: Acknowledge the message with 100% repeat back and stated they had speed commands and would continue on. [OPS 1 Radio]
20:30:41 hours	Train ID 140 arrived at Silver Spring Station (B08), track 2, stopped short of the 8-car marker, and opened the platform side doors with 191 feet of the consist off of the station platform. [AIMS][VMDS]
20:31:14 hours	Train ID 140 closed the platform side doors and moved to a point of power. [VMDS][CCTV]
20:31:36 hours	A Rail Supervisor standing at the 8-car marker waved down the RVO. Train ID 140 came to a complete stop six (6) feet from the 8-car marker. [VMDS][CCTV]
20:32:53 hours	Train ID 142: Reported having no speed commands on approach to Silver Spring Station on track 2. Radio RTC: Instructed Train ID 142 RVO to standby and informed them that there was a train directly ahead of them. [OPS 1 Radio]
20:33:17 hours	The Rail Supervisor instructed the RVO to move the consist to the 8-car marker. [CCTV]
20:34:15 hours	Rail Supervisor: Contacted the MICC Assistant Operations Manager to notify them of the Improper Door Operation and requested a ground walkaround inspection. AOM: Acknowledged the message and instructed the Rail Supervisor to contact the OPS 1 RTC. [MICC Rail 2 Phone]
20:34:34 hours	Radio RTC: Asked Train ID 140 twice if their train was exiting Silver Spring Station. Train ID 140: Stated, “Negative” Radio RTC: Asked the RVO if they were having any issues with speed commands. Radio RTC: Instructed Train ID 140 RVO to switch over to their handheld radio to communicate any issues with their train [OPS 1 Radio]
20:35:42 hours	Train ID 140 came to a complete stop two (2) feet from the 8-car marker. [VMDS][CCTV]

Time	Description
20:36:04 hours	Radio RTC: Radioed for Train ID 140 Rail Supervisor: Stated they were at Silver Spring Station Radio RTC: Instructed the Rail Supervisor to stand by as they adjusted rail service. Radio RTC: Instructed the Rail Supervisor to go with their message. Rail Supervisor: Informed the Radio RTC that Train ID 140 had stopped short and serviced the station with doors off of the platform. They are removing the train from service to perform a ground walkaround inspection and they would then assume command of the train. Radio RTC: Replied that they would set up roadway protection for the Rail Supervisor to perform a ground walkaround inspection and instructed the Rail Supervisor to stand by. Radio RTC: Asked the Rail Supervisor if the train was properly berthed. Rail Supervisor: Stated that the train was properly berthed and was being offloaded, they would verify that the train was clear and prepare for their ground walkaround inspection. Radio RTC: Instructed the Rail Supervisor to notify them once they were prepared to perform their ground walkaround inspection. Radio RTC: Instructed Train ID 142 in approaching Silver Spring Station to make good announcements to their customers regarding the delay. Train ID 140: Stated they were standing by and would make good announcements. [OPS 1 Radio]
20:38:51 hours	Radio RTC: Instructed the Glenmont Station Terminal Supervisor to halt dispatching trains due to the incident at Silver Spring Station [OPS 1 Phone]
20:38:53 hours	Radio RTC: Instructed the Rail Supervisor to call them by telephone. Rail Supervisor: Acknowledged the message and stated they were verifying the train was clear of customers and would call as soon as they were finished. [OPS 1 Radio]
20:39:53 hours	Radio RTC: Asked the Rail Supervisor why they were offloading the train. Rail Supervisor: Stated that it was the standard procedure when an improper door incident occurred. They did not observe anyone in the roadway. They would call over the radio for permission to perform a ground walkaround inspection. [OPS 1 Phone]
20:40:57 hours	Rail Supervisor: Requested foul time for Silver Spring Station, track 2 only, to perform a ground walkaround inspection. Radio RTC: Granted the Rail Supervisor foul time to perform the ground walkaround inspection. [OPS 1 Radio]
20:42:57 hours	Rail Supervisor: Stated that they were clear of the roadway. A good ground walkaround inspection was performed. No persons were observed in the roadway. They requested Train ID 142 enter Silver Spring Station at a reduced speed and perform a track inspection as a precaution. Rail Supervisor: Stated they were walking towards the lead car. Radio RTC: Instructed Train ID 142 in approaching Silver Spring Station to continue to make good announcements to their customers regarding the delay. [OPS 1 Radio]
20:43:41 hours	Button RTC: Asked the Rail Supervisor for the lead car number. Rail Supervisor: Stated that they were heading back towards the lead car and would tell them momentarily. They advised that their ground walkaround was completed and requested the train in approach to Silver Spring Station perform a track inspection and enter at a reduced speed. Button RTC: Asked the Rail Supervisor if they were relinquishing their foul time.

Time	Description
	Rail Supervisor: Acknowledged that they were relinquishing their foul time. Button RTC: Instructed the Rail Supervisor to hold their location once they return to the lead car. Rail Supervisor: Acknowledged with 100% repeat back and informed the Button RTC that the lead car was 7674. Button RTC: Acknowledged the message. [OPS 1 Radio]
20:48:09 hours	Button RTC: Informed the Rail Supervisor that the B08-08 signal would display a red aspect. Rail Supervisor: Acknowledge the message with 100% repeat back. [OPS 1 Radio]
20:53:35 hours	Button RTC: Instructed the Rail Supervisor to call the AOM by telephone. [OPS 1 Radio]
20:54:23 hours	Rail 1: Asked the Rail Supervisor who moved the train to the platform. Rail Supervisor: Stated the RVO moved the train. Rail 1: Asked when the RVO stopped short initially, did they open the doors manually or under ADO? Rail Supervisor: Asked the RVO, and the RVO replied under ADO. Rail 1: Asked if the RVO touched the manual door open button. Rail Supervisor: Replied that the RVO stated the doors opened under ADO. Rail 1: Asked for the lead car number. Rail Supervisor: Replied that the lead car was 7674. Rail 1: Informed the Rail Supervisor that the RVO had to be removed from service. They asked the Rail Supervisor if the RVO closed the doors, moved it onto the platform, and properly berthed. Rail Supervisor: Replied, when they noticed the train about to leave the station they stopped the RVO and asked them why they did not stop at the 8-car marker. They then asked how many cars were in the consist. When the RVO stated that they had an eight (8) car consist they informed the RVO that the train needed to be removed from service, because they serviced the station with two (2) cars off of the platform. Rail 1: Informed the MICC Director that the RVO claimed ADO caused the doors to open with doors off of the platform. [Rail 1 Phone]
20:57:06 hours	Rail 1: Informed the Shady Grove Yard CMNT of the incident and requested permission to move the train. Shady Grove CMNT: Granted permission for the train to be sent in. [Rail 1 Phone]
20:59:16 hours	Rail 1: Informed the Rail Supervisor they had permission to move the train to Shady Grove Rail Yard. Instructed them to keep the RVO with them, and they would get a Rail Supervisor to escort the RVO for post-incident testing. They instructed the Rail Supervisor to contact Central once they were ready to move the train. [Rail 1 Phone]
21:04:34 hours	Radio RTC: Instructed the Rail Supervisor to verify the lunar aspect at signal C08-08, rail alignments and speed commands. They then granted them permission to non-revenue to Shady Grove Rail Yard. [OPS 1 Radio]

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

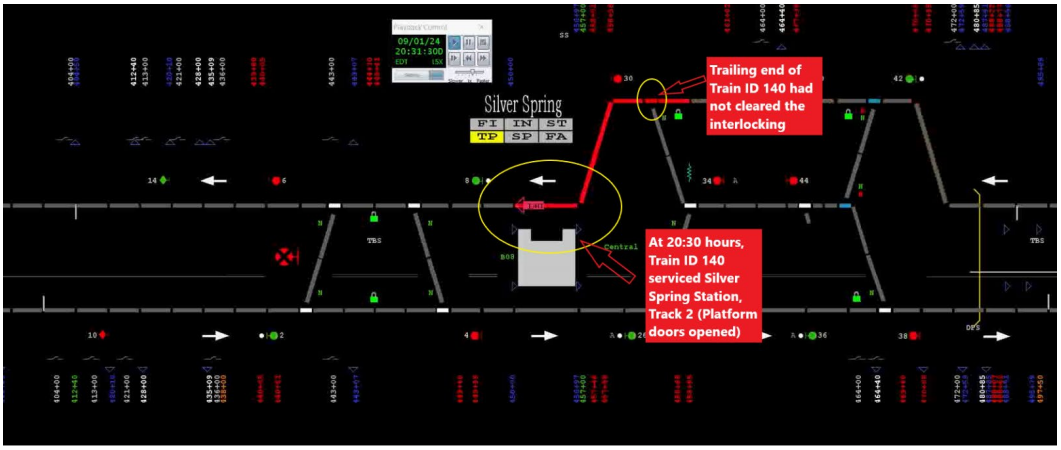


Figure 12 - depicts Train ID 140 servicing Silver Spring Station, Track 2 at 20:30 hours. The trailing end of the consist is occupying the interlocking switch.

ROCS SPOTS REPORT

based on up-to-the-second operational performance data from the Rail Operations Control System

Current date/time: Sun Sep 8 11:59:17 2024

Select Platform: B08-2 and/or Select ID: Leave blank to remove criteria

and/or Select 4-digit car number: Leave blank to remove criteria

Select Date: Sep 1 2024 Select Times (0-24HRS): From 17:00 To 21:00

Generate Report

ID	Platform	length	dcode	Right door open	Right door close	dwell	Left door open	Left door close	dwell	Head Arrived	Tail cleared	cars	Headway door open to door open
118	B08-2	8	12				17:07:39	17:07:59	20	17:07:03	17:08:25	3124-3125.3194-3195.3155-3154.3247-3246	-
120	B08-2	8	12				17:11:43	17:12:11	28	17:11:00	17:12:36	3182-3183.3180-3181.3290-3291.3272-3273	4:04
122	B08-2	8	12				17:17:47	17:18:10	23	17:17:11	17:18:32	7352-7353.7467-7466.7462-7463.7013-7012	6:04
124	B08-2	6	12				17:24:39	17:24:59	20	17:24:01	17:25:27	3145-3144.3188-3189.3229-3228	6:52
126	B08-2	8	12				17:34:27	17:34:49	22	17:30:59	17:35:14	7440-7441.7009-7008.7010-7011.7055-7054	9:48
750	B08-2	6	83							17:36:03	17:36:46	3176-3177.3235-3234.3157-3156	-
128	B08-2	8	12				17:39:32	17:39:54	22	17:38:54	17:40:25	3136-3137.3174-3175.3118-3119.3128-3129	5:05
130	B08-2	8	12				17:44:42	17:44:54	12	17:44:08	17:45:21	7458-7459.7333-7332.7444-7445.7481-7480	5:10
132	B08-2	2	12				17:48:23	17:49:02	39	17:47:47	17:49:27	7038-7039.7019-7018.7006-7007.7081-7080	3:41
134	B08-2	8	12				17:54:00	17:54:18	18	17:53:14	17:54:51	7720-7721.7431-7430.7502-7503.7675-7674	5:37
136	B08-2	8	12				18:00:03	18:00:35	32	17:59:26	18:01:04	3070-3071.3123-3122.3023-3022.3104-3105	6:03
138	B08-2	6	12				18:06:33	18:07:04	31	18:05:55	18:07:31	3117-3116.3109-3108.3012-3013	6:30
140	B08-2	0	12							18:11:50	18:13:18	3284-3285.3286-3287.3250-3251	-
142	B08-2	6	12				18:18:59	18:19:26	27	18:18:26	18:19:48	3014-3015.3082-3083.3099-3098	12:26
144	B08-2	8	12				18:24:10	18:24:37	27	18:23:34	18:25:13	7650-7651.7363-7362.7646-7647.7079-7078	5:11
146	B08-2	8	12				18:30:19	18:30:47	28	18:29:38	18:31:12	7048-7049.7557-7556.7052-7053.7021-7020	6:09
148	B08-2	8	12				18:38:20	18:38:46	26	18:37:33	18:39:11	7062-7063.7001-7000.7058-7059.7077-7076	8:01
102	B08-2	8	12				18:42:27	18:42:52	25	18:41:49	18:43:20	7090-7091.7083-7082.7028-7029.7003-7002	4:07
104	B08-2	0	12				18:47:36	18:48:08	32	18:47:00	18:48:40	3268-3269.3211-3210.3220-3221	5:09
106	B08-2	8	12				18:53:52	18:54:21	29	18:53:18	18:54:44	7088-7089.7085-7084.7624-7625.7535-7534	6:16
108	B08-2	8	12				19:00:06	19:00:38	32	18:59:24	19:01:02	7022-7023.7033-7032.7228-7229.7703-7702	6:14
110	B08-2	8	12				19:07:54	19:08:20	26	19:07:16	19:08:45	7030-7031.7041-7040.7074-7075.7061-7060	7:48
114	B08-2	8	12				19:12:51	19:13:05	14	19:12:09	19:13:33	7098-7099.7095-7094.7086-7087.7069-7068	4:57
116	B08-2	2	12				19:18:25	19:18:56	31	19:17:51	19:19:21	3245-3244.3162-3163.3132-3133.3239-3238	5:34
118	B08-2	8	12				19:24:12	19:24:39	27	19:23:31	19:25:04	3243-3242.3160-3161.3143-3142.3240-3241	5:47
120	B08-2	8	12				19:32:02	19:32:21	19	19:31:24	19:32:46	3005-3004.3222-3223.3263-3262.3149-3148	7:50
122	B08-2	8	12				19:36:01	19:36:29	28	19:35:25	19:36:53	3153-3152.3227-3226.3230-3231.3204-3205	3:59
124	B08-2	8	12				19:41:49	19:42:10	21	19:41:13	19:42:35	3246-3247.3154-3155.3195-3194.3125-3124	5:48
126	B08-2	8	12				19:47:36	19:48:28	52	19:47:05	19:48:55	3273-3272.3291-3290.3181-3180.3183-3182	5:47
128	B08-2	8	12				19:53:26	19:53:50	24	19:52:50	19:54:16	7012-7013.7463-7462.7466-7467.7353-7352	5:50
130	B08-2	6	12				20:00:05	20:00:40	35	19:59:23	20:01:03	3228-3229.3189-3188.3144-3145	6:39
132	B08-2	8	12				20:06:31	20:06:57	26	20:05:52	20:07:24	7054-7055.7011-7010.7008-7009.7441-7440	6:26
134	B08-2	8	12				20:13:04	20:13:36	32	20:12:28	20:14:01	3129-3128.3119-3118.3175-3174.3137-3136	6:33
136	B08-2	8	12				20:17:57	20:18:14	17	20:17:16	20:18:41	7458-7459.7333-7332.7444-7445.7481-7480	4:53
138	B08-2	2	12				20:24:05	20:24:37	32	20:23:32	20:25:02	7080-7081.7007-7006.7018-7019.7039-7038	6:08
740	B08-2	8	86				20:30:59	20:45:01	842	20:30:14	21:05:24	7674-7675.7503-7502.7430-7431.7721-7720	6:54

Figure 13 - SPOTS Report showing the arrival and departure times for trains at Silver Spring Station, Track 2. The red boxes depict the times when consist L7674/75x7503/02x7430/31x7721/20T was at Silver Spring Station, Track 2.

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

Adopted from CMOR IIT report with minor formatting and grammatical edits:

Second Improper Door Operation Incident

Train ID 140, (**L**7674/75**x**7503/02**x**7430/31**x**7721/20**T**), was reported for an Improper Door Operation at Silver Spring Station on September 1, 2024. IIT has completed a download and analysis of data from the consist in question. Based on the Event Recorded (ER) data, Train ID 140 was operated in Manual Mode prior to entering the Silver Spring Station at 20:29:59.390 and during the incident.

The train entered the station at a speed of 24.6 MPH, with the Master Controller placed in the "B1-B3" Braking mode. The Train Berthed Pushbutton was activated. The Left Doors Open Pushbutton was activated twice, and the left doors opened, 191 feet before the 8-car marker, with 191 feet of the trailing car off the platform. Shortly thereafter, the Left Doors Close Pushbutton was activated, and the left doors closed.

The Master Controller was moved to a "P1-P4" Power mode, and the train began to move toward the 8-car marker then came to the second complete stop six (6) feet before the platform limits. The Master Controller was moved to a "Coast" Power position and the train began to move toward the 8-car marker then came to the third complete stop two (2) feet before the platform limits.

The Left Doors Open Pushbutton was activated, the left doors opened, and the station was serviced. Afterwards, the Left Doors Close Pushbutton was activated, and the left doors closed, followed by the lead car 7674 being keyed down at 20:45:00.510 hours.

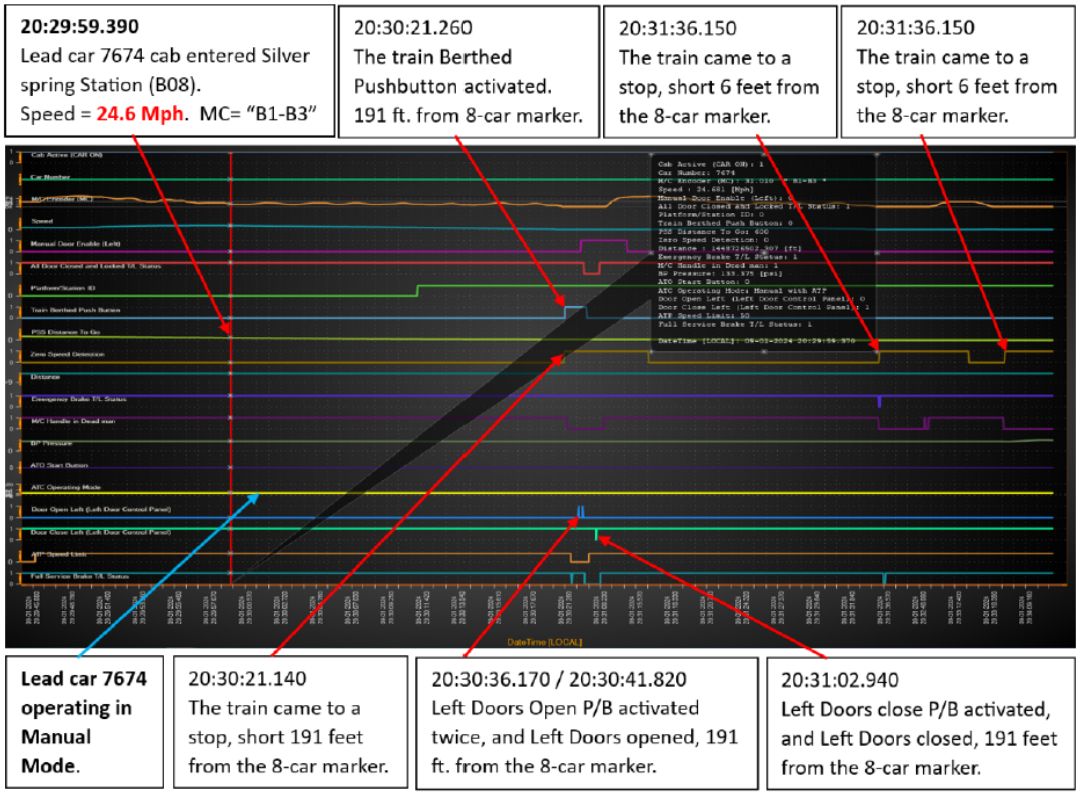
Based on the VMDS and ER data, there were no faults observed with the train that contributed to the cause of this incident. The train performed as commanded."

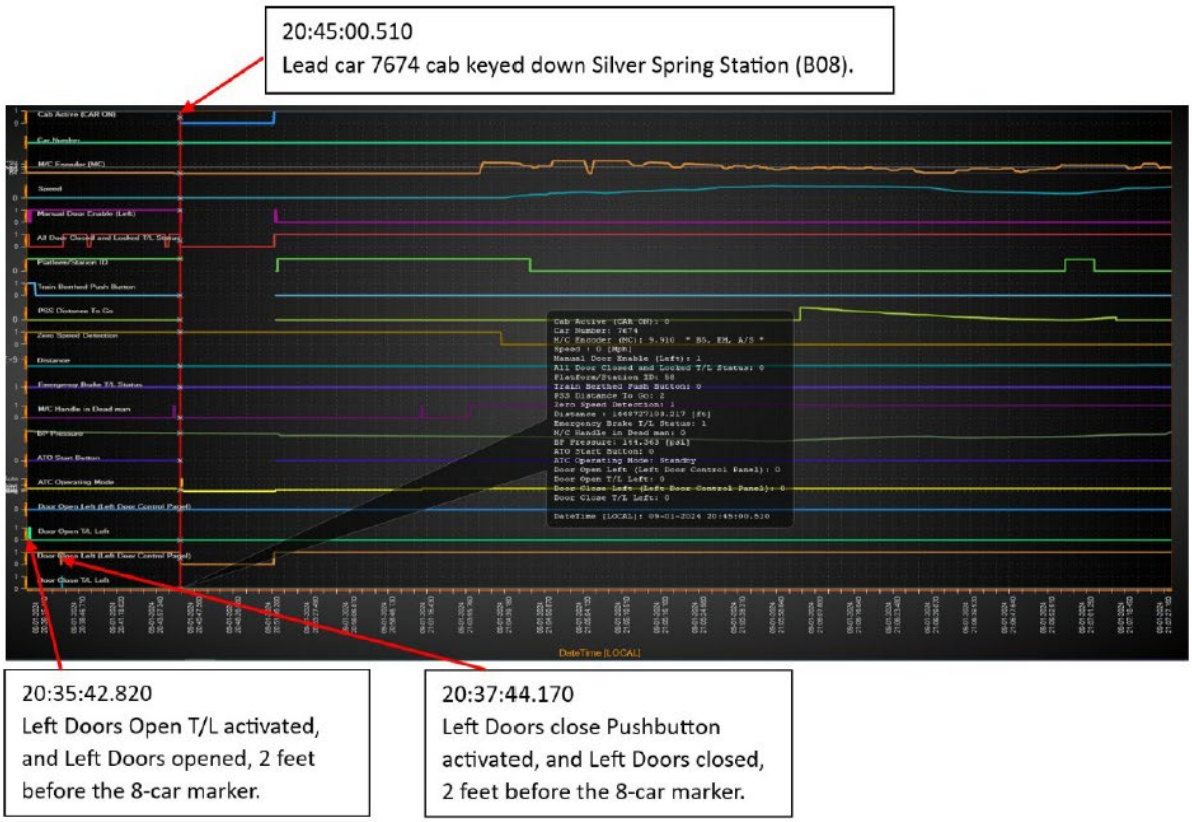
Time	Description of Events	*Train Speed*	*Master Controller*	*Distance from 8-Car Marker*
20:29:59 hours	Train ID 140 entered Silver Spring Station (B08) Track #2 with the Master Controller placed in the "B1-B3" Braking mode, operating in Manual Mode.	***24.6 MPH***	***B1-B3***	***600 feet***
20:30:21 hours	The train came to a stop, short 191 feet from the platform limits at Silver Spring Station.	***0 MPH***	***B4***	***191 feet***
20:30:21 hours	The train Berthed Pushbutton activated. 191 feet from the 8-car marker.	***0 MPH***	***B4***	***191 feet***
20:30:36 hours 20:30:41 hours	Left Doors Open Pushbutton was activated twice, and the Left Doors opened, 191 feet before the 8-car marker, with 191 feet of the trailing car off the platform.	***0 MPH***	***B4***	***191 feet***
20:31:02 hours	Left Doors close Pushbutton activated, and Left Doors closed, 191 feet before the 8-car marker, with 191 feet of the trailing car off the platform.	***0 MPH***	***B4***	***191 feet***
20:31:14 hours	The Master Controller was moved to "P1-P4" Power position, and the train again began to move toward the 8-car marker.	***<1 MPH***	***P1-P4***	***191 feet***
20:31:36 hours	The train came again to a stop, short 6 feet from the platform limits at Silver Spring Station.	***0 MPH***	***B4***	***6 feet***
20:33:15 hours	The Master Controller was moved to "Coast" position and the train again began to move toward the 8-car marker.	***<1 MPH***	***Coast***	***6 feet***

Time	Description of Events	*Train Speed*	*Master Controller*	*Distance from 8-Car Marker*
20:33:20 hours	The train came again to a complete stop, short 2 feet from the platform limits at Silver Spring Station.	***0 MPH***	***B4***	***2 feet***
20:35:42 hours	Left Doors Open T/L activated, and Left Doors opened, 2 feet before the 8-car marker.	***0 MPH***	***B4***	***2 feet***
20:37:44 hours	Left Doors close Pushbutton activated, and Left Doors closed, 2 feet before the 8-car marker.	***0 MPH***	***B4***	***2 feet***
20:45:00 hours	Car 7674 keyed Down at Silver Spring Station.	***0 MPH***	***A/S***	***2 feet***

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

7674 ER Data Analysis





Adopted from CMOR IIT report with minor formatting and grammatical edits:

First Improper Door Operation Incident

IIT was informed that the previously reported consist, operating as Train ID 134 at an earlier time, (**L**7674/75**x**7503/02**x**7430/31**x**7721/20**T**), was potentially involved in a similar incident earlier in the day.

After additional review of the data, it was verified that at approximately 17:52 hours, the same consist stopped short of the 8-Car marker at Silver Spring Station, Track 2. Based on ER data, Train ID 134 entered into Silver Spring Station at a speed of 22 MPH. The Master Controller was placed into the "B1-B3" Braking position 33 feet after entering onto the station's platform.

The Master Controller was moved to the "B5" Braking position, traveling at 3 MPH, 190 feet before the 8-car marker, and came to a complete stop 188 feet before the 8-car marker, with 188 feet of the consist off of the platform.

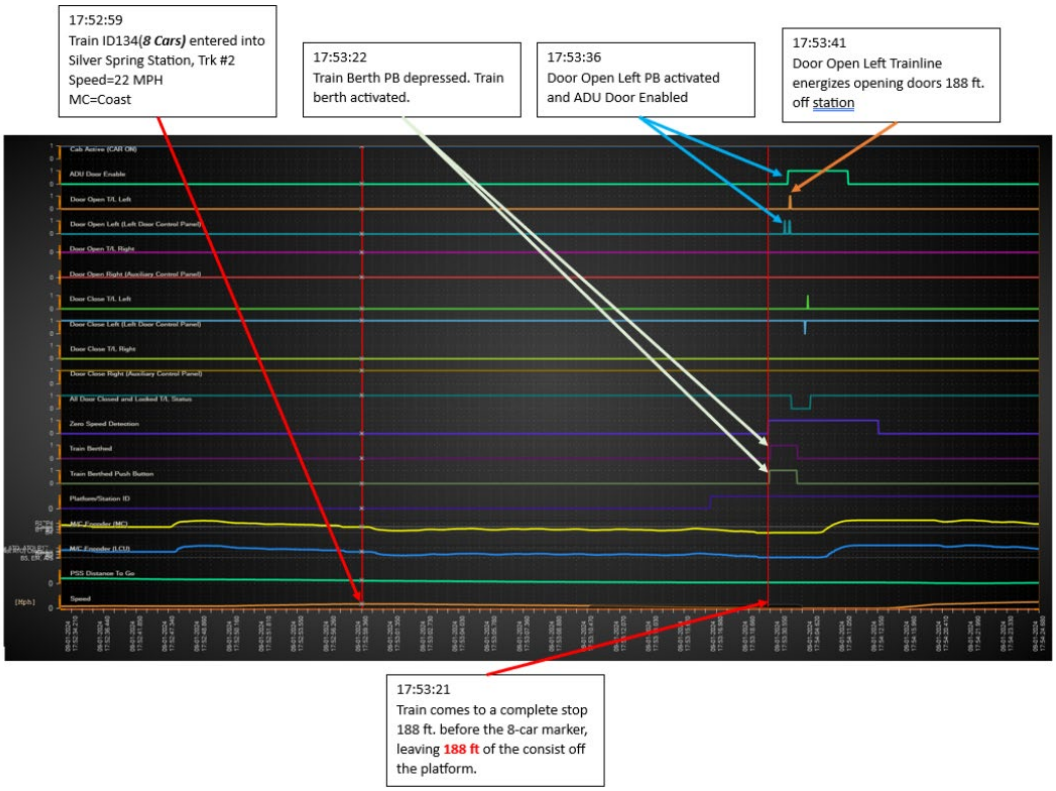
The Train Berth Pushbutton was activated, and the train berth signal went "HIGH." The Left Door Open Pushbutton was depressed, and Aspect Display Unit (ADU) Door enable was activated. The Left Door Open Pushbutton was activated again, the Left Door Open Trainlines energized, and the left-side passenger doors opened with 188 feet of the consist off the station platform. The doors are commanded to close shortly after, and the Master Controller is placed in the "P5" Power position. The train began moving towards Takoma Station.

Based on VMDS and ER data, this incident stemmed from the train berth pushbutton being activated and the doors being manually operated to open, while the train was not properly berthed.

There were no faults with the train that contributed to the cause of this incident. The train performed as commanded."

Time	Description of Events
17:52:59 hours	Train ID134, an 8-car consist, entered Silver Spring Station, Track 2, at a speed of 22 MPH with the Master Controller in the "Coast" position.
17:53:00 hours	The Master Controller was placed in the "B1-B3" Braking position. The train speed was 22 MPH, 33 feet onto the station platform.
17:53:18 hours	The Master Controller was placed in a B4 Braking position, Train speed was 3 MPH, 190 feet before the 8-car marker.
17:53:21 hours	The train came to a complete stop 188 feet before the 8-car marker, with 188 feet of the consist off of the platform.
17:53:22 hours	Train Berth Pushbutton was activated, and the Train Berth signal went "HIGH."
17:53:36 hours	The Left Door Open Pushbutton activated
17:53:40 hours	ADU Door Enable went "HIGH."
17:53:41 hours	The Left Door Open Pushbutton, and Left Door Open Trainlines energize, opening Left side passenger doors 188 feet off of the platform.
17:53:58 hours	The Left Door Close Pushbutton was activated, and the left doors closed.
17:54:03 hours	All Doors Closed and Locked Trainline energized, indicating all doors were fully closed and locked.
17:54:11 hours	The Master Controller was placed in the "P5" Power position, and the train began moving towards Takoma Station.

7674 ER Data Analysis



Office of Rail Transportation (RTRA)
Adopted from RTRA Supervisor's report with minor formatting and grammatical edits:

At approximately 20:32 hours, I observed a train stopped at track 2 of Silver Spring Station close to the 6-car mark. I did not see door indicator lights illuminated and believed the train may have lost its speed commands. I flagged the train down using hand signals. I asked the operator if they had serviced the station and they replied "Yes." I then asked them how many cars were in their consist and they replied, "eight (8) cars." I instructed the RVO to place the train out of service and that a ground walkaround would have to be performed.

At no time did I instruct the operator to move or readjust the train. At approximately 20:34 hours, I contacted the MICC Assistant Superintendent and notified them of the incident by telephone due to constant radio chatter. I established radio contact with the OPS 1 RTC and advised them of the incident at approximately 20:35 hours. I informed them that the train was out of service due to doors opening off of the platform. I requested foul time and permission to perform a ground walkaround inspection. At approximately 20:45 hours, I completed my ground walkaround and observed no one on the roadway. I transported the incident train to Shady Grove Rail Yard and was relieved. The RVO was escorted by a Shady Grove Rail Supervisor for post-incident testing.

When I interviewed the RVO, they stated that they used ADO Train Berth, and due to the scaffolding on the platform, they were confused about the location of the 8-car mark.

The RVO also stated that this was their first time at Silver Spring Station and that they had been an operator for five (5) months. They believed the train was properly berthed.

Adopted from RTRA Division Management report with minor formatting and grammatical edits:

At approximately 17:54 hours, Train ID 134 RVO on track 2 at Silver Spring Station, stopped short of the 6-car marker and opened the doors of the trains with two and a half (2.5) cars outside of the platform limits. After servicing the station the RVO continued in service without reporting the incident to the MICC or performing a ground walk-around inspection. This incident was brought to light during the in-person interview with the RVO. There were no reported damages to any equipment, injuries or, customers reported on the roadway.

At approximately 20:32 hours, the same RVO was operating as Train ID 140 on track 2 at Silver Spring Station. The RVO once again stopped short of the 6-car marker and opened the doors of the train with two and a half (2.5) cars outside of the platform limits.

After servicing the station, they closed the train doors and proceeded to properly berth at the 8-car marker. An RTRA Supervisor who was assigned to Silver Spring Station came out of the terminal after witnessing the incident and flagged the operator to stop the train. The operator stopped at the 8-car marker and was questioned by the supervisor as to what happened. The supervisor notified the MICC of the incident and followed all instructions and procedures. There were no reported damages to any equipment, injuries, or customers observed on the roadway. The RVO was removed from service and transported for post-incident testing.

Interview Findings and Written Statements

As part of the investigation launched into the event, SAFE interviewed two (2) 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.

Train ID 140 RVO's Written Statement

The RVO stated they "Arrived at Silver Spring Station around 8:30pm. I stopped the train just before going under the scaffold. I serviced the platform I hit the train berthed button. I can't remember if it opened or not. The supervisor told me to pull the train up to the 8-car marker. He then informed me to put the train out of service."

RVO's Interview Findings

- The RVO was hired in October 2023.
- The RVO's commute to and from work is 1.5 hours each way
- They were certified as a Rail Vehicle Operator in April 2024.
- This was the RVO's first day operating through Silver Spring Station.
- The RVO was issued a copy of the ROPN
- The RVO suggested a photograph on the ROPN to identify the location of the 8-car marker due to the scaffolding on the platform at Silver Spring Station.

Rail Supervisor's Interview Findings

- Was performing overtime at Silver Spring Station to assist RVOs in properly berthing their trains at Silver Spring Station due to construction scaffolding on the platform.
- Stated they were on a meal break, looking at RPM when they observed Train ID 140 stop short, then move the train once again.
- They exited the blockhouse and signaled for the RVO to stop their train.
- They asked the RVO if they had serviced the station and the length of their consist.
- Performed a ground walkaround inspection and found no persons fouling the roadway.
- Took over operations of the train, transporting the train in non-revenue service to Shady Grove Rail Yard.

- Stated that they spoke to all of the operators two (2) to three (3) times, informing them to stop at the 8-car marker before pressing the Train Berth button.
- When asked if they recalled seeing the RVO on their previous trip when they stopped short, the Rail Supervisor stated they did not.

Weather

On September 1, 2024, at the time of the incident, NOAA recorded the temperature as 79.7°F, with clear skies, winds of four (4) mph, and 73.65% humidity. [Silver Spring, MD]. Weather was not a contributing factor in this incident (Weather source: NOAA) – Location: [Silver Spring, MD].

Related Rules and Procedures

SOP 40 – Procedure for Platform Berthing, Station Servicing and Overruns, dated August 15, 2023

6.2 Door Opening Procedures

6.2.1 When train is operating in Mode 1 and the Door Mode Selector is in the Auto/Manual position:

6.2.1.1 The doors should automatically open when the train arrives and is properly berthed at the station.
6.2.2.2 Properly berth the train on the platform.

6.2.3 When the Door Mode Selector is in the Manual/Manual position, the Rail Vehicle Operator shall:

6.2.3.1 Use extreme caution before depressing the Open Doors pushbutton;

6.2.3.2 Ensure the train is properly berthed on the platform;

6.2.3.3 Verify the platform side of the train by placing their head out of the cab window and first look and identify the platform;

6.2.3.4 Look at the doors on the platform side of the train to observe any activity in front of the doors, with hands to their side for five (5) seconds;

6.2.3.5 Depress the Open Doors pushbutton on the platform side of the train;

6.2.3.6 (Additional step only for 7000 Series Fleet) Depress the console ‘Ok’ pushbutton on the Aspect Display Unit;

6.2.3.7 (Additional step only for 7000 Series Fleet) Depress the ‘Open Doors’ pushbutton on the platform side of the train.

6.3 Station Stop Misalignment Procedures

6.3.1 When a train is approaching the station and stops short, the Rail Vehicle Operator shall adjust the train's position in Mode 2 Level 1 to align it with the platform at the eight (8)-car marker position.

6.3.1.1 The Rail Vehicle Operator shall:

6.3.1.1.1 Activate the ATO STOP pushbutton if train is operated in Mode 1;

6.3.1.1.2 Contact RTC for permission to change operating mode from Mode 1 to Mode 2 Level 1;

6.3.1.1.3 Make sure vehicles are at a complete stop prior to changing operating modes;

6.3.1.1.4 Announce over public address (PA) system, "Your attention please, this train will move forward";

6.3.1.1.5 Sound the horn;

6.3.1.1.6 Properly berth train at the eight (8)-car marker position;

6.3.1.1.7 Depending on the Door Selector Mode position, follow the appropriate door opening procedures outlined in 6.2 of this SOP;

6.3.1.1.8 If in Mode 1, contact RTC to report a Station Stop Misalignment so it can be monitored for recurrence.

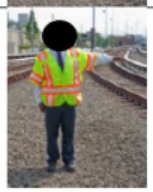
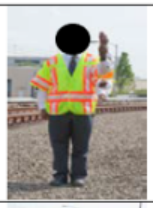
Metrorail Operating Rulebook, dated September 1, 2023

5.5 Hand Signals

5.5.1 Hand signal indications shall be given facing the oncoming vehicle from a point where they may be plainly seen, in a manner that can be understood and sufficiently ahead of time to permit the train to comply.

5.5.7 Hand signal names, indications, and aspects are:

Table 4, Hand Signals

Name	Indications	Aspect	Description of Aspect
Stop	Stop		Move hand, flag, light, or any other object back and forth across the track below the waist.
Reduce Speed	Slow ahead to not more than ten (10) mph, prepared to stop.		Hold hand, flag, or light in a steady position horizontally away from the body.
Proceed	Move forward		Move hand, flag, or light up and down in a vertical motion.
Apply Brakes	When car is standing, apply brakes		Move hand, flag, or light back and forth across the track above the shoulder.
Release Brakes	When car is standing, release brakes		Hold hand, flag, or light vertically above the shoulder.

18.1 General Safety Rules

18.1.7 Wearing backpacks, bags, or equipment with back and/or over the shoulder straps when the potential to foul tracks is present is prohibited. This equipment shall be hand carried and not worn while traversing in, on, and around tracks.

Human Factors

Fatigue

Signs and Symptoms of Fatigue

Safety evaluated incident data for fatigue risk factors. No signs or symptoms of fatigue were detected from the available data. The video of the incident was reviewed for signs of Train ID 140 RVO's fatigue. No signs or symptoms of fatigue were evident from the video. The employee reported feeling fully alert at the time of the incident and experiencing no symptoms of fatigue in the time leading up to the incident.

Fatigue Risk

Safety evaluated incident data for fatigue risk factors. Risk factors for fatigue were present. The incident time of day did not suggest an increased risk of fatigue-related impairment. The employee

reported some variation in the sleep schedule in the days leading up to the incident. The employee worked PM shifts in the days leading up to the incident. The employee was awake for 7 hours at the time of the incident. The employee reported 9.5 hours of sleep in the 24 hours preceding the incident. The off-duty period was 13.91 hours, which provides an opportunity for 7-9 hours of sleep. This was more than the employee's usual workday sleep durations. The employee reported no issues with sleep. The employee worked PM shifts in the days leading up to the incident.

Post-Incident Toxicology Testing

WMATA's Drug and Alcohol Program determined that the RVO complied with the Drug and Alcohol Policy and Testing Program 7.7.3/6.

Findings

- A ROPN was distributed to all rail personnel regarding proper train berthing at Silver Spring Station due to support scaffolding on the platform.
- The RVO stopped short and opened their platform side doors on Track 2 of Silver Spring Station, with 2.5 cars off the platform at 17:53 hours and 20:30 hours.
- The RVO did not notify the MICC and request permission to use Manual Door Operation at Silver Spring Station
- The Rail Supervisor used the incorrect hand signal when they instructed the RVO to stop the train.
- After waving down the RVO, the Rail Supervisor instructed them to move the train to the 8-car marker.
- The Rail Supervisor entered the roadway wearing a backpack underneath their Safety Vest.
- This was the RVO’s first day servicing Silver Spring Station.
- The Rail Supervisor was not at the 8-car marker during the RVO’s first trip to Silver Spring Station.
- The Rail Supervisor stated they were on a meal break when they observed the RVO on their second trip at Silver Spring Station.

Immediate Mitigation to Prevent Recurrence

- The RVO was removed from revenue service and sent for post-incident testing.
- The RVO was sent for Fitness for Duty Testing after showing signs of fatigue while being escorted for post-incident testing.
- The RVO passed the Fitness for Duty Testing
- Train ID 140 was removed from service for further investigation.
- The Rail Supervisor operated nonrevenue Train ID 740 to Shady Grove Rail Yard.

Probable Cause Statement

The probable cause of both improper door operation incidents at the Silver Spring Station on September 1, 2024, was an obstructed line of sight to the 8-car marker blocked by scaffolding on the platform.

Contributing to this incident was the RVO's unfamiliarity with the station. The RVO was certified as a Rail Vehicle Operator on April 4, 2024, and was assigned to the Red Line during the work selection pick on June 1, 2024. September 1, 2024, was the RVO's first day operating at Silver Spring Station due to an extended rail service shutdown of Silver Spring, Forest Glen, Wheaton, and Glenmont Stations.

Recommended Corrective Actions

Corrective Action Code	Description	Responsible Party	Estimated Completion Date
119502MX_SAFE CAPS_RTRA_001	The RVO will attend refresher training with the Rail Operations Quality Training (ROQT) department. (RC-1, CF-1)	RTRA SRC	Completed
119502MX_SAFE CAPS_RTRA_002	(Red Line) Re-issue RTRA-603-117-00 September 1st Reopening of the Silver Spring, Forest Glen, Wheaton, & Glenmont Stations Following the Summer Shutdown.	RTRA SRC	Completed
119502MX_SAFE CAPS_RTRA_003	Post Communication signage at the beginning of the scaffolding to alert RVO's to continue to the 8-car marker.	RTRA SRC	Completed
119502MX_SAFE CAPS_RTRA_004	Rail Supervisors assigned to Silver Spring Station to monitor trains entering the station.	RTRA SRC	Completed
119502MX_SAFE CAPS_RTRA_005	West Falls Church Assistant Superintendent to discuss proper hand signals and entering the roadway with a backpack during their next Safety Meeting.	RTRA SRC	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.

RTRA
Train ID 140 Rail Vehicle Operator (RVO)

The Rail Vehicle Operator is a WMATA employee with 10 months of service and five (5) total months of experience as an RVO. The RVO holds a Roadway Worker Protection (RWP) Level 2 certification that expires in October 2024. Prior to the interview, the RVO responded to Safety fatigue assessment questions.

During the formal interview, the RVO described their daily job functions and was asked about any training challenges in becoming a RVO. They stated some challenges they faced were learning to read schedules and manifest correctly. The RVO noted that on the day of the event, they received a copy of the employee notice attached to their manifest instructing operators to pull to the 8-car marker at Silver Spring Station. When they arrived at Silver Spring Station, they could not see where the 8-car marker was located due to the scaffolding support beams on the platform. They stopped the train before the scaffolding and serviced the station because they were unsure if they were supposed to go to the area due to the caution markings on the support beams.

The RVO explained how ADO functions. They stated that they pressed and held the Train Berth button; however, they were unaware that the consist doors opened automatically. The RVO noted that in the absence of ADO, they are supposed to contact the MICC and obtain permission to manually open the doors. The RVO described Manual Door Operations where the Door Open Pushbutton must be pressed, then the OK button on the console must be pressed afterward, and finally, the Door Open Pushbutton must be pressed once more. The RVO did not recall opening the doors using Manual Mode.

When asked, the RVO explained that they had made a second trip on track 2 towards Shady Grove Station and again stopped and serviced Silver Spring Station before the scaffolding. As they were exiting the station, a Rail Supervisor waved them down and informed them that they had stopped short and needed to readjust their train to the 8-car marker. They moved the train to the 8-car marker and were instructed to make good announcements and take the train out of service.

When asked if they noticed the 8-car marker as they exited the station on their first trip towards Shady Grove Station, they stated that they did not because they were concentrated on the rail and signals ahead. The RVO stated Silver Spring Station is on a curved track. The RVO stated they did not observe any 6-car marker at Silver Spring Station.

Rail Supervisor

The Rail Supervisor is a WMATA employee with 18 years of service and 7 total years of experience as a Rail Supervisor. The Rail Supervisor holds a Roadway Worker Protection (RWP) Level 2 certification that expires in August 2025. Before the interview, the Rail Supervisor responded to a series of Safety fatigue assessment questions.

During the formal interview, the Rail Supervisor described their day-to-day functions as a Terminal Supervisor and stated that on the day of the event, they were working overtime at Silver Spring

Station to assist RVOs to properly berth their trains due to the ongoing construction on the platform. The Rail Supervisor instructed the RVOs to press the Train Berth button only when they reached the 8-car marker to prevent the train's BEC from misaligning the train doors with the scaffolding support beams. The Rail Supervisor stated that he spoke to all of the RVOs two (2) to three (3) times, instructing them where to stop the train. The Rail Supervisor stated they were on their break and looking at their Rail Performance Monitor (RPM) when they stepped out of the blockhouse and observed the train stopped mid-platform on Track 2. The train began to move towards them, and they gave the hand signal for the train to stop. They asked the RVO if they had serviced the station, and they replied, "Yes." They then asked the RVO how many cars were in their consist, and they stated eight (8) cars. The Rail Supervisor then instructed the RVO to hold their location and place the train out of service due to doors being opened off the platform.

The Rail Supervisor stated they could not reach the MICC via the radio due to radio congestion. They then notified the MICC Assistant Superintendent of the incident via telephone.
When asked if they recalled seeing the RVO on their previous trip when they stopped short, the Rail Supervisor stated they did not.

Washington Metropolitan Area Transit Authority

Office of Rail Transportation: Managerial Incident Investigation Report

Incident Status: UPDATED

GENERAL INCIDENT INFORMATION

Incident Type:	Improper Door Operation	Delay (Minutes):	6 minutes
Incident Date:	Sunday, September 01, 2024	Vehicles Involved:	ID 134 L7674-7503-7430-7721 ID 140 L7674-7503-7430-7721
Incident Time:	5:54pm/08:32pm	First Reported By:	Rail Operations Supervisor [redacted]
Location:	Silver Spring Station Track #2		

BRIEF DESCRIPTION:

At Approximately 5:54pm, Operator [redacted] while operating ID 134 on track #2 at Silver Spring Station, stopped short of the 6-car marker and opened the doors off the trains off the platform with two and a half cars outside of the platform limits. After service the station [redacted] continued in service without reporting the incident to the MICC or performing a ground walk-around. This incident was brought to light during the in-person interview with [redacted]. There were no reported damages to any equipment, injuries or, customers reported on the roadway.

At approximately 8:32pm, Operator [redacted] while operating ID 140 on track #2 at Silver Spring Station, stopped short of the 6-car marker and opened the doors off the trains off the platform with two and a half cars outside of the platform limits. After doing so [redacted] closed the trains doors and proceeded to properly berth at the 8-car marker. A RTRA Supervisor was who was assigned to Silver Spring came out of the terminal after witnessing the incident and flagged the operator to stop the train. The operator stopped at the 8-car marker and was questions by the supervisor as to what happened. The supervisor notified the MICC of the incident and followed all instructions and procedures. There were no reported damages to any equipment, injuries or, customers reported on the roadway. Operator [redacted] was taken out of service and transported for post-incident testing.

Key Employees Involved & Employee Statements:

Operator [redacted] stated in [redacted] incident report that "Arrived at Silver spring Station around 8:30pm. I stopped the train just before going under the scaffold. I serviced the platform I hit the train berthed button. I cant remember if it opened or not. The supervisor told me to pull the train up to the 8-car marker. [redacted] then informed me to put the train out of service."

Operator [redacted] stated in [redacted] incident report that "Arrived at Silver Spring around 5:54pm I stopped the train just before gping under the scaffolding. I serviced the station and continued on.

Supervisor [redacted] stated "approximately 832 PM I observed train stop and moved at Platform 2, Silver Spring close to the 6-car mark. I did not see door indicator lights illuminated and believed the train may have lost speed commands. I flagged the train down using hand signals. I asked the operator if [redacted] had serviced the platform and [redacted] replied yes. I asked [redacted] how many cars [redacted] had, and [redacted] replied 8 calls. I instructed [redacted] to place [redacted] train out of service and that a ground walk around would have to be performed. At no time did I instruct the operator to move [redacted] train or readjust [redacted] train. At approximately 834 I contacted the MICC Assistant Superintendent and notified by phone due to constant radio calls. I established radio contact with OPS 1 at approximately 835 and advised of the incident that the train was out of service due to doors off the platform. I requested foul time and permission for a ground walk around After conducting my ground walk around at approximately 8:45 I did not observe anyone on the roadway. I transported incident train to Shady Grove and was relieved. Operator [redacted] was transported by Unit [redacted] Supervisor [redacted]. I interviewed Operator [redacted] [redacted] stated that [redacted] used ADO train berth that due to the scaffolding [redacted] was confused to the location of the 8-car mark. Operator [redacted] also stated that [redacted] that this was. [redacted] first time to Silver Spring and [redacted] has been an operator for five months. Operator [redacted] stated that [redacted] believed [redacted] training was properly berthed."

Figure 14 - RTRA Managerial Investigation Report, page 1 of 3.

Washington Metropolitan Area Transit Authority

Office of Rail Transportation: Managerial Incident Investigation Report

Post Incident Testing & Employee History:

-Rail Vehicle Operator [redacted] was removed from service and transported for post incident testing
- Operator [redacted] was hired on October 22, 2023
- Operator [redacted] has been a certified Rail Vehicle Operator since April 5, 2024
- Operator [redacted] last Train Certification was April 4, 2024

SIGNIFICANT INCIDENT TIMELINE:

5:52 PM – Operator [redacted] enters Silver Spring station on track #2 and stops this train with 2.5 cars off the platform.
5:54 PM – After attempting to utilize the train berth feature Operator [redacted] manually opened the trains doors on the platform side of the train. Operator [redacted] then closes the train doors and continues in service towards Shady Grove.

8:30 PM – Operator [redacted] enters Silver Spring station on track #2 and stops this train with 2.5 cars off the platform.
8:32 PM – After attempting to utilize the train berth feature Operator [redacted] manually opened the trains doors on the platform side of the train. [redacted] then closes the doors and begins to move the train.
8:32 PM – Supervisor [redacted] witnesses the incident and steps out of Silver Spring blockhouse and flags the operator to stop their train.
8:34PM – Supervisor [redacted] contacts the MICC by way of radio and landline to make notification of the incident.
8:38PM – Incident train is being offloaded in preparation for a ground walk around.
8:41PM - Supervisor [redacted] is granted foul time to perform the ground walk around.
8:43PM - Supervisor [redacted] competed ground walk around and relinquishes foul time.
9:33PM – Operator [redacted] is transported for post incident testing by Supervisor [redacted].

SIGNIFICANT FINDINGS & PENDING ISSUES:

- The operator of 140 was contacted by the MICC and failed to respond or report the incident.
- This was the operators first time operating through Silver Spring. The operator is new and has never operated past Takoma due the red line shutdown. The operator transferred to the red line June 1, 2024, during the pick.
- Earlier in the day [redacted] had the same incident and failed to report it while operating ID 134
- [redacted] was in possession of ROPN 603-177-00 Reopening of Silver Spring, Forest Glen, Wheaton, and Glenmont stations.

Figure 15 - RTRA Managerial Investigation Report, page 2 of 3.

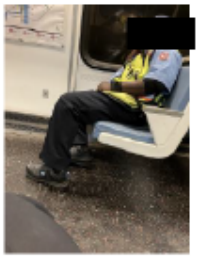
Washington Metropolitan Area Transit Authority

Office of Rail Transportation: Managerial Incident Investigation Report

CORRECTIVE ACTIONS:

This incident is under investigation. At a minimum the operator will be held in a non-operational status until they can be refreshed by ROQT. Any other corrective actions are forthcoming. The operator is also being sent for a fit for duty exam after showing signs of fatigue and sleeping during [redacted] post incident transport.

INCIDENT PHOTOS: ATTACH ANY SIGNIFICANT PHOTOS BASED ON THE INITIAL INCIDENT INVESTIGATION.



Report Prepared by: [redacted], Superintendent of Shady Grove Division

Report Reviewed by:

Figure 16 - RTRA Managerial Investigation Report, page 3 of 3.

Appendix C – Rail Operations Personnel Notice: Red Line Reopening

RAIL OPERATIONS
PERSONNEL NOTICE

RTRA-603-177-00
Friday, August 30, 2024

September 1st Reopening of Silver Spring, Forest Glen, Wheaton & Glenmont Following Summer Shutdown

On Sunday, September 1, 2024, normal service will resume on the Red Line with the reopening of Silver Spring, Forest Glen, Wheaton, and Glenmont stations.

The sign above will be displayed at all reopened stations.

These stations were closed while the Maryland Transit Administration (MTA) conducted Purple-Line related construction. With the reopening, however, customers at Silver Spring station will notice that construction will still occur with scaffolding in place on the platform level for the next few years.

NOTE: *Due to the scaffolding installation at Silver Spring station, rail vehicle operators will be required to properly berth the train at the 8-car marker PRIOR to depressing the train berth button for activation of the auto doors. This is to prevent an early Back End Code (BEC) and misalignment of the train doors with the scaffolding supports. A supervisor will be on-site during the first week of operations to monitor for any instances of the doors opening where the supports are present.*

During the shutdown, Metro crews were able to conduct multiple maintenance projects to include the replacement of 6,500 feet of rail, 6,000 feet of grout pads, 183 track signs, 2,500 crossties that support the rails, and 354 signs on mezzanines, platforms, and entrances. Later this year, new Digital Passenger Information Displays will be installed at all of the stations from Takoma to Glenmont.

Upon the reopening on Sunday, September 1st, Station Managers and Supervisors are reminded to ensure all shutdown-related signage has been removed from all stations.

Feel free to contact an RTRA Division Manager or Rail Operations and/or Station Supervisor if you have any questions regarding the contents within this notice. And for additional information, please visit Station Manager DIRECT or Four Red Line stations reopen Sept 1 MTA Purple Line construction continues at Silver Spring | WMATA

Rail Operations Management would like to extend gratitude to everyone who helped support this summer's shutdown.

Thank you for your continued support and please be safe.

To report a potential safety risk, please scan the QR code or use this link: tinyurl.com/ReportRisks
Note: Electrical devices shall only be used in designated areas and in accordance with the WMATA Electronic Device Policy

Appendix D – Photographs

Figure 17 - Depicts signage at Silver Spring Station scaffolding instructing RVO's to continue to the end of the platform.

Appendix E – Train ID 140 RVO's Certification

TRAIN OPERATOR AND ROAD SUPERVISOR JOB TASK PROFICIENCY EVALUATION

Name: [redacted]	Emp.No: [redacted]	Division: ROQT	Date: April 3, 2024

Reason for Certification: *Please place a check in an area below.*

X Certification: Student ☐ Pre-certification: Student ☐ Division Request ☐ Re-Certification ☐ Return to Duty ☐ Other _____

Exam Administered	Score	Date Taken
MOR attempt # 1	80%	January 29, 2024
TVOIM/TOIM attempt # 1	76%	January 29, 2024
Supervisor Combination attempt #	%	
Practical attempt #: 1	QL-1	April 3, 2024

Equipment *(current/working condition)*	Yes	No
MOR	x	
Perm/Temp/Special Orders	x	
Troubleshooting Guide	x	
Flashlight	x	
Safety Vest	x	
Footwear	x	
Identification (One Badge, RWP)Oct 24	x	

Comments:

Signatures:	Date:
Employee [redacted]	April 3, 2024
Examiner [redacted]	April 3, 2024

RTRA-906-01-00 TRAIN OPERATOR AND ROAD SUPERVISOR JOB TASK PROFICIENCY EVALUATION Page 1

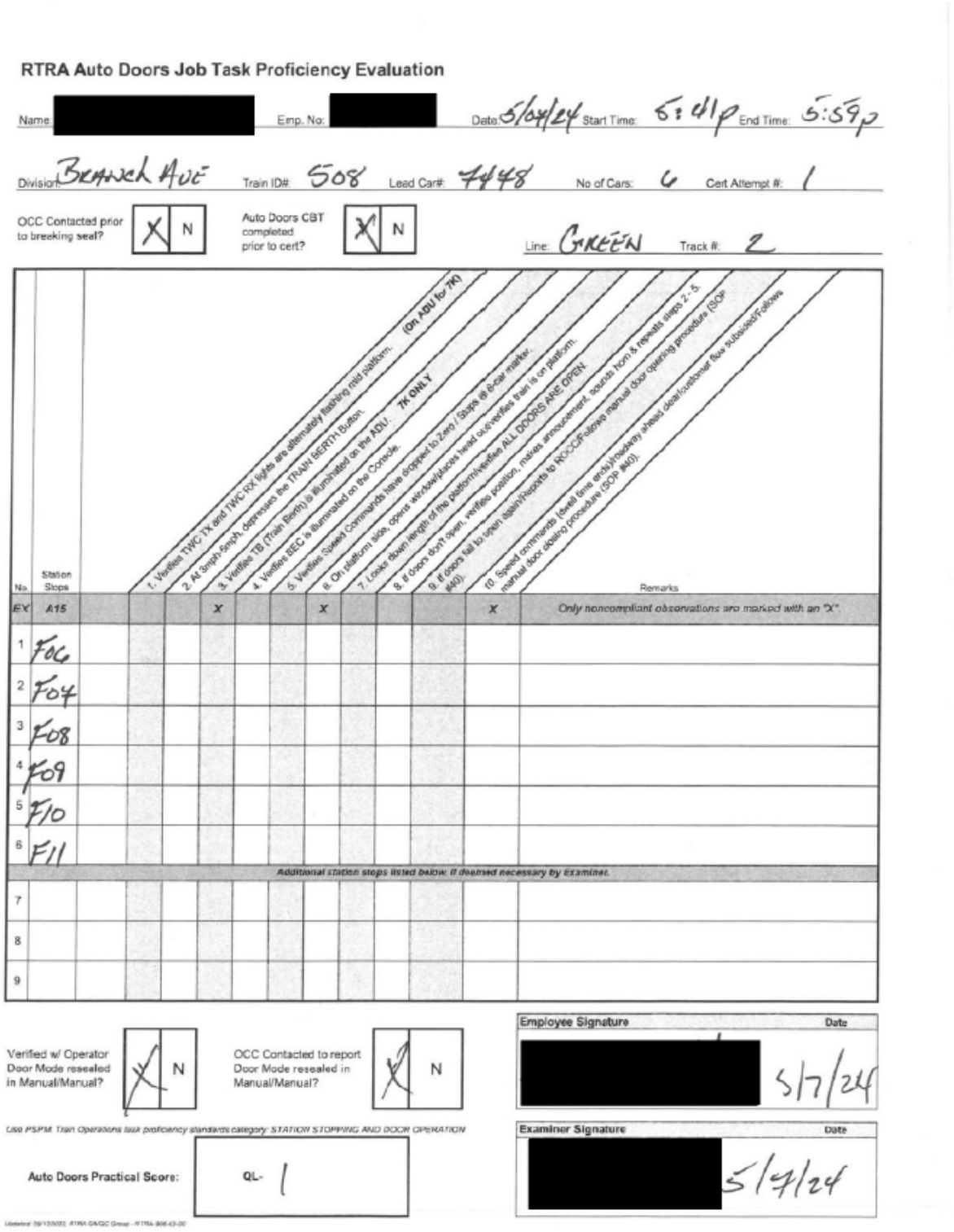
Figure 18 – Train ID 140 RVO's Certification, page 1 of 2.

TRAIN OPERATOR AND ROAD SUPERVISOR JOB TASK PROFICIENCY EVALUATION (continuation sheet) Emp No.: [redacted] Date: April 3, 2024

CATEGORIES / SUBCATEGORIES	QUALITY LEVEL	REMARKS (*Remarks are required for a quality level score of 2 or 3*) – ALL TIMES (*are in minutes*)
I. Preparation for Service	QL-1	Cars Used:7678-7511
1. Exterior Inspection	1	7679 Barrier no attached 7511 Rotary drum switch c/o 7678 BCO c/o
2. Interior Inspection - Trailing Cab	1	7510 EV c/b tripped
3. Interior Inspection - Each Car	1	7511 P/A c/b tripped 7679 Door valance hanging
4. Interior Inspection – Oper. Cab	1	7678 Horn c/o
5. Rolling Test / Rolling Brake Test	1	Track 19
		Time Allotted: 35:00 / Actual Time: 25:42 :
II. Mainline Operation	QL-1	
6. Communications	1	OPS 3
7. Door Oper. & Station Stopping	1	J02 track 2
8. Use of Horn	1	J02 track 1
9. Speed Adherence/Manual Oper.	1	J01 to J03 tracks 1& 2
10. Turn Back Moves	1	Location: J03 Time Allotted: 02:00 / Actual Time: :55
11. Manual Route Selection	1	Location: J01 16
12. EV Shutoff	1	Time Allotted: 00:30 (01:00) / Actual Time: :08
III. Yard Operation	QL-1	
13. Communications	1	C99 Tower
14. Yard Movements	1	Track 19
15. Coupling	1	Time Allotted: 08:00 (12:00) / Actual Time: 5:41 Cars Used:7519+7197 +
16. Uncoupling	1	Time Allotted: 05:00 (07:30) / Actual Time: 4:12 Cars Used: <7196-7510 >
17. Isolation (Self-Recovery)	1	Time Allotted: 15:00 (22:30)/ Actual Time 11:11 Cars Used:7678-7511-7196-7519
18. Manual Switch Operation	1	Switch 161
IV. Miscellaneous	QL-1	
19. Recovery Train Operation	1	Time Allotted: 12:00 (18:00) / Actual Time: 10:11 + Cars Used:7678-7511-7196-7519
20. Troubleshooting	1	
No All doors closed (EEDR belly car #7197) Actual time: 3:50		
No Brakes off (friction brake c/b no reset belly car #7519) Actual time 4:42		

Figure 19 - Train ID 140 RVO's Certification, page 2 of 2.

Appendix F – Train ID 140 RVO's Automatic Door Operation Certification



RTRA Auto Doors Job Task Proficiency Evaluation

Name: [redacted] Emp. No: [redacted] Date: 5/04/24 Start Time: 5:41p End Time: 5:59p

Division: Branch Ave Train ID#: 508 Lead Car#: 7448 No of Cars: 6 Cert Attempt #: 1

OCC Contacted prior to breeking seal? X N

Auto Doors CBT completed prior to cert? X N

Line: GREEN Track #: 2

No.	Station Stops	1. Verifies TWC-TX and TWC-RX lights are alternately flashing mid platform. (On ADU for 7K)	2. At 3mph-5mph, depresses the TRAIN BERTH Button.	3. Verifies TB (Train Berth) is illuminated on the ADU. 7K ONLY	4. Verifies BEC is illuminated on the Console.	5. Verifies Speed Commands have stopped to Zero / Stops @ 8-car marker.	6. On platform side, opens arm-rest/places head out/verifies train is on platform.	7. Looks down length of the platform/verifies ALL DOORS ARE OPEN	8. If doors don't open, verifies position, makes announcement, sounds horn & repeats steps 2 - 8.	9. If doors fail to open again/Reports to ROCC/Follows manual door opening procedure (SOP #40).	10. Speed commands (dwell time and)/proceed ahead clear/customer flow subsided/Follows manual door closing procedure (SOP #40).	Remarks
EX	A15				X			X				X	Only noncompliant observations are marked with an "X".
1	F06												
2	F07												
3	F08												
4	F09												
5	F10												
6	F11												
		Additional station stops listed below if deemed necessary by examiner.											
7													
8													
9													

Verified w/ Operator Door Mode resealed in Manual/Manual? X N

OCC Contacted to report Door Mode resealed in Manual/Manual? X N

Employee Signature [redacted] Date 5/7/24

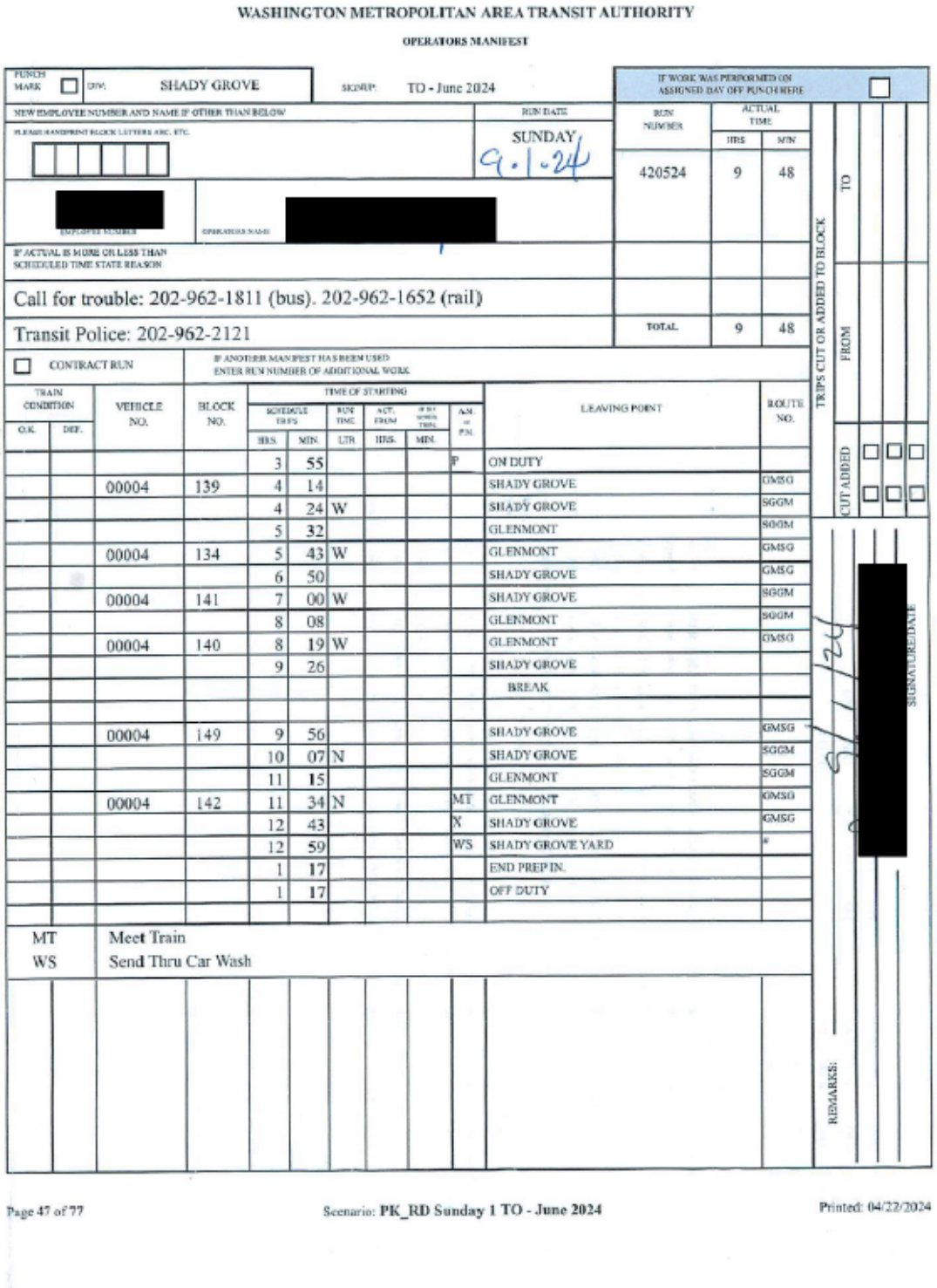
Use PSPM Train Operations task proficiency standards category: STATION STOPPING AND DOOR OPERATION

Auto Doors Practical Score: QL- 1

Examiner Signature [redacted] Date 5/4/24

Figure 20 - Train ID 140 RVO's Automatic Door Operations Certification.

Appendix G – Train ID 140 RVO's Manifest



WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

OPERATORS MANIFEST

PUNCH MARK ☐ DIV. SHADY GROVE SIGNUP: TO - June 2024

IF WORK WAS PERFORMED ON ASSIGNED DAY OFF PUNCH HERE ☐

NEW EMPLOYEE NUMBER AND NAME IF OTHER THAN BELOW

PLEASE HANDPRINT BLOCK LETTERS ABC, ETC.

RUN DATE: SUNDAY 9.1.24

EMPLOYEE NUMBER [redacted]

OPERATORS NAME [redacted]

IF ACTUAL IS MORE OR LESS THAN SCHEDULED TIME STATE REASON

Call for trouble: 202-962-1811 (bus). 202-962-1652 (rail)

Transit Police: 202-962-2121

☐ CONTRACT RUN

IF ANOTHER MANIFEST HAS BEEN USED ENTER RUN NUMBER OF ADDITIONAL WORK

RUN NUMBER	ACTUAL TIME HRS	ACTUAL TIME MIN
420524	9	48
TOTAL	9	48

TRIPS CUT OR ADDED TO BLOCK: TO / FROM / CUT ADDED

TRAIN CONDITION O.K.	TRAIN CONDITION DEF.	VEHICLE NO.	BLOCK NO.	TIME OF STARTING SCHEDULE TRIPS HRS.	SCHEDULE TRIPS MIN.	RUN TIME LTR.	ACT. FROM HRS.	ACT. FROM MIN.	A.M. or P.M.	LEAVING POINT	ROUTE NO.
				3	55				P	ON DUTY	
		00004	139	4	14					SHADY GROVE	GMSG
				4	24	W				SHADY GROVE	SGGM
				5	32					GLENMONT	SGGM
		00004	134	5	43	W				GLENMONT	GMSG
				6	50					SHADY GROVE	GMSG
		00004	141	7	00	W				SHADY GROVE	SGGM
				8	08					GLENMONT	SGGM
		00004	140	8	19	W				GLENMONT	GMSG
				9	26					SHADY GROVE	
										BREAK	
		00004	149	9	56					SHADY GROVE	GMSG
				10	07	N				SHADY GROVE	SGGM
				11	15					GLENMONT	SGGM
		00004	142	11	34	N			MT	GLENMONT	GMSG
				12	43				X	SHADY GROVE	GMSG
				12	59				WS	SHADY GROVE YARD	
				1	17					END PREP IN.	
				1	17					OFF DUTY	

MT Meet Train
WS Send Thru Car Wash

REMARKS:

SIGNATURE/DATE [redacted] 9/1/24

Page 47 of 77 Scenario: PK_RD Sunday 1 TO - June 2024 Printed: 04/22/2024

Appendix H – MICC Rail Approved Incident Report

Washington Metropolitan Area Transit Authority
Maintenance and Material Management System
MICC Rail Approved Incident Report

Incident Number : 8792563 **SMS Number :**

RTRA Supervisor at Silver Spring reported that train 140 was not properly berthed track two when it had serviced the station. Train 140 operator reported to the supervisor that ADO had opened the doors.

Date/Time 09/01/2024 20:30	**Station Location** B08: (SILVER SPRING STATION)	**Reported By**
Trouble Code IDOR DOORS OPENED OFF PLATFORM	**Location Details**	**Notifications**
Responsibility Code RTR RAIL TRANSPORTATION	**Direction** INBOUND	**Resolved By**
Train ID 140	**Track Number** N/A	**Approved/Closed by**
Line RED	**Chain Markers**	**Org. OCC** ROCC

Delays in Minutes

Line Delay	Train Delay	Passenger Delay
22	24	24

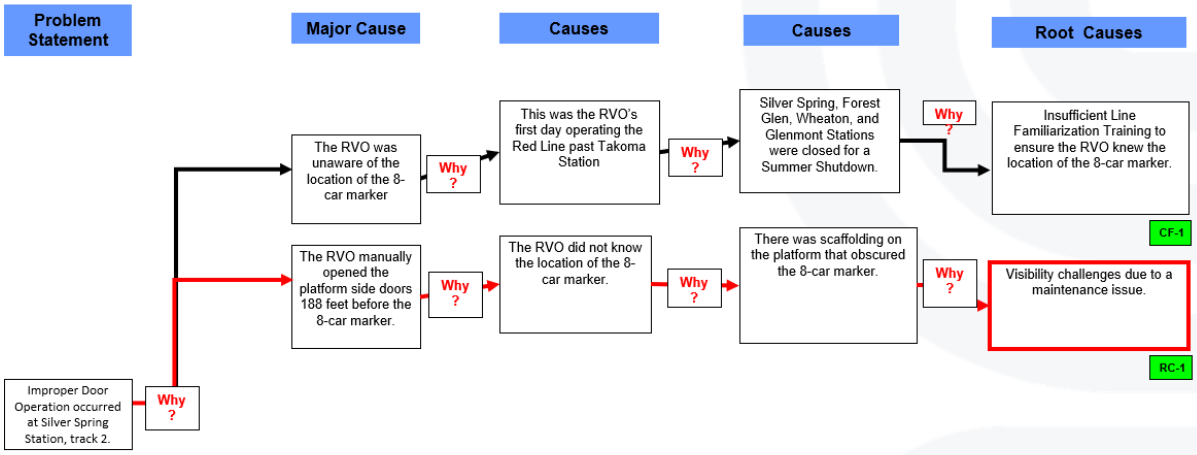
Trips Modified

Partial	Late Dispatch	Rerouted	Not Dispatched	Offloads
9	0	0	0	5

Incident Chronology (Timeline)

Time	Add'l Pass. Delays	Add'l Trouble	Incident Level Code	Description
20:30	24	IDOR	D2	RTRA Supervisor at Silver Spring reported that train 140 was not properly berthed track two when it had serviced the station. Train 140 operator reported to the supervisor that ADO had opened the doors.
20:37				Train 144 began holding at Forest Glen track two, beginning the longest line delay.
20:41				After being able to make radio contact with the operator and supervisor on scene, the supervisor requested and was given foul time on track two in order to perform a ground inspection to check for any personnel that might have fallen to the roadway.
20:44				The RTRA supervisor on-scene relinquished his foul time and reported to MICC that the ground inspection was clear.
20:51				Train 144 had been instructed to offload their train and reverse ends toward Glenmont. Train 144 began moving back toward Glenmont to clear congestion.
20:52				Train 107 operator had been instructed to reverse ends at Silver Spring track one for service toward Shady Grove. Train 107 departed Silver Spring track one in service, ending the incident customer delay.
20:57				Train 142 operator had been instructed to reverse ends toward Glenmont. Train 142 began moving back toward Forest Glen to allow the customers to exit who had been stranded outside of Silver Spring.
21:01				Train 146 was the first train to single track by way of track one between Forest Glen and Silver Spring.
21:02				Train 142 serviced Forest Glen track two, allowing its customers to exit the train. Train 146 serviced Forest Glen track one, ending the longest line delay.
21:04				It had been determined by the SIO that train 740 was clear to move. The RTRA Supervisor on-scene took over operations of the train, and train 740 began moving non-revenue toward Shady Grove Yard for further investigation.

Appendix I – Why-Tree Analysis



Root Cause Analysis

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

FINAL REPORT OF INVESTIGATION A&I E24693

Date of Event:	September 3, 2024
Type of Event:	O-15(a): Improper Door Operation
Incident Time:	16:20 hours
Location:	Braddock Road Station, Track 2
Time and How received by SAFE:	17:19 hours – Safety Information Official (SIO)
WMSC Notification Time:	18:08 hours
Responding Safety Officers:	None
Rail Vehicle:	Train ID 332 (L6132-6233x6173-6172x6011-6010T)
Injuries:	None
Damage:	None
Emergency Responders:	None
SMS I/A Incident Number:	20240819#119168MX

September 3, 2024
Table of Contents

Abbreviations and Acronyms

AIMS	Advanced Information Management System
ARS	Audio Recording System
CCTV	Closed-Circuit Television
CM	Chain Marker
CMOR	Office of Chief Mechanical Officer
COSI	Office of Communications and Signaling
IIT	Incident Investigation Team
MICC	Metro Integrated Command and Communications Center
MOR	Metrorail Operating Rulebook
NOAA	National Oceanic and Atmospheric Administration
RTC	Rail Traffic Controller
RTRA	Office of Rail Transportation
RVO	Rail Vehicle Operator
RWP	Roadway Worker Protection
SAFE	Department of Safety
SEI	Signaling Engineering Investigation
SIO	Safety Information Officer
SOP	Standard Operating Procedure
SPOTS	System Performance On-time Summary
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 Tuesday, September 3, 2024, at 16:33 hours, a photograph was posted to social media website "X," formerly known as "Twitter," showing a train at Braddock Road Station with the doors opened on the non platform side. This prompted personnel to verify the validity of the photograph. At 16:20 hours, Train ID 332, a six-car Yellow line consist (L6132-6233x6173-6172x6011-6010T), experienced an improper door operation when the non-platform side doors were opened. This was confirmed by a review of closed-circuit television (CCTV) camera at Braddock Road Station. The CCTV footage showed the door indicator lights illuminated meaning doors opened but the platform side doors were closed.

The review of CCTV indicated that at 16:20 hours, Train ID 332 came to a complete stop 13 feet before the 8-car marker at Braddock Station, and the train doors were manually opened on the non-platform side. The Rail Vehicle Operator (RVO) then opened the platform side doors for 14 seconds, servicing the station, and then closed the platform side doors. At 16:21 hours, the RVO closed the non-platform side doors. The non-platform side doors were open for 45 seconds.

The RVO did not report the Improper Door Operation and continued to Huntington Station. Upon arriving at Huntington Station, the RVO contacted the Metro Integrated Command and Communications Center (MICC) and reported that the train was experiencing door issues. The Radio Rail Traffic Controller (RTC) instructed a Rail Supervisor to board the train. The Rail Supervisor advised that they observed no issues with the train doors.

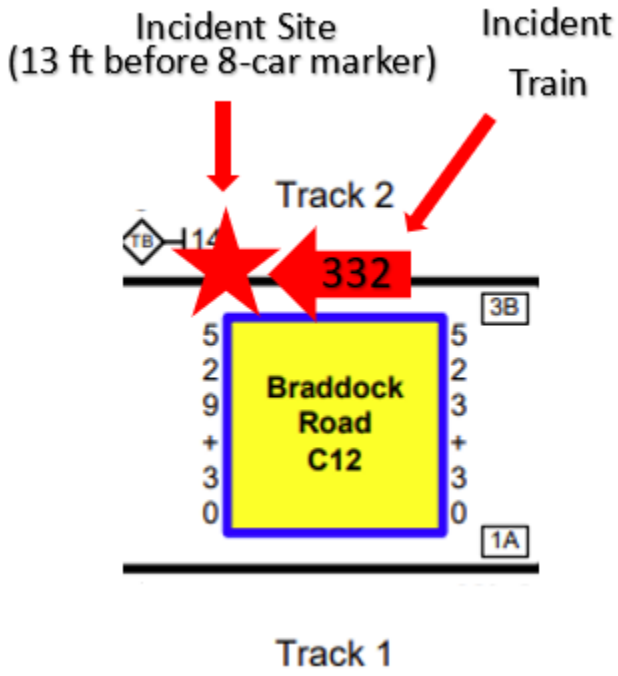
The RVO was removed from service for post-incident testing. The train was removed from service for post-incident inspection.

The probable cause of the Improper Door Operation event on September 3, 2024, at Braddock Road Station, was the RVO's failure to adhere to established procedures for proper platform berthing and station servicing.

Incident Site

Braddock Road Station is an outdoor, center platform station with its platform limits at Chain Marker (CM) 529+30 – 523+30. Braddock Road Station has ballasted track and an interlocking on the inbound end of the station.

Field Sketch/Schematics



The above depiction is not to scale.

Purpose and Scope

The purpose of this accident investigation and candid self-evaluation is 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

Upon receiving notification of the Improper Door Operation event on September 3, 2024, the Department of Safety (SAFE) dispatched a cross-functional team to assess the scene and conduct the subsequent investigation. SAFE team members worked with relevant WMATA subject matter experts to review the incident's facts and data.

The preliminary investigative methodologies included the following:

- Site assessment through video and document review.
- Formal Interviews – SAFE interviewed an individual 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 individual:
  - RVO
- 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 – A collection of relevant work history information and process documentation contained in Metro systems of record. These records include:
    - Metrorail Operating Rulebook (MOR)
    - National Oceanic and Atmospheric Administration (NOAA)
    - RVO Incident Report
    - RVO 30-Day Work History
    - RVO Certification
    - RTRA Managerial Incident Investigation Report
    - RTRA Supervisor's Written Statement

- System Data Recording Review – A collection of information contained in Metro Data Recording Systems. This data includes:
    - Audio Recording System (ARS) playback
    - Closed-Circuit Television
    - Vehicle Monitoring and Diagnostic System (VMDS)/Event Record (ER)

Investigation

On Tuesday, September 3, 2024, a photograph was posted to the website "X," formerly known as "Twitter," showing a train at Braddock Road Station with the non-platform side doors open. A review of the CCTV at Braddock Road Station verified that at 16:20 hours, Train ID 332, a six-car Yellow line consist (L6132-6233x6173-6172x6011-6010T) experienced an improper door operation. The door indicator lights illuminated, meaning doors were opened, but the platform side doors were still closed.

The train stopped 13 feet before the 8-car marker at Braddock Station and doors were manually opened the non-platform side. The non-platform side doors were open for 45 seconds. During that time, the RVO manually opened the platform side doors for 14 seconds, servicing the station. The RVO then closed the platform side doors. At 16:21 hours, the RVO closed the non-platform side doors. At 16:22 hours, Train ID 332 departed Braddock Road Station.

Upon arrival at Huntington Station, the RVO contacted the MICC Button RTC via their personal cellphone and informed the Button RTC that the train doors were "popping" open uncommanded.

At 16:32 hours, the Button RTC contacted an Office of Rail Transportation (RTRA) Terminal Supervisor regarding the RVO's report of door problems with the train. The Terminal Supervisor advised the Button RTC that there were no door issues with the train and that another RVO was currently operating the train.

At 16:33 hours, the Button RTC contacted the Terminal Supervisor again to identify the RVO's name. At 16:59 hours, the RVO was off duty as scheduled.

On Wednesday, September 4, 2024, at 06:09 hours, the RVO reported for duty. The RVO was escorted for post-incident testing in adherence to Standard Operating Procedure 102-01-02, which outlines the protocol for Removing an Employee from Service for involvement in an operational safety event, the RVO was removed from service for post-incident testing.

The CMOR/IIT determined that based on the results of the Vehicle Monitoring and Diagnostic System (VMDS) data, no fault was observed with the pushbutton or the auto door open signals that resulted in the doors opening uncommanded. The door opened opposite the platform side as commanded. The door pushbuttons were subsequently exercised multiple times with no indication of sticking or binding.

Chronological Event Timeline

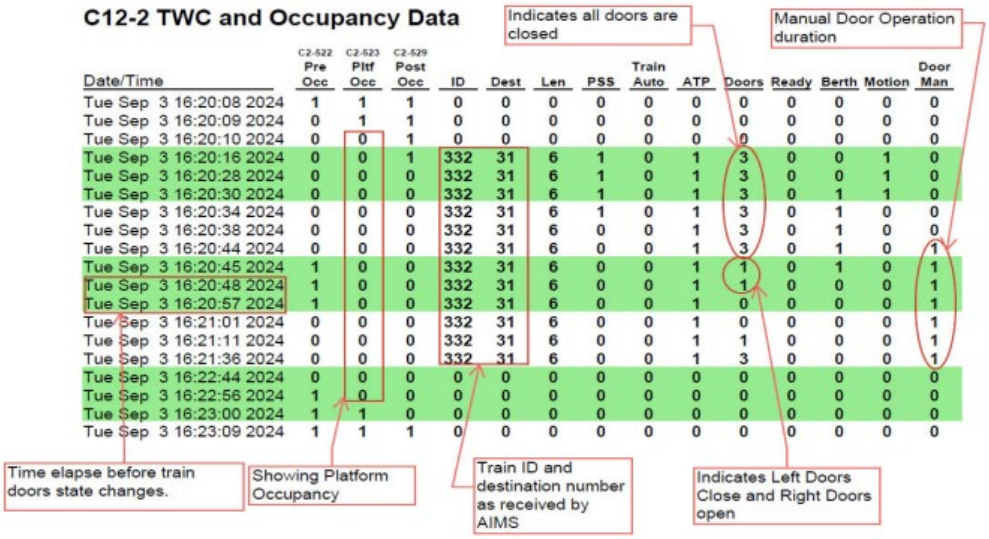
A review of ARS playback, i.e., phone and radio communications, revealed the following timeline:

Time	Description
16:20:21 hours	Train ID 332 (L6132) was observed entering the platform limits at Braddock Road Station, Track 2. [CCTV]
16:20:43 hours	Train ID 332 open door indicator lights illuminated; the left-side doors (platform side) closed. [CCTV]
16:20:44 hours	Manual door operation command started. [TWC]
16:20:48 hours	Right side doors (non-platform side) open. [TWC]
16:20:55 hours	Left side doors (platform side) open. The open door indicator lights remain illuminated. [CCTV]
16:21:09 hours	Left side doors (platform side) closed. The open door indicator lights remain illuminated. [CCTV]
16:21:13 hours	Open door indicator lights continue illuminated. [CCTV]
16:21:35 hours	Open door lights were turned off. [CCTV]
16:21:36 hours	Manual door operation command ended. All doors are closed. [TWC]
16:22:53 hours	Train ID 332 (6010T) observed, departing the platform limits. [CCTV]
16:30:49 hours	RVO: Contacted the MICC and informed the Button RTC that the train doors were popping open. [YL/GRN Phone]
16:32:01 hours	Button RTC: Contacted Huntington Terminal Supervisor about a report of door problems with the train at Huntington Station by an unidentified RVO. Terminal Supervisor: Advised Button RTC that there were no reports of any door issues and that the train was in operation. [YL/GRN Phone]
16:33:37 hours	Button RTC: Contacted the Terminal Supervisor to identify the name of the RVO. The Button RTC had the RVO's phone number and were unsure of the exact name of the RVO. [YL/GRN phone]
17:15:24 hours	AOM: Advised Rail 1 that the MOC desk was notified of an improper door operation at Braddock Road Station. [Phone]
17:16:57 hours	Rail 1: Contacted the MOC desk to inquire how they were notified and they responded it was a message on Twitter. [Phone]
17:19:45 hours	Rail 1: Contacted the SIO to inform them that they were notified of an improper door operation and they were investigating it. [Phone]

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

Office of Communications and Signaling/Signal Engineering Investigation (COSI/SEI)

According to the COSI/SEI report, based on the Train to the Wayside Communication (TWC) and Occupancy Data, Train ID 332 doors were opened manually on the right, non-platform side, for approximately 10 seconds before train doors state changed, closing the right side doors and then opening the left side doors (platform side).



Date/Time	C2-522 Pre Occ	C2-523 Pltf Occ	C2-529 Post Occ	ID	Dest	Len	PSS	Train Auto	ATP	Doors	Ready	Berth	Motion	Door Man
Tue Sep 3 16:20:08 2024	1	1	1	0	0	0	0	0	0	0	0	0	0	0
Tue Sep 3 16:20:09 2024	0	1	1	0	0	0	0	0	0	0	0	0	0	0
Tue Sep 3 16:20:10 2024	0	0	1	0	0	0	0	0	0	0	0	0	0	0
Tue Sep 3 16:20:16 2024	0	0	1	332	31	6	1	0	1	3	0	0	1	0
Tue Sep 3 16:20:28 2024	0	0	0	332	31	6	1	0	1	3	0	0	1	0
Tue Sep 3 16:20:30 2024	0	0	0	332	31	6	1	0	1	3	0	1	1	0
Tue Sep 3 16:20:34 2024	0	0	0	332	31	6	1	0	1	3	0	1	0	0
Tue Sep 3 16:20:38 2024	0	0	0	332	31	6	0	0	1	3	0	1	0	0
Tue Sep 3 16:20:44 2024	0	0	0	332	31	6	0	0	1	3	0	1	0	1
Tue Sep 3 16:20:45 2024	1	0	0	332	31	6	0	0	1	1	0	1	0	1
Tue Sep 3 16:20:48 2024	1	0	0	332	31	6	0	0	1	1	0	0	0	1
Tue Sep 3 16:20:57 2024	1	0	0	332	31	6	0	0	1	0	0	0	0	1
Tue Sep 3 16:21:01 2024	0	0	0	332	31	6	0	0	1	0	0	0	0	1
Tue Sep 3 16:21:11 2024	0	0	0	332	31	6	0	0	1	1	0	0	0	1
Tue Sep 3 16:21:36 2024	0	0	0	332	31	6	0	0	1	3	0	0	0	1
Tue Sep 3 16:22:44 2024	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tue Sep 3 16:22:56 2024	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Tue Sep 3 16:23:00 2024	1	1	0	0	0	0	0	0	0	0	0	0	0	0
Tue Sep 3 16:23:09 2024	1	1	1	0	0	0	0	0	0	0	0	0	0	0

Figure 1 – TWC and Occupancy Data indicating Train ID 332

Office of the Chief Mechanical Officer, Incident Investigation Team (CMOR/IIT)

The CMOR/IIT determined that based on the results of VMDS and ER data, there was no fault observed with the pushbutton nor the auto door open signals that resulted in the doors opening un-commanded. The door opened opposite of the platform side as commanded. The door pushbuttons were subsequently exercised multiple times with no indication of sticking or binding.

Time	Description of Events
16:19:02	Train ID332 entered into Braddock Rd. Station, Track #2 at a speed of 31 MPH, with the master Controller in the B4 Braking position.
16:19:24	Train came to a complete stop 13 ft. before the 8-Car marker.
16:19:35	The Right Door Open pushbutton was depressed and Right Door Open trainlines energized, opening Right side passenger Doors opposite of the platform side.
16:19:46	The Left Door Open Pushbutton was activated and the Left Door Open Trainlines energized, opening Left side passenger doors on the platform side.
16:19:55	The Left Door Close Pushbutton was activated and the Left Door Close Trainlines energized, closing Left side passenger doors.
16:20:20	The Right Door Close pushbutton was depressed and Right Door Close trainlines energized, closing Right side passenger Doors.
16:20:28	DCKR signal goes HIGH, indicating All Doors fully closed and Locked.
16:22:58	The Master Controller was placed in a P5 Power position and the train began to move in the direction of King Street.

Image 1: Train ID 332 VMDS Sequence of Events.

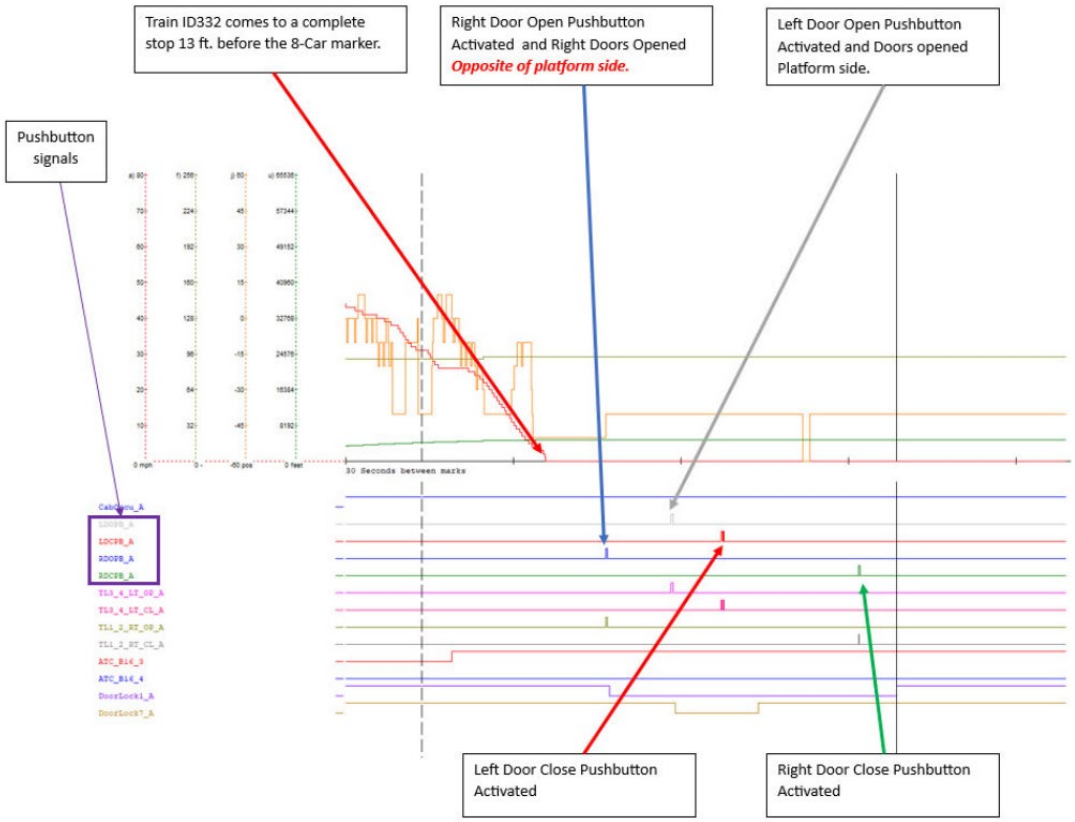


Image 2: Train ID 332 ER data

Office of Rail Transportation
Adopted from RTRA Preliminary Managerial Incident Investigation Report

The RVO started their employment with WMATA on January 10, 2011, operating as an RVO on January 29, 2023. The RVO was last certified on May 16, 2024. The RVO worked a total of 44 hours within the last seven (7) days and no overtime within the past 2 weeks.

The RVO was not transported for post-incident testing on the day of the incident due to RVO not notifying MICC until off duty time. The RVO was transported for post-incident testing when they returned to work the following day.

The RVO had two safety violations in the past 24 months. The RVO was issued a 10-day suspension for opening doors outside of platform limits on July 12, 2023. The RVO was issued a level 2 and four points for excessive speed between Van Dorn Street and King Street Stations on May 16, 2024.

Interview Findings and Written Statements

As part of the investigation launched into the event, SAFE interviewed the RVO. In addition, SAFE reviewed a supervisor's written statement and the RVO's written statement. The statements identified the following key findings associated with this event. Findings detailed below include reported information from involved personnel and may conflict with other data sources contained in the report.

RVO:

- The RVO stated that just before the incident, they were "fighting sleep."
- The RVO stated that they experienced the following symptoms leading up to the incident: Yawning, difficulty keeping eyes open, feeling sleepy waves of sleepiness, falling asleep, feeling sluggish, and difficulty concentrating.
- The RVO stated they manually opened the doors because the trains normally had berth problems at L'Enfant Plaza and Gallery Place Station.
- The RVO also manually opened doors at Eisenhower and Ronald Reagan Washington National Airport Stations.
- The RVO stated that Central advised them that they did not have to ask for permission to open the doors manually.
- The RVO said they called the MICC at the end of the line because they experienced radio communications issues.
- The RVO responded to a question about whether they experienced any distraction or mental lapses at the time of the event. The RVO stated that the trip that included the event was "probably the worst" with "dozing."
- The RVO did not contact anyone to take over the train operations because it was a "short trip."
- The RVO was asked about the event at Braddock Road Station. The RVO stated that they thought they "did things normally" and that they found out what happened this morning [the next day] regarding the Improper Door Operation.
- The RVO was asked if it could have been possible that the RVO was in autopilot to press the door button. The RVO replied that was possible, but they did not remember.
- The RVO stated that someone knocked on the door and told them the right doors were open (written statement).

Rail Supervisor (written statement):

- The supervisor stated a CMNT employee reported on Twitter that a train opened the doors on the opposite side of the platform.
- The supervisor stated the operator serviced the station and continued without reporting this incident to the MICC and no ground walkaround was conducted.
- The supervisor stated the operator subsequently reported to the MICC at Huntington Station that they had door problems at several stations.

Rail Terminal Supervisor (written statement)

- The Terminal Supervisor received a call from the MICC that the RVO who was operating Train ID 332, track 1, called the MICC and stated the train was having door problems.
- The RVO's work shift ended when they arrived at Huntington Station.
- The RVO did not report the improper door operation to the Terminal Supervisor at Huntington Station.

Weather

On September 3, 2024, NOAA recorded the average temperature as 69°F, average wind speed at 11.8 mph, and relative humidity 44 percent average. The weather was not a contributing factor in this incident (Weather source: NOAA) – Location: Washington, DC.

Related Rules and Procedures

The Metrorail Operating Rulebook (MOR), in part, states the following:

1.1 Guiding Safety Principles

1.1.3 Employees shall not permit unnecessary conversation, reading, lounging or any other action or condition of mind to divert their attention from the safe and performance of duty.

8.18 Door Operation

8.18.3 In revenue service, when the train is otherwise within the limits of a station platform, Rail Vehicle Operators shall not manually operate the OPEN DOORS control on the side of the train opposite the platform.

8.18.4 In the event train doors are opened outside the platform limits or on the side opposite the platform, Rail Vehicle Operators shall close doors, notify the Rail Traffic Controller, and conduct a ground walk around inspection. The Rail Traffic Controller will determine if the train is to be taken out of service and if it is safe to discharge customers at that station.

Standard Operating Procedure (SOP) 40, Procedure for Platform Berthing, Station Servicing and Overruns, in part, states the following:

6.2 Door Opening Procedures

6.2.3 When the Door Mode Selector is in the Manual/Manual position, the Rail Vehicle Operator shall:

6.2.3.1 Use extreme caution before depressing the Open Doors pushbutton;

6.2.3.2 Ensure the train is properly berthed on the platform;

6.2.3.3 Verify the platform side of the train by placing their head out of the cab window and first look and identify the platform;

6.2.3.4 Look at the doors on the platform side of the train to observe any activity in front of the doors, with hands to their side for five (5) seconds;

6.2.3.5 Depress the Open Doors pushbutton on the platform side of the train;

6.2.3.6 (Additional step only for 7000 Series Fleet) Depress the console 'Ok' pushbutton on the Aspect Display Unit;

6.3 Station Stop Misalignment Procedures

6.3.1 When a train is approaching the station and stops short, the Rail Vehicle Operator shall adjust the train's position in Mode 2 Level 1 to align it with the platform at the eight (8)-car marker position.

Human Factors

Evidence of Fatigue:

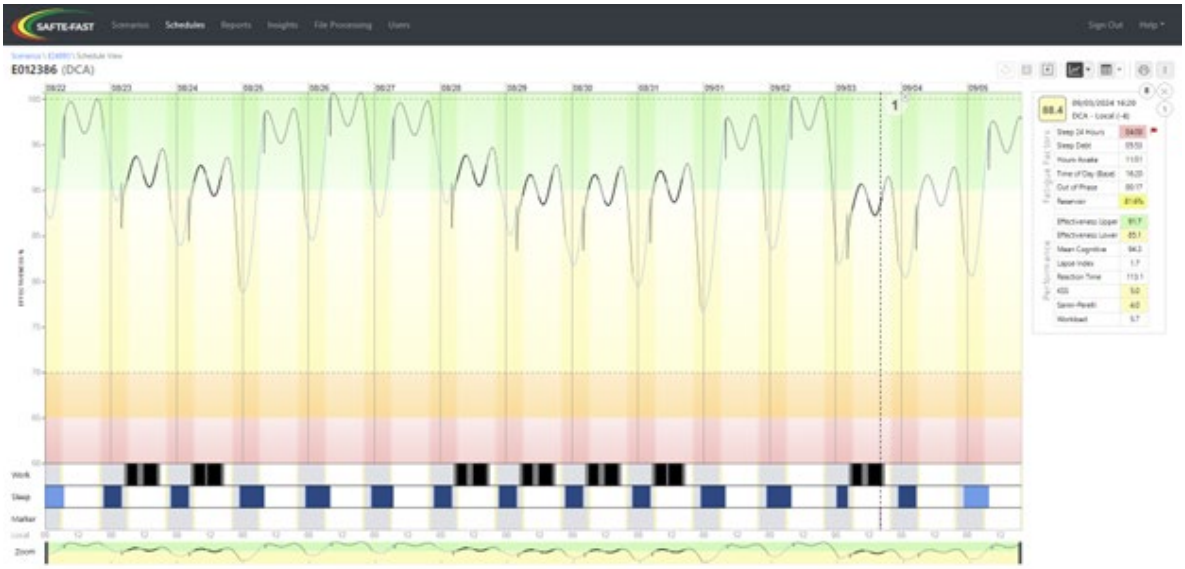
Conditions at the time of the incident were evaluated to distinguish whether evidence of fatigue was present. Video of the incident was not available to ascertain whether signs of fatigue were present. The RVO reported they were fighting sleep at the time of the incident and experienced the following symptoms of fatigue in the time leading up to the incident: Difficulty concentrating, feeling sluggish, yawning, feeling sleepy, waves of sleepiness, difficulty keeping eyes open, and falling asleep.

Fatigue Risk:

Incident data was evaluated for fatigue risk factors. Risk factors for fatigue were identified. The incident time of day (16:20 hours) does not suggest an increased risk of fatigue-related impairment. The RVO worked day shifts in the days preceding the incident. The RVO reported a total of 4 hours of sleep in the last sleep period preceding the incident and was awake for 11 hours at the time of the incident. Although the RVO was off-duty in the two (2) days preceding the incident, they reported personal circumstances that affected opportunity for sufficient sleep. The RVO reported usual workday sleep durations of 6.5 hours and recent issues with sleep, specifically falling asleep.

A biomathematical fatigue modelling application (SAFTE-FAST WebSFC) was used to further evaluate fatigue risk factors that may have been present in the RVO's schedule. The analysis was based on the RVO's work schedule, reported sleep from the day before the incident, and reported habitual sleep durations. Estimated performance effectiveness at the time of the incident was

88.4%. Specifically, the analysis identified short sleep duration in the last 24 hours as a factor contributing to an increased risk of fatigue at the time of the incident.



Modeling analysis output shows estimated performance effectiveness during the incident work shift and for the week leading up to the work shift, based on the employee work and reported sleep schedule. Estimates were based on the RVO's work schedule, reported sleep from the day preceding the incident, and reported habitual sleep durations (6.5 hours a day). Bold portions of the modeled curve show work (in black) and sleep times (in blue). Effectiveness is shown on the vertical axis, with colored fields in the chart background signifying ranges of effectiveness scores including high effectiveness (>90%) in green, and low effectiveness (<65%) in red. Time is shown on the horizontal axis. Markers for work and sleep times are shown in the lanes above the time of day on the horizontal axis.

Post-Incident Toxicology Testing

The RVO did not complete a post-incident test on the day of the incident because when it was verified that an improper door operation occurred, the RVO had already completed their work shift for the day. When the RVO reported for duty the following day, they were transported for post-incident testing. The alcohol testing was not conducted because the timeframe had passed but complied with the drug test as required.

Findings

- A photograph was posted to the website "X" showing the non-platform side doors opened at Braddock Road Station.
- The RVO reported fighting sleep at the time of the incident.
- The RVO reported symptoms of fatigue, including difficulty concentrating, feeling sluggish, falling asleep, waves of sleepiness, feeling sleepy, difficulty keeping eyes open, and yawning.
- The biomathematical fatigue analysis identified short sleep duration in the last 24 hours as a factor contributing to an increased risk of fatigue at the time of the incident.
- Train ID 332 came to a complete stop 13 feet before the 8-car marker at Braddock Road Station.
- The RVO manually opened and closed the non-platform side doors for approximately 45 seconds.
- The RVO opened the doors manually without the MICC's permission.
- The RVO serviced Braddock Road Station, manually opening and closing the platform side doors for approximately 14 seconds.

- The RVO stated that someone knocked on their door and told them the right doors were open.
- The RVO did not report the event at Braddock Road Station to the MICC.
- The RVO arrived at Huntington Station and phoned the MICC regarding the door problems experienced at several stations.

Immediate Mitigation to Prevent Recurrence

- Upon RVO's return to duty, in adherence to Standard Operating Procedure 102-01-02, which outlines the protocol for Removing an Employee from Service for involvement in an operational safety event, the RVO was removed from service for post-incident testing.
- The incident train was removed from service for post-incident inspection.

Probable Cause Statement

The probable cause of the Improper Door Operation event on September 3, 2024, at Braddock Road Station, was the RVO's failure to adhere to established procedures for proper platform berthing and station servicing.

Recommended Corrective Actions

Corrective Action Code	Description	Responsible Party	Estimated Completion Date
119168MX_ SAFECAPS_ RTRA_001	Refresher training for RVO of the applicable rules and procedures.	RTRA	Completed

Appendices

Appendix A – Interview Summary

The below narrative summarizes 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.

The RVO worked as an RVO for 18 months and is currently assigned to Alexandria Division. The RVO worked for WMATA for 13.5 years, previously as a Bus Operator. The RVO was certified Level 2 RWP, expiring in August 2025. The RVO was certified as an operator in February 2023. The RVO completed the post-incident testing.

The RVO responded to fatigue-related questions. The RVO stated that just before the incident, they were "fighting sleep." The RVO stated that they experienced all the symptoms asked, leading up to the incident: yawning, difficulty keeping eyes open, feeling sleepy waves of sleepiness, falling asleep, feeling sluggish, and difficulty concentrating.

The RVO stated that the last bedtime before the incident was 12:30 a.m., and they did not take a nap. They woke up around 4:45 a.m. The RVO had the same work schedule, not switching between day and night.

The RVO normally slept 6.5 hours. The RVO sometimes had trouble falling asleep.
The RVO stated they experienced a personal "situation" that led to sleeping late the night before the incident.

The RVO responded to a question about whether there was an option to be relieved without getting reprimanded for reporting their fatigue condition. The RVO stated there was an option for taking "personals." There were a few times when personals were not allowed, but the RVO did not ask to take a personal.

The RVO stated that certain trains did not berth at certain stations. They noted both 7k and legacy trains had similar rates of problems. In addition to stations on the list, every now and then, the RVO experienced problems at L'Enfant Plaza, Gallery Place, and the Archives. The RVO stated they manually berthed at Eisenhower and the airport. The RVO stated they were advised by Central that they did not have to ask for permission to open the door manually. The RVO stated the list was located at Huntington Block House.

The RVO stated that they made a phone call at the end of the line because they experienced radio communications issues. They could not get through Central. Central did not respond to the RVO. The RVO recalled a customer emergency occurring at the time. The RVO tried contact via the radio at L'Enfant Station to report that they were experiencing problems with the berth button. The RVO explained that the berth button wasn't working and that it was getting jammed and was loose.

The RVO responded to a question whether they experienced any distraction or mental lapses at the time of the event. The RVO stated that the trip that included the event was "probably the worst" with "dozing." The RVO did not contact anyone to take over the rail operation because it was a "short trip."

The RVO were asked about the event at Braddock Road Station. The RVO stated that they thought they "did things normally" and that they found out what happened this morning [the next day] regarding the Improper Door Operation.

The RVO was asked if it could have been possible that the RVO was an autopilot to press the door button. The RVO replied that was possible, but they did not remember. The RVO stated no one informed them of the event when they phoned Central at the end of the line.

The RVO was asked about their previous instance of improper door operation. The RVO stated that at that time, they felt nervous due their supervisor rushing them and hit the wrong button.
The RVO was asked and replied they called Central to report about the berth button issues.
The RVO was asked generally if there were a policy or method to safely report their fatigue condition. The RVO stated that “they will hold it against you” for saying that they were fatigued and that they will send you to take a test. The RVO stated a lot of people would hold back on using that “F” word.

Appendix B – Certification

TRAIN OPERATOR AND ROAD SUPERVISOR JOB TASK PROFICIENCY EVALUATION

Name:	[redacted]	Emp.No:	[redacted]	Division:	Rail Training	Date:	01-13-2023

Reason for Certification: *Please place a check in an area below.*

☑ Certification: Student ☐ Pre-certification: Student ☐ Division Request ☐ Re-Certification ☐ Return to Duty ☐ Other

Exam Administered	Score	Date Taken
MSRPH version #:	82 %	12-9-22
TVOIM/TOIM	81 %	12-9-22
Supervisor Combination	%	
Practical attempt #: 1	QL- 3	1-13-23

Equipment *(current/working condition)*	Yes	No
MSRPH	✓	
Perm/Temp/Special Orders	✓	
Troubleshooting Guide	✓	
Flashlight	✓	
Safety Vest	✓	
Footwear	✓	
Identification (One Badge, RWP)	✓	

Comments

Student operator [redacted] must retake Preparation for Service and Troubleshooting.

Signatures:	Date:
Employee: [redacted]	01/13/23
Examiner:	01-13-2023

RTRA-906-01-00 TRAIN OPERATOR AND ROAD SUPERVISOR JOB TASK PROFICIENCY EVALUATION Page 1

Training Certification - Page 1 of 8

TRAIN OPERATOR AND ROAD SUPERVISOR JOB TASK PROFICIENCY EVALUATION (continuation sheet) Emp No.: [redacted] Date: 01-13-2023

CATEGORIES / SUBCATEGORIES	QUALITY LEVEL	REMARKS (*Remarks are required for a quality level score of 2 or 3*)
I. Preparation for Service	3	Cars Used: 7406 x 7036
1. Exterior Inspection	1	# 7407 Rotary Drum, # 7037 Barrier Uns, # 7036 BCD c/o
2. Interior Inspection - Trailing Cab	3	# 7406 Door Valance * Failed to Lock Bulkhead Door
3. Interior Inspection - Each Car	1	# 7407 Horn c/o, # 7037 Tail-Marker TLCB
4. Interior Inspection – Oper. Cab	3	# 7036 Dynamic Brake Seal * Failed to Lock Bulkhead Door
5. Rolling Test / Rolling Brake Test	1	
		Time Allotted: 35:00 / Actual Time: 39 :00
II. Mainline Operation	1	
6. Communications	1	
7. Door Oper. & Station Stopping	1	
8. Use of Horn	1	
9. Speed Adherence/Manual Oper.	1	
10. Turn Back Moves	1	Location: J03 Time Allotted: 02:00 / Actual Time: 1 :00
11. Manual Route Selection	1	Location: J01-16
12. EV Shutoff	1	Time Allotted: 00:30 (1:00) / Actual Time: 00 :15
III. Yard Operation	2	
13. Communications	1	
14. Yard Movements	1	
15. Coupling	1	Time Allotted: 08:00 (12) / Actual Time: 8 :00 Cars Used: 7339 + 7471
16. Uncoupling	1	Time Allotted: 05:00 (7.5) / Actual Time: 4 :50 Cars Used: < 7470 > 7406
17. Isolation (Self-Recovery)	2	Time Allotted: 15:00 (22.5) / Actual Time: 17 :00 Cars Used: 7470 + 7406
18. Manual Switch Operation	1	# 191
IV. Miscellaneous	3	
19. Recovery Train Operation	1	Time Allotted: 12:00 (18) / Actual Time: 12:00 Cars Used: 7470 + 7406
20. Troubleshooting	3	#1. NO All Doors closed (EM Handle) Time 12:00 min
		#2. NO Brakes OFF (Friction Brake TLCB) Time 10:00 min
* PAS for Service: T.O. Failed to lock Trailing + Operating Bulkhead Doors.		
* Troubleshooting: T.O. Failed to cut-out / Dog Bad order Doors and Exceeded allotted Time.		

RTRA-906-C1-00 TRAIN OPERATOR AND ROAD SUPERVISOR JOB TASK PROFICIENCY EVALUATION Page 2

TRAIN OPERATOR AND ROAD SUPERVISOR JOB TASK PROFICIENCY EVALUATION

Name:	Emp.No:	Division:	Date:
[redacted]	[redacted]	Training	January 24, 2023

Reason for Certification: *Please place a check in an area below.*

☑ Certification: Student ☐ Pre-certification: Student ☐ Division Request ☐ Re-Certification ☐ Return to Duty ☐ Other_____

Exam Administered	Score	Date Taken
MSRPH version #:	82 %	12-9-22
TVOIM/TOIM	81 %	12-9-22
Supervisor Combination	N/A %	N/A
Practical attempt #: 2ND	QL- PASS	1/24/2023

Equipment *(current/working condition)*	Yes	No
MSRPH	✓	
Perm/Temp/Special Orders	✓	
Troubleshooting Guide	✓	
Flashlight	✓	
Safety Vest	✓	
Footwear	✓	
Identification (One Badge, RWP)	✓	

Comments

Operator [redacted] needs to elevate [redacted] voice just a little louder when speaking.

Signatures:	Date:
Employee: [redacted]	1/24/23
Examiner: [redacted]	1/24/2023

RTRA-906-01-00 TRAIN OPERATOR AND ROAD SUPERVISOR JOB TASK PROFICIENCY EVALUATION Page 1

Training Certification - Page 3 of 8

[redacted]

TRAIN OPERATOR AND ROAD SUPERVISOR JOB TASK PROFICIENCY EVALUATION (continuation sheet) Emp No.: [redacted] Date: 1/24/2023

CATEGORIES / SUBCATEGORIES	QUALITY LEVEL	REMARKS (*Remarks are required for a quality level score of 2 or 3*)
I. Preparation for Service	pass	Cars Used: 7472-7473 X 7357-7356 X 7360-7361 X 7019-7018
1. Exterior Inspection	1	#7360 [illegible], #7019 Rotary Drum Switch, #7018 [illegible]
2. Interior Inspection - Trailing Cab	1	#7360 [illegible] Cut out
3. Interior Inspection - Each Car	1	#7361 [illegible] panel
4. Interior Inspection – Oper. Cab	1	#7018 paddle missing
5. Rolling Test / Rolling Brake Test	1	
		Time Allotted: 35:00 / Actual Time: 32 : 10
II. Mainline Operation	N/A	
6. Communications		
7. Door Oper. & Station Stopping		
8. Use of Horn		
9. Speed Adherence/Manual Oper.		
10. Turn Back Moves		Location: Time Allotted: 02:00 / Actual Time: :
11. Manual Route Selection		Location:
12. EV Shutoff		Time Allotted: 00:30 (1:00) / Actual Time: :
III. Yard Operation	N/A	
13. Communications		
14. Yard Movements		
15. Coupling		Time Allotted: 08:00 (12) / Actual Time: : Cars Used: +
16. Uncoupling		Time Allotted: 05:00 (7.5) / Actual Time: : Cars Used: < >
17. Isolation (Self-Recovery)		Time Allotted: 15:00 (22.5) / Actual Time: : Cars Used:
18. Manual Switch Operation		
IV. Miscellaneous	pass	
19. Recovery Train Operation	N/A	Time Allotted: 12:00 (18) / Actual Time: : Cars Used: +
20. Troubleshooting	1	

1) Door Cntrl C/B no reset (1) 1:00

2) [illegible] / mushroom no reset / Self Recovery (1) 1:12

RTRA-906-01-00 TRAIN OPERATOR AND ROAD SUPERVISOR JOB TASK PROFICIENCY EVALUATION Page 2

Training Certification - Page 4 of 8

TRAIN OPERATOR AND ROAD SUPERVISOR JOB TASK PROFICIENCY EVALUATION

Name:	[redacted]	Emp.No:	[redacted]	Division:	Alexandria	Date:	5-16-24

Reason for Certification: *Please place a check in an area below.*

☐ Certification: Student ☐ Pre-certification: Student ☐ Division Request ✓ Re-Certification ☐ Return to Duty ☐ Other _____

Exam Administered	Score	Date Taken
MOR attempt #	NA	NA
TVOIM/TOIM attempt #	NA	NA
Supervisor Combination attempt #	NA	NA
Practical attempt #: 2	QL- PASS	5-16-24

Equipment (current/working condition)	Yes	No
MOR	✓	
Perm/Temp/Special Orders	✓	
Troubleshooting Guide	✓	
Flashlight	✓	
Safety Vest	✓	
Footwear	✓	
Identification (One Badge, RWP)	✓	

Comments:

Signatures:	Date:
Employee: [redacted]	05/16/24
Examiner: [redacted]	5-16-24

RTRA-506-01-00 TRAIN OPERATOR AND ROAD SUPERVISOR JOB TASK PROFICIENCY EVALUATION Page 1

Training Certification - Page 5 of 8

TRAIN OPERATOR AND ROAD SUPERVISOR JOB TASK PROFICIENCY EVALUATION (continuation sheet) Emp No.: [redacted] Date: 5-16-24

CATEGORIES / SUBCATEGORIES	QUALITY LEVEL	REMARKS (Remarks are required for a quality level score of 2 or 3) – ALL TIMES (are in minutes)
I. Preparation for Service	PASS	Cars Used: 7318 x 7319 x 7379 x 7378
1. Exterior Inspection	1	Truck C/O #7379 Intercar Barrier #7318
2. Interior Inspection - Trailing Cab	1	Window Open #7378
3. Interior Inspection - Each Car	1	Valance Open #7319
4. Interior Inspection – Oper. Cab	1	Headlight C/B Tripped #7318
5. Rolling Test / Rolling Brake Test	1	
		Time Allotted: 35:00 / Actual Time: 29 : 18
II. Mainline Operation	PASS	
6. Communications	NA	
7. Door Oper. & Station Stopping	NA	
8. Use of Horn	NA	
9. Speed Adherence/Manual Oper.	NA	
10. Turn Back Moves	1	Location: C98-32 signal Time Allotted: 02:00 / Actual Time: 1 : 08
11. Manual Route Selection	NA	Location:
12. EV Shutoff	NA	Time Allotted: 00:30 (01:00) / Actual Time: :
III. Yard Operation	PASS	
13. Communications	NA	
14. Yard Movements	NA	
15. Coupling	1	Time Allotted: 08:00 (12:00) / Actual Time: 6 : 17 Cars Used: 7379 + 7319
16. Uncoupling	NA	Time Allotted: 05:00 (07:30) / Actual Time: : Cars Used: < >
17. Isolation (Self-Recovery)	1	Time Allotted: 15:00 (22:30) / Actual Time: 13 : 22 Cars Used: 7378 7319 7456 7697
18. Manual Switch Operation	NA	
IV. Miscellaneous	PASS	
19. Recovery Train Operation	1	Time Allotted: 12:00 (18:00) / Actual Time: 9 : 48 Cars Used: 7318 + 7456
20. Troubleshooting	1	ATP Fail (Reset) Lead Car #7378 1:12 min
	1	Passenger Door Not Fully Closed (Emergency Door Release) Lead Car #7378 4:09 min

RTRA-906-01-00 TRAIN OPERATOR AND ROAD SUPERVISOR JOB TASK PROFICIENCY EVALUATION Page 2

RTRA 903-12-00 Approved: 04/02/2024.

Examiner Checklist

Train Operator Certification Quality Control

	Information
Employee ID	[redacted]
Employee Name	[redacted]
Date of Exam	5-16-24
Attempt Number	2
Examiner Name	[redacted]

Yes	NA	Page 1
☑		All Employee-related are filled out.
☑		All Exam Administered fields are filled out according to the Employee's position.
☑		All applicable Exam Administered fields have an attempt number.
☐	✓	All applicable Exam Administered fields have a passing score.
☑		Safety Vest, Footwear, and Identification are marked Yes.
☑		All words and numbers can be read by another person.
☑		Signatures and dates are filled out for both Employee and Examiner.
		Page 2, Subcategories 1 – 19
☑		Employee Number and Date are complete and match the front page.
☑		Cars Used is filled out.
☑		Each subcategory tested has a QL score.
☑	☐	Any subcategory not tested is crossed out and score is labeled N/A.
☑	☐	At least 4 discrepancies are listed in Preparation for Service.
☑	☐	Locations are recorded for applicable subcategories.
☑	☐	Car numbers are recorded for applicable subcategories.
☑	☐	Times are exact and not rounded.
☑	☐	The QL score for each Task Subcategory is under the time allowed.
☑		All words and numbers can be read by another person.
		Page 2, Troubleshooting (Subcategory 20)
☑	☐	Troubleshooting scenarios include one problem from Group A and one from Group B.
☑	☐	Lead/Belly and Reset/No Reset are written for the applicable problems.
☑	☐	Times are exact and not rounded.
☑	☐	The QL Score for each Troubleshooting scenario is under the time allowed.
☑		All words and numbers can be read by another person.
☐	☑	Supervisors and Training Instructor have a third troubleshooting problem from either group.
		Scoring & Retest
☑		The task category scores accurately reflect the subcategory scores.
☑		The overall grade on Page 1 matches the combined scores on Page 2.
☐	☑	The correct sections that need to be retested are listed on Page 1 in the Comment section.

I attest that the associated Job Task Proficiency Form has been checked and that all information is correct.

Signature: [redacted]

Date: 5-16-24

Training Certification - Page 7 of 8

RTRA 903-12-00 Approved: 04/02/2024.

Examiner Checklist

Train Operator Certification Quality Control

	Information
Employee ID	[redacted]
Employee Name	[redacted]
Date of Exam	5-16-24
Attempt Number	2
Examiner Name	[redacted]

Yes	NA	Page 1
☑		All Employee-related are filled out.
☑		All Exam Administered fields are filled out according to the Employee's position.
☑		All applicable Exam Administered fields have an attempt number.
☑		All applicable Exam Administered fields have a passing score.
☑		Safety Vest, Footwear, and Identification are marked Yes.
☑		All words and numbers can be read by another person.
☑		Signatures and dates are filled out for both Employee and Examiner.
		Page 2, Subcategories 1 – 19
☑		Employee Number and Date are complete and match the front page.
☑		Cars Used is filled out.
☑		Each subcategory tested has a QL score.
☑	☐	Any subcategory not tested is crossed out and score is labeled N/A.
☑	☐	At least 4 discrepancies are listed in Preparation for Service.
☑	☐	Locations are recorded for applicable subcategories.
☑	☐	Car numbers are recorded for applicable subcategories.
☑	☐	Times are exact and not rounded.
☑	☐	The QL score for each Task Subcategory is under the time allowed.
☑		All words and numbers can be read by another person.
		Page 2, Troubleshooting (Subcategory 20)
☑	☐	Troubleshooting scenarios include one problem from Group A and one from Group B.
☑	☐	Lead/Belly and Reset/No Reset are written for the applicable problems.
☑	☐	Times are exact and not rounded.
☑	☐	The QL Score for each Troubleshooting scenario is under the time allowed.
☑		All words and numbers can be read by another person.
☐	☑	Supervisors and Training Instructor have a third troubleshooting problem from either group.
		Scoring & Retest
☑		The task category scores accurately reflect the subcategory scores.
☑		The overall grade on Page 1 matches the combined scores on Page 2.
☐	☑	The correct sections that need to be retested are listed on Page 1 in the Comment section.

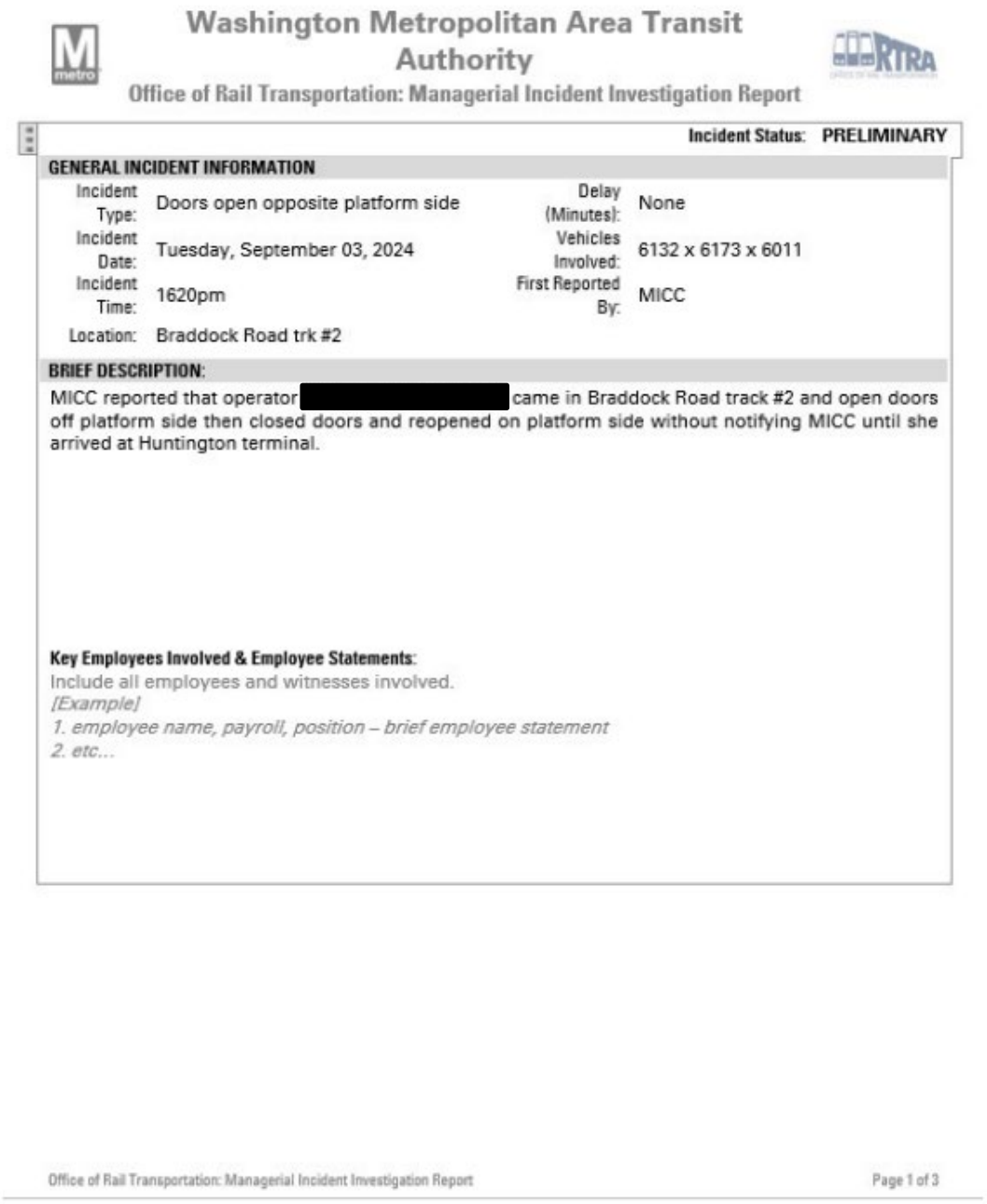
I attest that the associated Job Task Proficiency Form has been checked and that all information is correct.

Signature: [redacted]

Date: 5-28-24

Training Certification - Page 8 of 8

Appendix C – RTRA Preliminary Managerial Investigation Report



Washington Metropolitan Area Transit Authority

Office of Rail Transportation: Managerial Incident Investigation Report

Incident Status: PRELIMINARY

GENERAL INCIDENT INFORMATION

Incident Type:	Doors open opposite platform side	Delay (Minutes):	None
Incident Date:	Tuesday, September 03, 2024	Vehicles Involved:	6132 x 6173 x 6011
Incident Time:	1620pm	First Reported By:	MICC
Location:	Braddock Road trk #2		

BRIEF DESCRIPTION:

MICC reported that operator [redacted] came in Braddock Road track #2 and open doors off platform side then closed doors and reopened on platform side without notifying MICC until she arrived at Huntington terminal.

Key Employees Involved & Employee Statements:

Include all employees and witnesses involved.

[Example]

1. employee name, payroll, position – brief employee statement

2. etc…

Office of Rail Transportation: Managerial Incident Investigation Report Page 1 of 3

RTRA Preliminary Managerial Investigation Report - Page 1 of 3

Post Incident Testing & Employee History:
Train operator [redacted] was not transported for post-incident testing due to operator not notifying MICC until her off duty time.
Train Operator has been employed with WMATA since 10 January 2011 and train operator since 29 January 2023.
Operator has two safety violation in the last 24 months, one on 12 July 2023 for opening doors outside of platform limits (10-day suspension) and on 31 March 2024 she received a level II & four points for failure to maintain operational duties (excessive speed between Van Dorn and King Street)
Last certification was on 16 May 2024.

SIGNIFICANT INCIDENT TIMELINE:
Under investigation

SIGNIFICANT FINDINGS & PENDING ISSUES:
Under investigation

CORRECTIVE ACTIONS:
Corrective Actions are currently unknown.

RTRA Preliminary Managerial Investigation Report - Page 2 of 3

Washington Metropolitan Area Transit Authority

Office of Rail Transportation: Managerial Incident Investigation Report

INCIDENT PHOTOS: ATTACH ANY SIGNIFICANT PHOTOS BASED ON THE INITIAL INCIDENT INVESTIGATION.

Report Prepared by: [redacted] 9/3/2024

Report Reviewed by:

Office of Rail Transportation: Managerial Incident Investigation Report Page 3 of 3

RTRA Preliminary Managerial Investigation Report - Page 3 of 3

Appendix D – RTRA Supervisors Report

RTRA SUPERVISOR REPORT

Date	Incident Time	Incident Location (Station Mezzanine #)	Track/ Mezzanine #
9/3/2024	420P	Braddock Rd	Track 2

Equipment Number (Train ID & Car Numbers; Escalator/ Elevator # Room #)
TRAIN ID 332 (6132-33 X 6173-72 X 6011-10)

Incident Description
TRAIN DOORS OPENED ON THE OPPOSITE SIDE OF THE PLATFORM

WMATA Personal Involved	Employee #	Rule Violation?	Home Division	Post Incident
[redacted]	[redacted]	YES	ALEXANDRIA	YES (NEXT DAY)

Name	Address	Injury?
UNKNOWN EMPLOYEE		
Name	Address	Injury?
Name	Address	Injury?

Arrival Time	Unit Number	Person in Charge	Remarks
N/A			

Chronological Account of Incident
(Note time for each entry; Include statement of Employee or Witness at conclusion)

ON TUESDAY, SEPTEMBER 3, 2024, AT APPROXIMATELY 420PM. A CMNT EMPLOYEE REPORTED ON TWITTER A TRAIN HAD OPENED THE DOORS ON THE OPPOSITE SIDE OF THE PLATFORM. THE OPERATOR SERVICED THE STATION AND CONTINUED ON WITHOUT REPORTING THIS INCIDENT TO MICC. ALSO, A GROUND WALKAROUND WAS NOT CONDUCTED. HOWEVER, THE OPERATOR REPORTED MICC AND TERMINALS SHE WAS HAVING DOOR PROBLEMS AT SEVERAL STATIONS AT HUNTINGTON TERMINAL.

Your Arrival Time:

Supervisor Submitting Report (include payroll #)	Date	Report Reviewed by:	Date
[redacted]	9/4/24		

Report must be faxed to ROCC [redacted] at end of tour

RTRA Supervisors Report - Page 1 of 2

RTRA Supervisor's Report

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

DEPARTMENT OF OPERATIONS-RAIL SERVICE

Office of Rail Transportation

Date:	Incident Time	Incident Location (Station Mezzanine#)	Track/Mezzanine#
9/3/2024	4:20pm	Braddock Road	Track 2

Equipment Number (Train ID & Car Numbers; Escalator/Elevator #, Room #) Train ID 332
Car # 6132 6133 6173 6172 6011 6010

Incident Description
Improper door operation

WMATA Personnel Involved	Employee #	Rule Violation?	Home Division	Post Incident
[redacted]	[redacted]		ALEXANDRIA	NO
				N/A

Name N/A	Address N/A	Injury?N/A
Name N/A	Address N/A	Injury?N/A
Name	Address	Injury?N/A

Arrival Time	Unit Number	Person In Charge	Remarks
4:28pm	[redacted]	[redacted]	Operator open doors off platform side

Chronological Account of Incident
Note time for each entry; Include statement of Employee or Witness at conclusion

1. At 4:32pm I received a call from MICC that the operator at Huntington station track number 1 who was operating train ID # 332 called MICC and said [redacted] was having problems with the doors
2. The operator was off at Huntington when [redacted] arrived, [redacted] fell to report the incident to the terminal Supervisor.

Supervisor Submitting Report (include payroll #)	Date	Report Reviewed by	Date 9/3/2024
[redacted]	9/3/2024		

RTRA Supervisor's Report

Page 2 of 2

Details (continued from front)

50.437 09/10

REPORT MUST BE FAXED TO ROCC [redacted] t end of tour

RTRA Supervisors Report - Page 2 of 2

Appendix E – RVO Incident/Accident Report

WMATA/RTRA Incident/Accident Report (Other than Motor Vehicle) Page ___ of ___

Incident Information: This page must be completed for all incidents

Date:	Incident Time:	Time Reported:	Reported by: Customer ❑ Employee ❑ ROCC ❑ Other ❑ _____
09/03/24	4:20pm		

Location

Station:	Mezzanine #	Track #/Destination	Chain Marker/Signal Number
Braddock Road		2 Huntington	

TYPE OF INCIDENT

❑ Property Damage	❑ Smoke	❑ Fire	❑ Customer Complaint
❑ Customer injury	❑ Customer Illness	❑ Employee Injury	❑ Employee Illness
❑ Criminal Activity	❑ Elevator Entrapment	❑ Rail Vehicle Incident	❑ Other (Explain in description of incident)

WEATHER	LIGHT CONDITIONS (natural lighting)	LIGHTING (artificial lighting)
Clear ❑ Rain ❑	Dawn/Dusk ❑ Daylight ❑	Lights On ❑ Lights Off ❑
Snow ❑ Sleet/Ice ❑	Dark ❑ Tunnel/Underground ❑	Lights Not Working ❑

STATION INCIDENTS: Always include equipment number you use for MOC/AFC/EOC

Elevator/Escalator#:	AFC #:	Room Number/Location:

Failure Number(s):

Parking Lot ❑ Paid Area ❑ Free Area ❑ Garage ❑ Station Entrance ❑ Stairway # ____ ❑ Platform ❑ Ancillary Room ❑
Injury/Illness reported aboard Train ❑ Other ❑ _____

Name of Responding Supervisor:	Name/Department of PLNT/AFC or other WMATA responder

TRAIN INCIDENTS

Train ID	Destination	Car Numbers(list all cars in consist):	Lead Car:
7377	Huntington	6	

Name of Responding Supervisor:	Name/Department of CMNT/TRST or other WMATA responder

DESCRIBE THE INCIDENT: Include what you did to correct the problem and who you notified and when.

Describe any property damage and the extent of any injuries.

Got to Braddock road hit the open doors, got up to close doors then realize the doors wasn't open so I hit them open button then close. Proceded to leave but train didn't have on all doors close attempted to call Central 2 times then Someone knocked on the door and told me the right doors are open I close them kept hitting radio but no communication continued on until I got to Huntington and contacted Central.

Employee Completing Report

Employee Name:(print)	Employee Signature:(sign)	Employee #:	Date:
[redacted]	[redacted]	[redacted]	09/03/24

Division:	Run #	Block #	Assigned Days:
Alex	207		SM

To Be Completed By Reviewing Manager

Supervisor Name:(print)	Supervisor Signature	Employee #	Date:
[redacted]	[redacted]	[redacted]	04 Sept 24

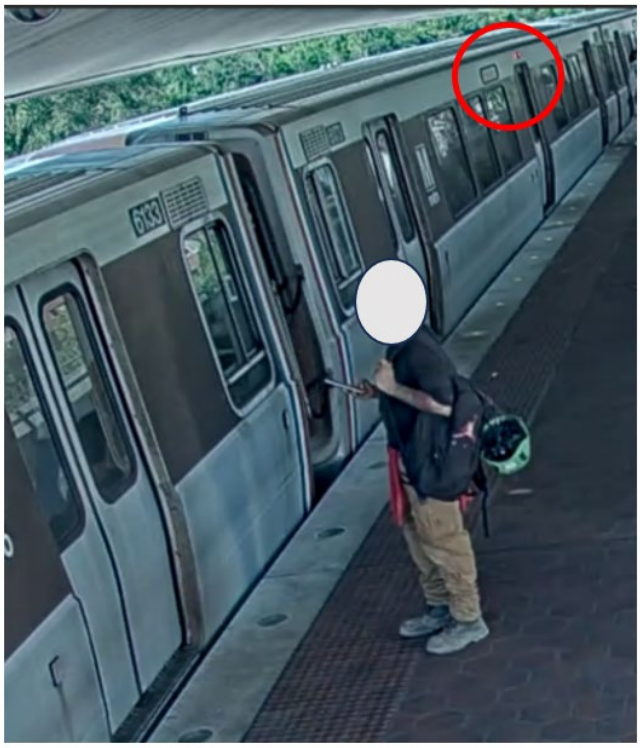
Action taken/needed: Filled

SMS Number: 20240904 F119557

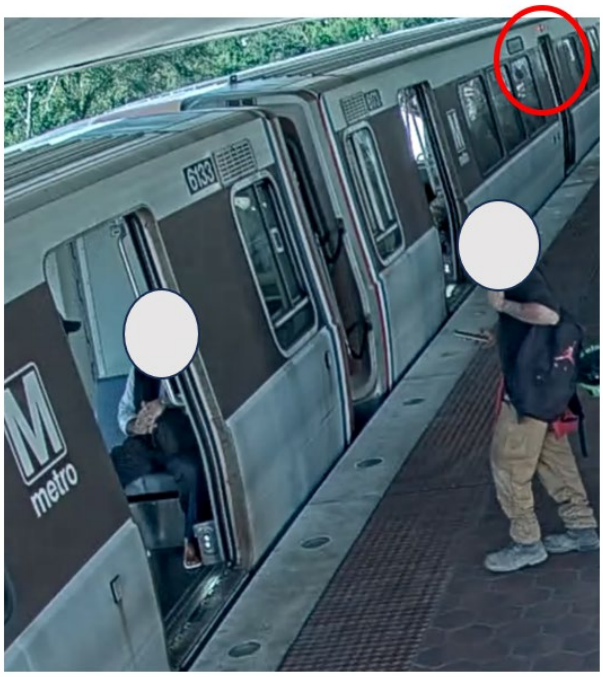
50.753A 04/12 White Copy: Division or Supervisor Yellow Copy: For any incident involving escalators or elevators; remains in kiosk for use of elevator/escalator inspectors

Appendix F – CCTV Digital Image

16:20:21 - Train ID 332 (L6132) arrived at Braddock Road Station.

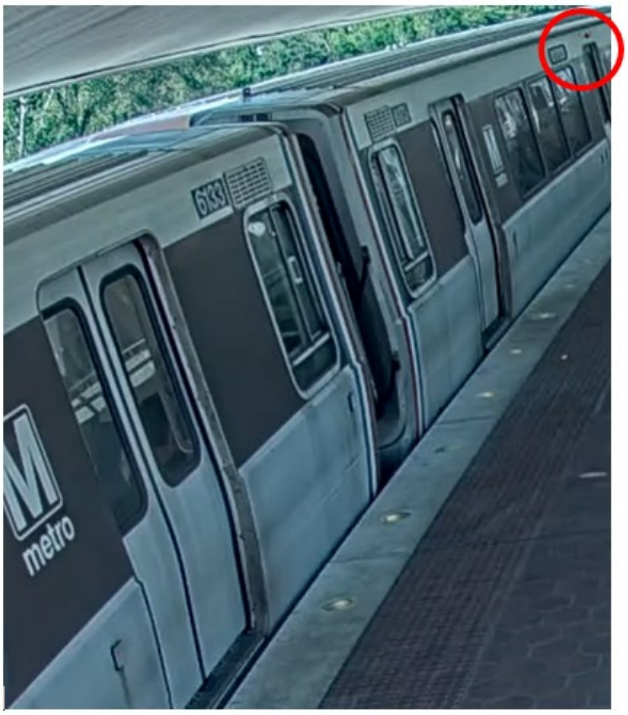


16:20:43 - Door lights illuminated; the platform side doors were not open.



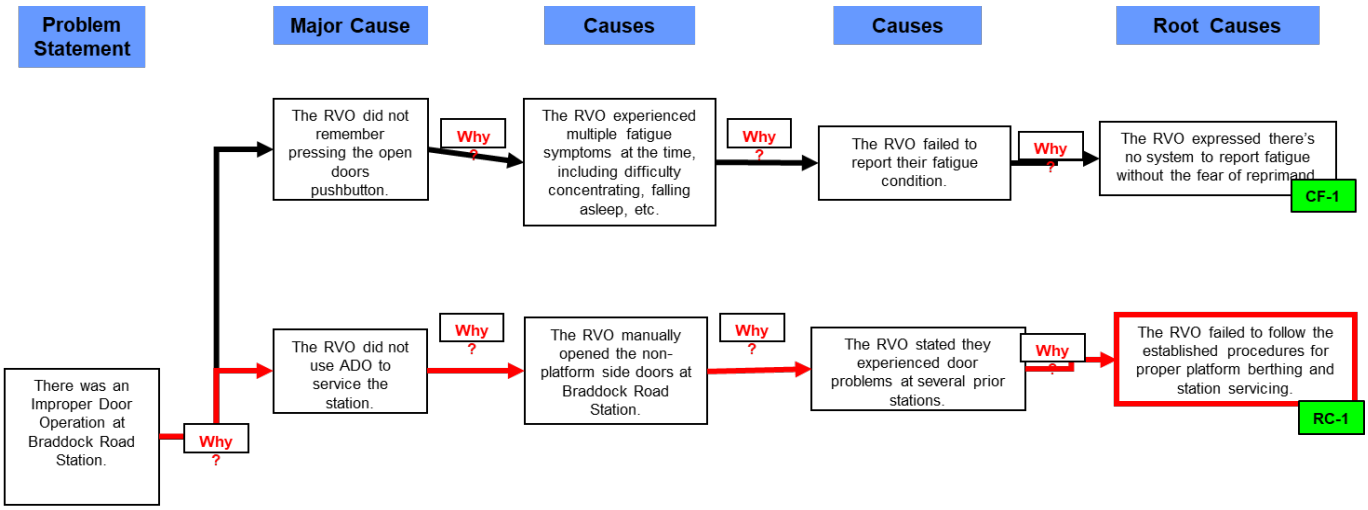
16:20:55 - Door lights illuminated; the platform side doors were open.

16:21:09 – the platform side doors were closed, but the door lights were still illuminated.



16:21:35 Door lights off.

Appendix G – Why-Tree Analysis



Root Cause Analysis

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

FINAL REPORT OF INVESTIGATION A&I E24749

Date of Event:	September 23, 2024
Type of Event:	O-15(a): Improper Door Operation
Incident Time:	11:15 Hours
Location:	Innovation Center Station, Track 2
Time and How received by Safety:	11:23 Hours
Washington Metrorail Safety Commission (WMSC) Notification Time:	12:01 Hours
Responding Safety Officers:	WMATA: None WMSC: None Other: None
Rail Vehicle:	Train ID 612 (L7242-7243x7207-7206x7714-7715x737-7236T)
Injuries:	None
Damage:	None
Emergency Responders:	None
Safety Management System Incidents/Accidents (SMS I/A) Incident Number:	20240923#120066MX

Innovation Center Station – Improper Door Operation

September 23, 2024

Table of Contents

Abbreviations and Acronyms

AIMS	Advanced Information Management System
AOM	Assistant Operations Manager
ARS	Audio Recording System
ATP	Automatic Train Protection
CCTV	Closed-Circuit Television
CM	Chain Marker
CMOR	Office of the Chief Mechanical Officer
ER	Event Recorder
LCU	Logic Control Unit
MICC	Metro Integrated Command and Communications Center
MOR	Metrorail Operating Rulebook
NOAA	National Oceanic and Atmospheric Administration
OJT	On Job Training
SAFE	Department of Safety
SMS	Safety Measurement System
RTC	Rail Traffic Controller
RTRA	Office of Rail Transportation
RVO	Rail Vehicle Operator
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 Monday, September 23, 2024, at 11:14 hours, Train ID 612 (L7242-7243x7207-7206x7714-7715x7237-7236T), a Silver line, eight-car consist, entered the platform limits of Innovation Center Station, track 2, and stopped two feet short of the 8-car marker. The Rail Vehicle Operator (RVO) pressed the train berth button but, the train doors did not open automatically. The RVO looked out from the cab window and noticed the platform side doors were not open.

At 11:15 hours, the RVO advised the Radio Rail Traffic Controller (RTC) that the train was "properly berthed" and requested permission to open the doors manually. The RVO was granted permission. The RVO pressed the right-side Door Open button which opened the doors on the non-platform side. The RVO closed the doors, then looked out the cab window again, and noticed the platform side doors were not open.

Closed-circuit television (CCTV) at Innovation Center Station confirmed that Train ID 612 experienced an improper door operation. After reviewing CCTV, the train door indicator lights illuminated, indicating doors were opened, but the platform side doors were still closed.

The RVO pressed the left-side Door Open button, which opened the doors on the platform side. At 11:16 hours, the RVO pressed the left-side Door Close button, which closed the platform side doors.

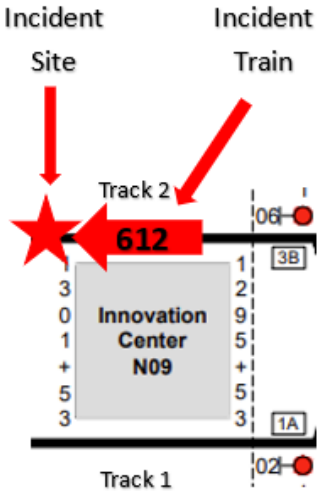
At 11:20 hours, the RVO reported to the Radio RTC that the "wrong side" doors were opened. The RTC advised RVO to conduct a ground walkaround of the train. The RTC reported the event to the Assistant Operations Manager (AOM). At 11:39 hours, an Office of Rail Transportation (RTRA) Supervisor arrived at the station and took over operating the train at Innovation Center Station. The event occurred on the RVO's first day operating the train alone after being certified as a RVO and completing On-the-Job (OJT) training.

The probable cause of the Improper Door Operation event at Innovation Center Station on September 23, 2024, was the RVO's loss of situational awareness.

Incident Site

Innovation Center Station is an outdoor, center platform station with its platform limits at Chain Marker (CM) 1301+53 – 1295+53.

Field Sketch/Schematics



The above depiction is not to scale.

Purpose and Scope

The purpose of this accident investigation and candid self-evaluation is 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:

- Site Assessment through video and document review

- Formal Interviews – Safety interviewed one individual 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 individual:
    - Rail Vehicle Operator – Train ID 612

- 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:
    - Training Records
    - Certifications
    - 30-Day work history review
    - Metrorail Operating Rulebook (MOR)
    - National Oceanic and Atmospheric Administration (NOAA)
    - Metro Integrated Command and Communications (MICC) 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
    - The Office of Chief Mechanical Officer Incident Investigation Team (IIT) Vehicle Monitoring and Diagnostic System (VMDS)
    - Closed-Circuit Television (CCTV)

Investigation

On Monday, September 23, 2024, at 11:14 hours, Train ID 612 (L7242-7243x7207-7206x7714-7715x737-7236T), a Silver line, eight-car consist, entered the platform limits of Innovation Center Station, track 2, and made a complete stop approximately two feet short of the 8-car marker. The RVO was operating the train in automatic door operations (ADO). The RVO pressed the train berth button. The RVO looked out from the cab window and noticed the platform side doors were not open.

At 11:15 hours, the RVO advised the Radio RTC that the train was “properly berthed” and requested permission to open the doors manually. The RVO was granted permission.

The RVO pressed the right-side Door Open button which opened the doors on the non-platform side. The RVO pressed the right-side Door Close button, closing the doors. The RVO looked out from the cab window and noticed the platform side doors were still not open. The train door indicator lights were illuminated, meaning the doors were opened, but the platform side doors were still closed. After reviewing the CCTV at Innovation Center Station, it was verified that Train ID 612 experienced an improper door operation.

At 11:15 hours, the RVO pressed the left-side Door Open button, which opened the platform side doors. At 11:16 hours, the RVO pressed the left-side Close button, which closed the platform side doors.

At 11:20 hours, the RVO reported to the RTC that the “wrong side” doors were opened. The RTC instructed the RVO to offload the train and conduct a ground walkaround. The RTC reported the event to the appropriate personnel.

At 11:27 hours, the RTC announced to all RVOs of single tracking between Innovation Center Station and Dulles International Airport. The RVO advised RTC that the train was clear of passengers.

At 11:29 hours, the RVO completed the ground walkaround and advised the RTC of no concerns after the ground walkaround. The RTC advised RVO to standby for an RTRA Supervisor.

At 11:39 hours, the RTRA Supervisor arrived at Innovation Center Station and took over operating the train. At 11:44 hours, the train was re-blocked as Train ID 712 and departed the station to Dulles Yard.

At 11:47 hours, the Radio RTC announced that normal operation had resumed at Innovation Center Station.

The RVO stated that it was their first day of operating the train alone after their OJT training.

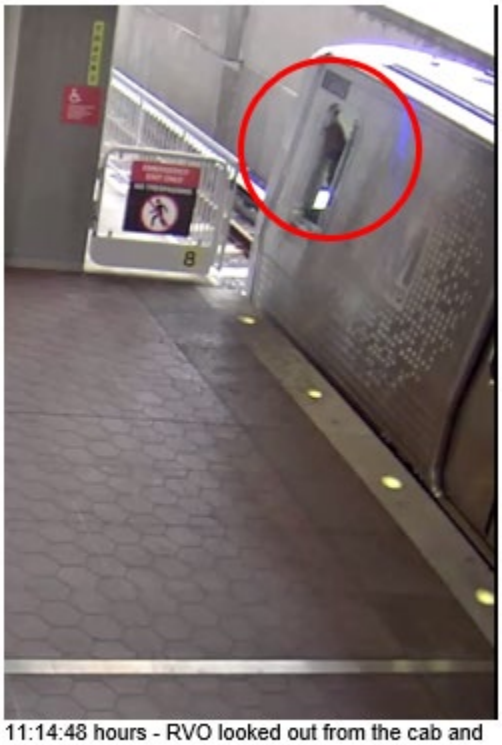
Chronological Event Timeline
A review of ARS playback, i.e., phone and radio communications, revealed the following timeline:

Time	Description
11:14:17 hours	Train ID 612 (L7242) entered Innovation Center Station 2 feet short of the 8-car maker on Track 2.
11:14:30 hours	Train ID 612 stopped at the Innovation Center Station. [CCTV]
11:14:48 hours	RVO looked out from the cab window and noticed the platform side doors were not open. [CCTV]
11:15:02 hours	RVO: Contacted the Radio RTC to inform them that they were properly berthed and requested to open the doors manually. RTC: Granted permission. [Radio, OPS 4]
11:15:11 hours	The red Door Open button (opposite side of the platform) was pressed on the right-side panel. [VMDS]
11:15:20 hours	The Door Open button was pressed on the console panel. [VMDS]
11:15:21 hours	The Door Close button was pressed on the right-side panel. [VMDS]
11:15:25 hours	Train opened door lights were illuminated. [CCTV]
11:15:30 hours	RVO looked out again and noticed the platform side doors still were not opened. [CCTV]
11:15:33 hours	The Door Open button was pressed on the platform side panel. [VMDS]
11:15:35 hours	The platform side doors were opened. [CCTV]
11:16:15 hours	The platform side doors were closed. [CCTV]
11:16:24 hours	RVO pressed the Close Door button on the right side panel and looked out from the cab window. [CCTV]
11:20:23 hours	RVO: Contacted the RTC, reporting that they “weren’t sure” but thought the “wrong side” doors were opened. RTC: Acknowledged and instructed the RVO to make announcements to the customers, offload the train, and conduct a ground walkaround. [Radio, OPS 4]
11:21:07 hours	MICC Operations Manager was advised of the preliminary report of Train ID 612, opening doors on the opposite side of the platform. [Phone, Rail 1]
11:21:26 hours	RTC: Confirmed with RVO that the Lead car number was 7242. [Radio, OPS 4]
11:22:24 hours	RTC: Asked RVO to confirm the non-platform side doors were opened. [Radio, OPS 4]
11:23:08 hours	MICC Operations Manager advised the Safety Information Official (SIO) and Division manager. [Phone, Rail 1]
11:27:14 hours	RVO: Advised passengers were offloaded. RTC: Advised all RVOs of single tracking at Innovation Center Station. [Radio, OPS 4]
11:29:48 hours	RVO: Completed the walkaround and had no other reportable event. [Radio, OPS 4]
11:30:08 hours	RTC: Advised RVO to wait for a supervisor. [Radio, OPS 4]
11:35:30 hours	RTC: Requested RTRA Supervisor advise them upon arrival at Innovation Center. [Radio, OPS 4]

Time	Description
11:39:43 hours	RTRA Supervisor: Advised RTC of their presence at Innovation Center Station. RTC: Instructed the RTRA Supervisor to take over the train operations and head to the Dulles Yard with the RVO. [Radio, OPS 4]
11:44:10 hours	Train ID 612 (712) [7236T] departed the station.
11:47:41 hours	Announced made to resume normal operation. [Radio, OPS 4]
11:52:44 hours	First train (Train ID 618) serviced Innovation Center Station, track 2, after resuming normal operation. [SPOTS]

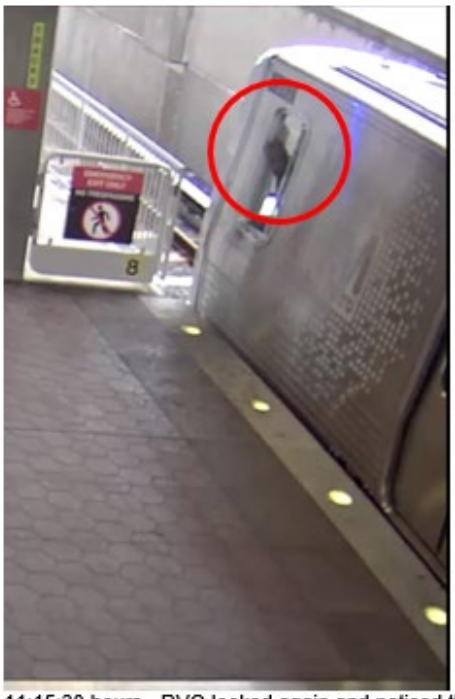
Note: Times above may vary from other systems' timelines based on clock settings.

Closed-Circuit Television (CCTV)

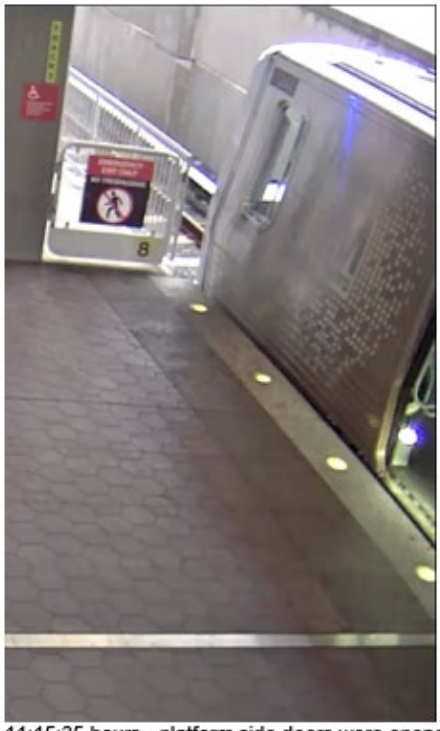


11:14:48 hours - RVO looked out from the cab and noticed the platform side doors were not opened.

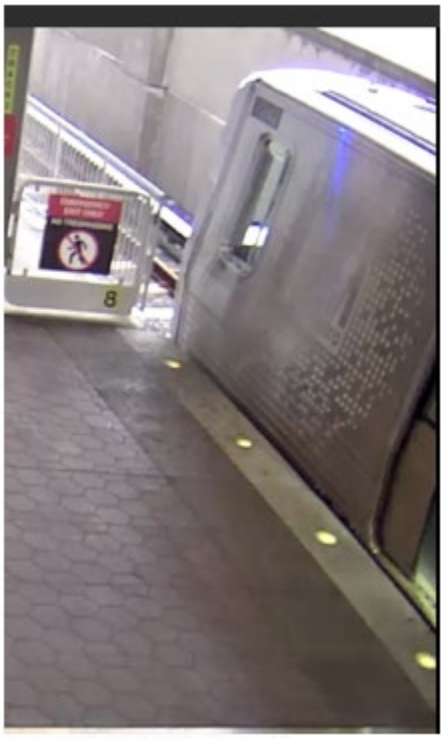
11:15:25 open door lights were illuminated.



11:15:30 hours - RVO looked again and noticed the platform side doors were not opened.



11:15:35 hours - platform side doors were opened.



11:16:13 hours doors were closing.

11:16:24 hours – RVO looked out from the right side cab window.

Office of Chief Mechanical Officer / Vehicle Monitoring and Diagnostic System (VMDS)
Adopted from Office of Chief Mechanical Officer IIT report with minor formatting and grammatical edits:

The CMOR/IIT determined that based on the review of Vehicle Monitoring and Diagnostic System (VMDS)/Logic Control Unit data (LCU) and Event Records (ER), the train operated as designed and found no defects that contributed to the event. Car 7242 was the Lead car. The train was in Manual with Automatic Train Protection (ATP). Both the right (opposite side of the platform) and left Open Door (the platform side) buttons were pressed after the train came to a stop.

ER Data Graphic:

Sequence of Events:

1. At 11:13:48, Train 612 entered the Innovation Center Station in "B1~B3" braking at ~36 MPH.
2. At 11:14:17, Train 612 was in Manual Mode with ATP. The Train stops at Innovation Center Station ~2 feet short of the 8-car marker on Track 2.
3. At 11:15:11, the Right Door Open Button is pressed on the Auxiliary Panel, and the Open Left Door Train Line goes to a High state. The "All Doors Closed & Locked" goes to zero, indicating the Doors are open.
4. At 11:15:20, the Left Door Open Button is pressed on the Console Panel, and the Open Right Side Train Line goes to a High state.
5. At 11:15:21, the Right Door Close Button is pressed on the Aux Panel and the Doors Close.
6. At 11:15:31, the Left Door Open Button is pressed on the Control Panel, and the Left Open Door Train Line goes to a High state.
7. At 11:15:33, the Left Door Open Button is pressed on the Control Panel, and the Left Open Door Train Line goes to a High state.
8. At 11:15:50, the Right Close Button is pressed on the Aux Panel and goes to a Low state.
9. At 11:50:52, the Right Close Button is pressed on the Aux Panel.
10. At 11:15:56, the Left Close Button is pressed on the Control Panel.
11. At 11:16:35, the Left Open Button was pressed on the Console Panel, and the All Doors Closed & Locked signal indicates the Doors are Closed.
12. At 11:19:38, the Platform ID is detected (TWC IP 140) Innovation Center (B09-2).
13. At 11:23:02, Car 7242 is Keyed Down.
14. At 11:29:57, Car 7242 is Keyed Up.
15. At 11:43:54, Car 7242 takes POP in "P1~P4" Power Mode.

ER Data of Incident Table:

DateTime [LOCAL]	Cab Active (CAR ON)	Car Number	Train ID	Platform/Station ID	ATP Speed Limit	ADU Regulated Speed	Speed [Mph]	Zero Speed Detection	PSS Distance To Go	ATC markers identification (First member)	ATC markers identification (Second member)	ADU Door Enable	All Door Closed and Locked T/L Status	Door Open Left (Left Door Control Panel)
09/23/2024 11:14:17 AM	1	7242	612	0	40	40	0	0	2	0	0	0	1	0
09/23/2024 11:14:17 AM	1	7242	612	0	40	40	0	1	2	0	0	0	1	0
09/23/2024 11:15:11 AM	1	7242	612	0	40	40	0	1	2	0	0	1	1	0
09/23/2024 11:15:11 AM	1	7242	612	0	40	40	0	1	2	0	0	1	1	0
09/23/2024 11:15:11 AM	1	7242	612	0	40	40	0	1	2	0	0	1	0	0
09/23/2024 11:15:20 AM	1	7242	612	0	40	40	0	1	2	0	0	1	0	1
09/23/2024 11:15:20 AM	1	7242	612	0	40	40	0	1	2	0	0	1	0	1
09/23/2024 11:15:21 AM	1	7242	612	0	40	40	0	1	2	0	0	1	0	0
09/23/2024 11:15:31 AM	1	7242	612	0	40	40	0	1	2	0	0	1	0	1
09/23/2024 11:15:31 AM	1	7242	612	0	40	40	0	1	2	0	0	1	0	1
09/23/2024 11:15:33 AM	1	7242	612	0	40	40	0	1	2	0	0	1	0	1
09/23/2024 11:15:33 AM	1	7242	612	0	40	40	0	1	2	0	0	1	0	1
09/23/2024 11:15:50 AM	1	7242	612	0	40	40	0	1	2	0	0	1	0	0
09/23/2024 11:15:56 AM	1	7242	612	0	40	40	0	1	2	0	0	1	0	0
09/23/2024 11:16:35 AM	1	7242	612	0	40	40	0	1	2	0	0	1	1	1

The RVO was employed as a Bus Operator on May 24, 2005, and certified as an RVO on August 28, 2024. The RVO has no prior safety incident. The RVO worked a total of 33 hours within the last seven (7) days and no overtime within the past 2 weeks.

Interview Findings and Written Statements

As part of the investigation launched into the event, Safety interviewed one person. The interview 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.

RVO

- The RVO stated that before the incident, they heard another RVO advise that the train doors did not open at Innovation Center Station.
- The RVO was operating in auto-doors, but the doors did not open.
- When the doors did not open, the RVO requested and received permission to open the doors manually.
- The event occurred on the RVO's first day operating the train alone after certifying as a RVO.
- The RVO went to the right-side panel and hit the red button (Close Door) instead of the white button (Open Door).
- The "off platform side" doors were opened.
- The RVO then went to the left side panel and opened and closed the platform side doors.
- The RVO experienced door problems for the first time. The RVO said they "panicked."
- After the incident, the RVO contacted Central and was advised to do a walk-around the train.
- The RVO had no problems with their training.

RTRA Rail Supervisor (written statement)

- The RVO stated that the doors did not open on the platform side.
- The RVO saw door signal lights, but the doors did not open.
- The RVO pushed the right-side door indicator button and doors opened on the opposite side of the platform.

Weather

On September 23, 2024, NOAA recorded the average temperature as 66°F, average wind speed at 7.0 mph, and relative humidity at 86 percent average. The weather was not a contributing factor in this incident (Weather source: NOAA) – Location: Fairfax, VA.

Related Rules and Procedures

The Metrorail Operating Rulebook (MOR), in part, states the following:

8.18 Door Operation

8.18.3 In revenue service, when the train is otherwise within the limits of a station platform, Rail Vehicle Operators shall not manually operate the OPEN DOORS control on the side of the train opposite the platform.

Standard Operating Procedure (SOP) 40, Procedure for Platform Berthing, Station Servicing and Overruns, in part, states the following:

6.2 Door Opening Procedures

6.2.3 When the Door Mode Selector is in the Manual/Manual position, the Rail Vehicle Operator shall:

6.2.3.1 Use extreme caution before depressing the Open Doors pushbutton;

6.2.3.2 Ensure the train is properly berthed on the platform;

6.2.3.3 Verify the platform side of the train by placing their head out of the cab window and first look and identify the platform;

6.2.3.4 Look at the doors on the platform side of the train to observe any activity in front of the doors, with hands to their side for five (5) seconds;

6.2.3.5 Depress the Open Doors pushbutton on the platform side of the train;

6.2.3.6 (Additional step only for 7000 Series Fleet) Depress the console 'Ok' pushbutton on the Aspect Display Unit;

6.3 Station Stop Misalignment Procedures

6.3.1 When a train is approaching the station and stops short, the Rail Vehicle Operator shall adjust the train's position in Mode 2 Level 1 to align it with the platform at the eight (8)-car marker position.

Human Factors

Fatigue

Signs and Symptoms of Fatigue
We evaluated 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 RVO's fatigue. No signs or symptoms of fatigue were evident from the video. The RVO reported feeling fully alert at the time of the incident. The RVO reported experiencing no symptoms of fatigue in the time leading up to the incident.

Fatigue Risk
We 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. The RVO reported keeping a regular sleep schedule in the days leading up to the incident. The RVO worked the day shift in the days leading up to the incident. The RVO was awake for 9 hours at the time of the incident. The RVO reported 8.5 hours of sleep in the 24 hours preceding the incident. The off-duty period was 63 hours which provides an opportunity for 7-9 hours of sleep. This was a comparable amount of sleep to the RVO's usual workday sleep durations. The RVO reported no issues with sleep.

Post-Incident Toxicology Testing

WMATA's Drug and Alcohol Program determined that the RVO complied with the Drug and Alcohol Policy and Testing Program 7.7.3/6.

Findings

- The RVO made a complete stop approximately two feet short of the 8-car marker.
- The RVO requested permission to open the doors manually.
- The RVO pressed the "red" Door Open button on the right panel that opened doors on the opposite side of the platform and then the "white" Door Close button, closing the opposite side doors.
- The opposite side doors were open for approximately 10 seconds.
- The RVO serviced the station, opening and closing the platform side doors.
- The RVO reported that the "wrong side" doors were opened and conducted a ground walkaround.

Immediate Mitigation to Prevent Recurrence

- In adherence to Standard Operating Procedure 102-1, which outlines the protocol for Removing an Employee from Service for involvement in an operational safety event, the Radio RTC dispatched a Rail Supervisor to relieve the Train Operator from duty for post-incident testing.
- In accordance with the Office of the Chief Mechanical Officer CMOR-IIT Operations Administrative Policy 102.06, the MICC promptly removed Train ID 612 from revenue service for post-incident investigative measures. This action adhered to the Rail Vehicle Event Investigation Policy, ensuring a comprehensive incident examination.

Probable Cause Statement

The probable cause of the Improper Door Operation event at Innovation Center Station on September 23, 2024, was due to the RVO's loss of situational awareness.

Recommended Corrective Actions

Corrective Action Code	Description	Responsible Party	Estimated Completion Date
120066_SAFECAPS_RTRA_001	The Rail Vehicle Operator will complete refresher training with an emphasis on proper door operations.	RTRA SRC	Completed

Appendices

Appendix A – Interview Summary

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.

The RVO was certified as a Train Operator in August 2024 and holds an RWP Level 2 Certification. The RVO responded to the interview intake questions, having no sleep/fatigue issues. The RVO completed their post-incident testing. The RVO stated it was their first day operating the train alone and the last trip of the day.

The RVO stated that before the incident, they heard another RVO advising Central that the doors did not open at Innovation Center Station. This was the first time the RVO had experienced problems with auto doors. The RVO stated that they tried auto doors, but they did not open. When their auto doors did not work, they requested and received permission to manually open them.

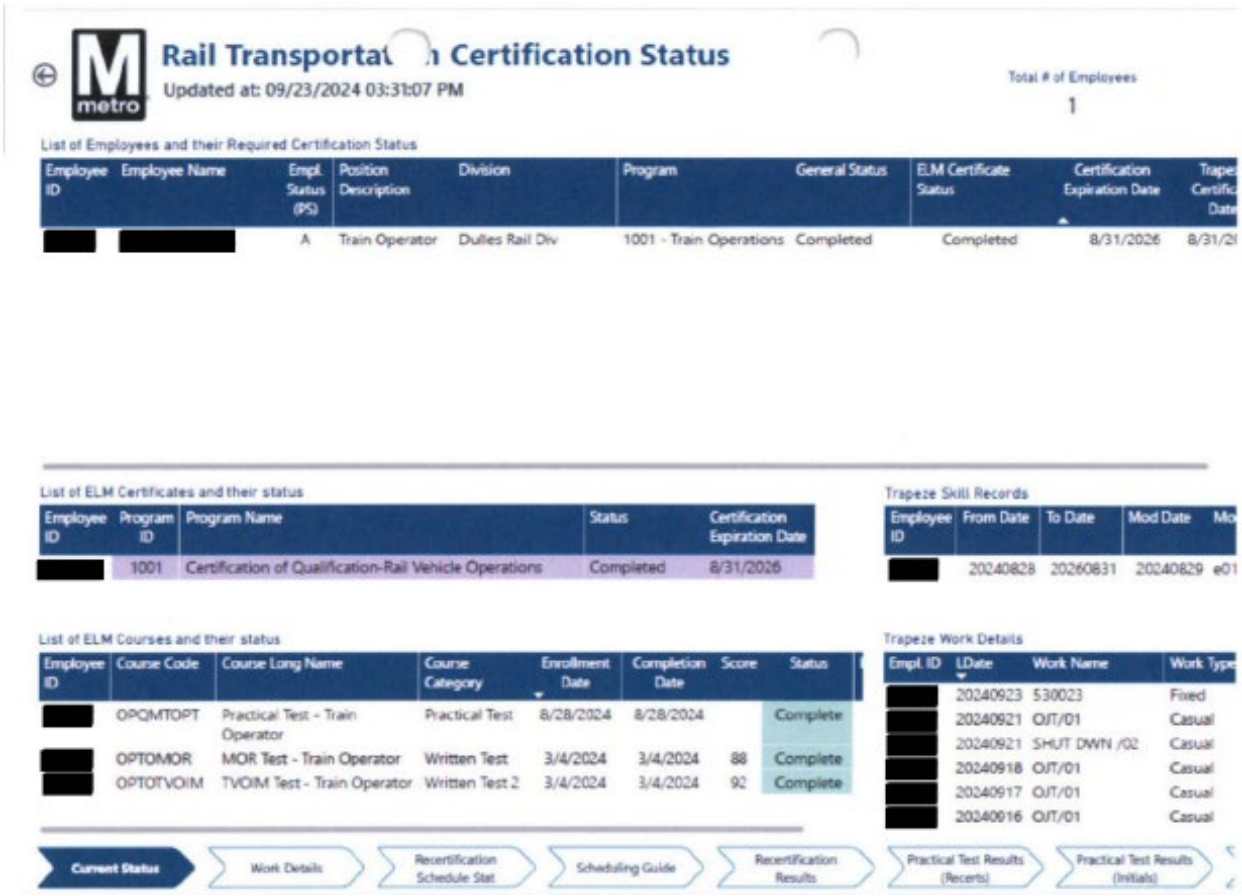
The RVO stated they went to the right panel and pressed the button. The RVO reported hearing an alarm. They said they hit the red button instead of the white button, thinking they had opened the platform side doors, but the doors were not opened. The RVO stated they opened the doors twice because they panicked.

The RVO stated that after the incident, they contacted Central and was instructed to conduct a ground walkaround the train. The supervisor came to meet and took over the train from them. They had no issues during the walkaround.

The RVO stated they did not have any door issues with the train.

The RVO stated that they had no problems with their training.

Appendix B – Certification



Rail Transportat[illegible]n Certification Status

Updated at: 09/23/2024 03:31:07 PM

Total # of Employees: 1

List of Employees and their Required Certification Status

Employee ID	Employee Name	Empl. Status (PS)	Position Description	Division	Program	General Status	ELM Certificate Status	Certification Expiration Date	Trapeze Certific Date
[redacted]	[redacted]	A	Train Operator	Dulles Rail Div	1001 - Train Operations	Completed	Completed	8/31/2026	8/31/2[illegible]

List of ELM Certificates and their status

Employee ID	Program ID	Program Name	Status	Certification Expiration Date
[redacted]	1001	Certification of Qualification-Rail Vehicle Operations	Completed	8/31/2026

Trapeze Skill Records

Employee ID	From Date	To Date	Mod Date	Mo
[redacted]	20240828	20260831	20240829	e01

List of ELM Courses and their status

Employee ID	Course Code	Course Long Name	Course Category	Enrollment Date	Completion Date	Score	Status
[redacted]	OPQMTOPT	Practical Test - Train Operator	Practical Test	8/28/2024	8/28/2024		Complete
[redacted]	OPTOMOR	MOR Test - Train Operator	Written Test	3/4/2024	3/4/2024	88	Complete
[redacted]	OPTOTVOIM	TVOIM Test - Train Operator	Written Test 2	3/4/2024	3/4/2024	92	Complete

Trapeze Work Details

Empl. ID	LDate	Work Name	Work Type
[redacted]	20240923	530023	Fixed
[redacted]	20240921	OJT/01	Casual
[redacted]	20240921	SHUT DWN /02	Casual
[redacted]	20240918	OJT/01	Casual
[redacted]	20240917	OJT/01	Casual
[redacted]	20240916	OJT/01	Casual

Current Status | Work Details | Recertification Schedule Stat | Scheduling Guide | Recertification Results | Practical Test Results (Recerts) | Practical Test Results (Initials)

Appendix C – RTRA Supervisor's Report

RTRA SUPERVISOR REPORT

Date	Incident Time	Incident Location (Station Mezzanine #)	Track/Mezzanine #
09-23-2024	11:21 AM	INNOVATION	2

Equipment Number (Train ID & Car Numbers; Escalator/Elevator #): N/A

Incident Description: Doors opened off Platform

WMATA Personnel Involved	Employee #	Rule Violation?	Home Division	Post Incident
[redacted]	[redacted]		Dulles	yes

Customer Information (Detailed Information must be recorded on Station Manager Incident Report)

Name	Address	Injury?
N/A	N/A	
Name	Address	Injury?
Name	Address	Injury?

Fire Department/EMS/Other External Agency Responding (Use Supplemental sheet if necessary)

Arrival Time	Unit Number	Person In Charge	Remarks
N/A		N/A	N/A

Chronological Account of Incident

Per my Investigation, Operator [redacted] stated that he serviced Innovation Center track 2 and the doors didn't open on platform side, he stated that he saw door signal lights but the doors didn't open, he walk over and push the right side door indicator button and doors opened off platform.

(Note time for each entry; Include statement of Employee or Witness at conclusion)

Your Arrival Time: _____

Supervisor Submitting Report	(Payroll #)	Date	Report Reviewed By	Date
[redacted]	[redacted]	09/23/24		

Report must be faxed to ROCC [redacted] at end of Tour

RTRA Supervisor Report
Continuation Page

Key Findings (Detail Below)

Supervisor Submitting Report (Initials)	Report Review By (Initials)
Report must be faxed to ROCC [redacted] at end of tour	

WMATA/RTRA Incident/Accident Report (Other than Motor Vehicle) Page 1 of 1

Incident Information: This page must be completed for all incidents

Date:	Incident Time:	Time Reported:	Reported by: Customer ☐ Employee ☑ ROCC ☑ Other ☐
9/23/24	around 11:30 pm	11:35 AM	

Location

Station	Mezzanine #	Track #/Destination	Chain Marker/Signal Number
INNOVATION		2	N09

TYPE OF INCIDENT

☐ Property Damage	☐ Smoke	☐ Fire	☐ Customer Complaint
☐ Customer injury	☐ Customer Illness	☐ Employee Injury	☐ Employee Illness
☐ Criminal Activity	☐ Elevator Entrapment	☑ Rail Vehicle Incident	☐ Other (Explain in description of incident)

WEATHER	LIGHT CONDITIONS (natural lighting)	LIGHTING (artificial lighting)
Clear ☐ Rain ☑	Dawn/Dusk ☐ Daylight ☑	Lights On ☑ Lights Off ☐
Snow ☐ Sleet/Ice ☐	Dark ☐ Tunnel/Underground ☐	Lights Not Working ☐

STATION INCIDENTS: Always include equipment number you use for MOC/AFC/EOC

Elevator/Escalator#:	AFC #:	Room Number/Location:

Failure Number(s):

Parking Lot ☐ Paid Area ☐ Free Area ☐ Garage ☐ Station Entrance ☐ Stairway # ___☐ Platform ☐ Ancillary Room ☐
Injury/Illness reported aboard Train ☐ Other ☐ _____

Name of Responding Supervisor:	Name/Department of PLNT/AFC or other WMATA responder

TRAIN INCIDENTS

Train ID	Destination	Car Numbers(list all cars in consist):	Lead Car:
612	ASHBURN	7750, 7236, 7715, 7206, 7236	7236

Name of Responding Supervisor:	Name/Department of CMNT/TRST or other WMATA responder

DESCRIBE THE INCIDENT: Include what you did to correct the problem and who you notified and when.

Describe any property damage and the extent of any injuries.

I WAS given permision to open doors plat form side only I attemp to open door on the right but cought my sele then I went to open doors on the left side platform side. At this time im thinking i did open the so i believe I went to ~~the~~ close the door's and press the red button instead of the white close door button now the door's are open off platform side i panic when I thought i open the door's from the start.

Employee Completing Report

Employee Name:(print)	Employee Signature:(sign)	Employee #:	Date:
[redacted]	[redacted]	[redacted]	9/23/24

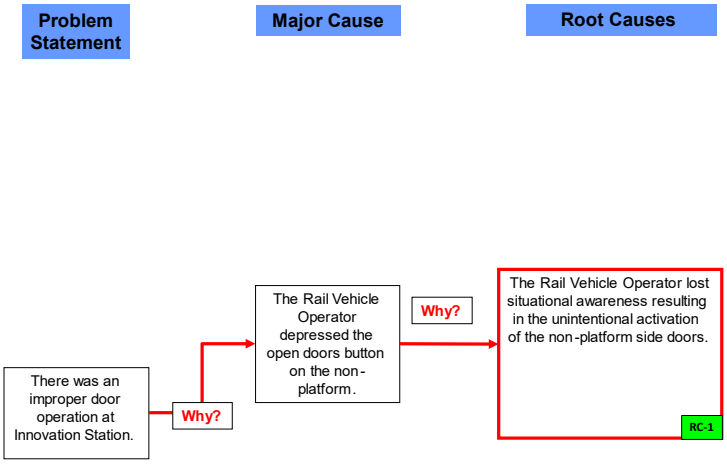
Division:	Run #	Block #	Assigned Days:
DULLES	23		

To Be Completed By Reviewing Manager

Supervisor Name:(print)	Supervisor Signature	Employee #	Date:
[redacted]	[redacted]	[redacted]	9 23 2024

Action taken/needed
Under investigation
SMS Number:

Appendix E – Why-Tree Analysis



Root Cause Analysis

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

FINAL REPORT OF INVESTIGATION A&I E24755

Date of Event:	September 24, 2024
Type of Event:	0-15 (a) - Improper Door Operation
Incident Time:	19:11 hours
Location:	Silver Spring Station, track 2
Time and How received by SAFE:	20:10 Hours – Safety Information Officer (SIO)
WMSC Notification Time:	20:18 Hours
Responding Safety Officers:	None
Rail Vehicle:	Train ID 126 (L3239x38-3240-41x3265x64-3152x53T)
Injuries:	None
Damage:	None
Emergency Responders:	None
SUDS I/A Incident Number:	20240924#120114MX

Silver Spring Station – Improper Door Operation

September 24, 2024

Table of Contents

Abbreviations and Acronyms

AIMS	Advanced Information Management System
ARS	Audio Recording System
CCTV	Closed-Circuit Television
CMOR	Office of Chief Mechanical Officer
COMR	Office of Radio Communication
IIT	Incident Investigation Team
MC	Master Controller
MICC	Metro Integrated Command and Communications Center
MOC	Maintenance Operation Controller
MOR	Metrorail Operating Rulebook
NOAA	National Oceanic and Atmospheric Administration
OAP	Operations Administrative Policy
ROQT	Rail Operations Quality Training
RTC	Rail Traffic Controller
RTRA	Office of Rail Transportation
SAFE	Department of Safety
SIO	Safety Information Officer
SOP	Standard Operating Procedures
SUDS	Safety Universal Data System
VMS	Vehicle Monitoring 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 Tuesday, September 24, 2024, an eight-car 3000-series train (Train ID 126, consisting of car pairs L3239x38-3240x41-3265x64-3152x53T), operated by a Brentwood Division Rail Transportation Supervisor, stopped at Silver Spring Station on track 2. The train had six cars on the platform and two outside the platform limits. Despite the improper positioning, the train doors were opened to service the station. The train had stopped at the beginning of a construction scaffold on the platform, located 188 feet from the designated 8-car marker. The Rail Transportation Supervisor subsequently closed the doors and moved beyond the 8-car marker, resulting in a station overrun, following the improper door operation.

The Silver Spring Terminal Supervisor promptly reported the incident to the Metro Integrated Command and Communication Center (MICC) Button Rail Traffic Controller (RTC), who then made internal departmental notifications. Following the incident, the Radio RTC could not establish communication with the Rail Transportation Supervisor. The Terminal Supervisor conducted a ground walkaround and assumed control of the train.

In accordance with Standard Operating Procedure (SOP) 102-01-02[1] the Radio RTC dispatched a second Rail Transportation Supervisor to relieve the Rail Transportation Supervisor for post-incident testing, which addresses the removal of employees involved in operational safety events. The Radio RTC followed established protocols for ensuring safety and compliance in such situations. Additionally, in alignment with the Office of the Chief Mechanical Officer (CMOR) Incident Investigation Team (IIT)[2] Operations Administrative Policy (OAP) 102.06, MICC promptly removed Train ID 126 from revenue service to facilitate a detailed investigation under the Rail Vehicle Event Investigation Policy.[3]

The probable cause of the improper door operation was the Rail Transportation Supervisor's misjudgment in stopping the train, which led to incorrect positioning relative to the platform. A contributing factor was the presence of temporary scaffolding on the platform, which created a visual illusion of an earlier platform endpoint, further influencing the Supervisor's misjudgment.

[1] SOP 102-01-02 outlines the protocol for removing employees from service in the event of safety violations or operational incidents. The footnote references this as "employee removal following operational safety events," which is accurate but could be expanded to indicate that this protocol includes post-incident testing (such as drug and alcohol testing) to ensure compliance with safety standards.

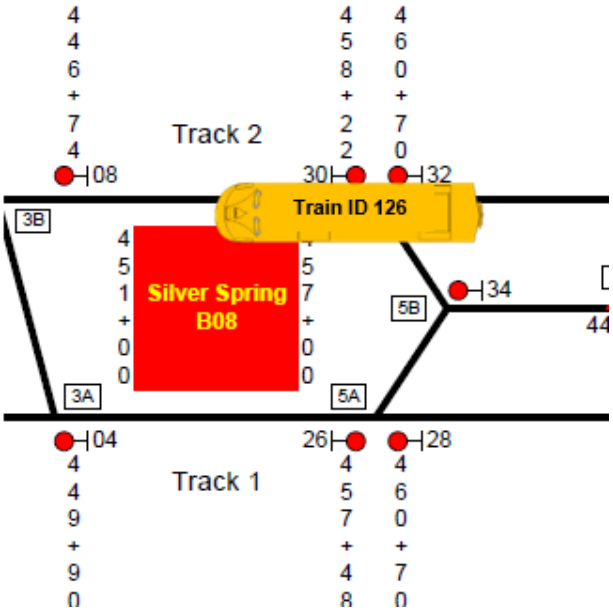
[2] ensures prompt response by the Incident Investigation Team (IIT) and removal from service for further review, which is vital to maintaining safety protocols during investigations.

[3] this decision ensures safety and compliance while mitigating risk from the incident, and that such protocols are part of the broader Rail Vehicle Event Investigation Policy.

Incident Site

Silver Spring Station track 2. The station platform had 188 feet of scaffolding from the 8-car marker towards the center of the platform.

Field Sketch/Schematics



The above depiction is not to scale.

Purpose and Scope

The purpose of this accident investigation and candid self-evaluation is 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:

- Site Assessment through video and document review.

- Formal Interviews – SAFE interviewed two 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:
    - Rail Operations Supervisor #1
    - Rail Operations Supervisor #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:
    - Training Records

- Certifications
- 30-Day work history review
- Metrorail Operating Rulebook (MOR)
- National Oceanic and Atmospheric Administration (NOAA)
- Metro Integrated Command and Communications (MICC) Incident Report
- Maximo Data (Work Order)

- System Data Recording Review – Collection of information contained in Metro Data Recording Systems. This data includes:
  - Audio Recording System (ARS) playback, Radio Ops 1 and landline.
  - The Office of Chief Mechanical Officer (CMOR) Incident Investigation Team (IIT) Vehicle Monitoring and Diagnostic System (VMS)
  - Closed-Circuit Television (CCTV)

Investigation

On Tuesday, September 24, 2024, at 19:11 hours, CCTV revealed that an eight-car 3000 series Train ID 126 (L3239x38-3240x41-3265x64-3152x53T) operated by a Rail Operations Supervisor #1 stopped at Silver Spring Station on track 2, with 5 and a half on and 2 and a half outside the platform limits and opened the train doors. Rail Operations Supervisor #1 stopped the train at the beginning of a construction scaffold that was installed on the platform, located 188 feet from the 8-car marker, and serviced the station.

Figure 1 - (CCTV) railcars 3152 and 3153 doors open outside the platform limits.

Rail Operations Supervisor #1 closed the train doors and began moving toward the 8-car marker. However, Rail Operations Supervisor #2 stopped the train just after it passed the 8-car marker, leaving one door beyond the marker. This positioning resulted in a station overrun, preventing proper service at Silver Spring Station.

According to the Incident Investigation Team (IIT) report, the train initially stopped 188 feet short of the 8-car marker and later stopped 7 feet beyond it.

At 19:14 hours, Rail Operations Supervisor #2 reported the incident to the MICC Button RTC, who notified Rail 2 and dispatched Rail Supervisor #3 from an unspecified location and the incident train cleared before their arrival.

Following the incident, the Radio RTC was unable to re-establish communication with Rail Operations Supervisor #1. As a result, Rail Operations Supervisor #2 was instructed to complete a ground walkaround.

At 19:23 hours, CCTV footage showed customers being offloaded from Train ID 126 with assistance from the Station Manager via the emergency doors on the platform due to the RTC unable to establish communication with Rail Operations Supervisor #1 operating the train. Simultaneously, trains began operating in a single-track configuration through Silver Spring Station on track 1 toward Shady Grove Station.

At 19:25 hours, the Audio Recording System (ARS) revealed that Rail Operations Supervisor #2 was granted foul time to conduct a ground walkaround on track 2. CCTV confirmed that Rail Operations Supervisor #2 entered the roadway.

At 19:28 hours, the Button RTC notified MOC that they had no radio communication on the platform of track 2 at Silver Spring Station. According to Work Order #18942219, a communication technician requested that the Button RTC conduct a radio check with the Train Operator on the next train to enter Silver Spring Station. Upon doing so, the radio checks were loud and clear, only isolating the no-communication fault from the incident train.

At 19:28 hours, the Station Manager reported that Train ID 126 was clear of customers, and one minute later, Rail Operations Supervisor #2 relinquished foul time. The Radio RTC instructed Rail Operations Supervisor #2 to assume the operation of Train ID 126.

At 19:33 hours, Train ID 126 departed Silver Spring Station and was transported to the Brentwood Rail Yard for further investigation.

Chronological Event Timeline

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

Time	Description
19:11:11 hours 19:11:49 hours	Train ID 126, trailing three car doors, opening off the platform (3264-3152x53) and remaining open until 19:11:49 hours. [CCTV]
19:12:43 hours	Train ID 126 began moving on track 2 at Silver Spring Station. [CCTV]
19:13:06 hours	Train ID 126 stopped with the lead car beyond the 8-car marker of Silver Spring Station, track 2, and train doors remained closed. [CCTV]
19:14:37 hours	Rail Operations Supervisor #2: Notified the Button RTC that Train ID 126 opened the train doors off the platform. [Phone]
19:14:50 hours 19:16:03 hours	Radio RTC: Requested confirmation from Train ID 126 if they were moving. To no avail. (several attempts made) [Radio, Ops 1]
19:17:35 hours	Button RTC: Instructed Rail Operations Supervisor #2 to complete a ground walk around Train ID 126. [Phone]
19:18:12 hours	Radio RTC: Dispatch Rail Operations Supervisor #3 from an unknown location to Silver Spring Station. [Radio, Ops 2]
19:18:30 hours	Rail 1: Notified the SIO of the Improper Door Operation event. [Phone]

Time	Description
19:20:05 hours	Button RTC: Request Rail Operations Supervisor #2 to complete a radio check and request permission to enter the roadway. Rail Operations Supervisor #2: Questioned if the incident was a Station Overrun or Improper Door Operation. Button RTC: Advised that Rail Operations Supervisor #2 reported an Improper Door Operation and to establish communication with the Rail Operations Supervisor #1 operating Train ID 126. [Phone]
19:21:00 hours	Button RTC: Dispatched Rail Operations Supervisor #3 to Silver Spring Station from an unknown location. [Phone]
19:23:06 hours	Customers on Train ID 126 offload onto the platform via emergency doors by the Silver Spring Station Manager. [CCTV]
19:23:22 hours	Trains began single tracking towards Shady Grove Station by way of track 1. (Train ID 128 first train) [CCTV]
19:24:25 hours	Rail Operations Supervisor #2 utilizes the ETS phone at the 8-car marker (Forest Glen end of the platform) on track 2. [CCTV]
19:24:38 hours	Rail Operations Supervisor #2: Advised the Radio RTC that the Silver Spring Station Manager was assisting with offloading customers from Train ID 126. [Radio, Ops1]
19:25:20 hours	Radio RTC: Grant Rail Operations Supervisor #2 foul time to conduct a ground walkaround of Train ID 126. [Radio, Ops1]
19:25:43 hours	Rail Operations Supervisor #2 enters the roadway, track 2, and conducts a ground walk-around on Train ID 126. [CCTV]
19:28:40 hours	Button RTC: Notified MOC that they had no radio communication on track 2's platform at Silver Spring Station. [Phone]
19:28:45 hours	Station Manager: Reported Train ID 126 was clear of customers. [Radio, Ops1]
19:29:25 hours	Rail Operations Supervisor #2: Relinquished foul time and cleared the roadway. [Radio, Ops 1]
19:30:12 hours	Radio RTC: Instructed Rail Operations Supervisor #2 to take over the operation of Train ID 126. [Radio, Ops1]
19:33:25 hours	Train ID 126 departed Silver Spring Station. [CCTV]
19:44:15 hours	Rail 1: Reported the Improper Door Operation and Station Overrun events to the SIO. [Phone]

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

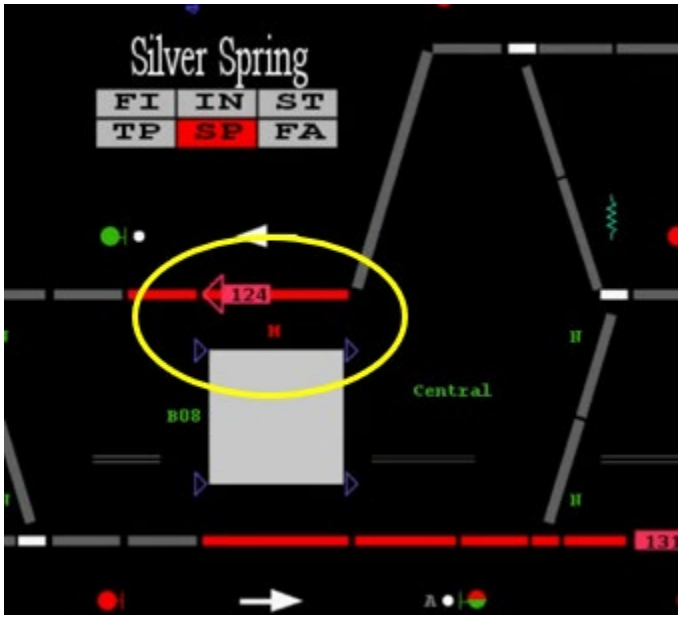


Figure 2 - (Yellow circle) depicts a view of a prior train within platform limit with proper door operation.

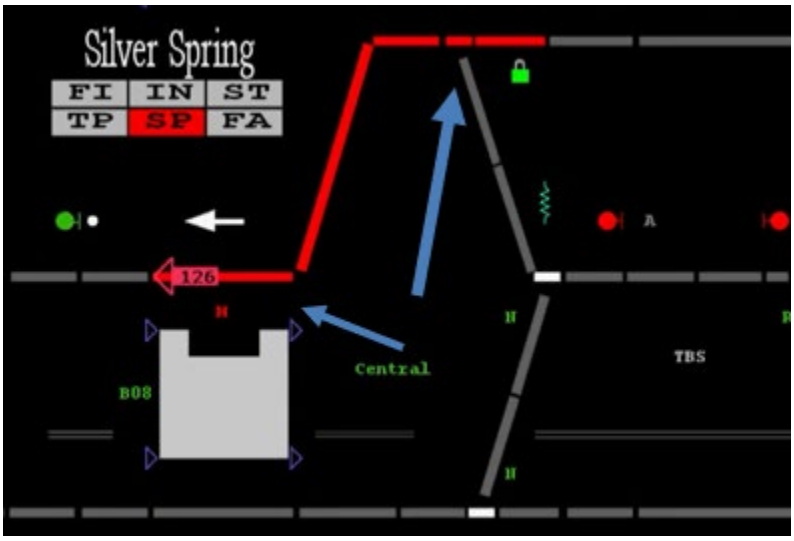


Figure 3 (Blue arrows) depicts incident Train ID 126 occupying the interlocking with a platform door operation.

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

Adopted from CMOR IIT report with minor formatting and grammatical edits:

The Office of the Chief Mechanical Officer (CMOR), Incident Investigation Team (IIT), completed an analysis of data from Train ID 126 and concluded that at 19:07:10.292, the train entered Silver Spring platform limits at a speed of 26 MPH with 3239 as the operating car.

Upon entry, the Master Controller (MC) was placed in the "B1" Braking position. The MC was cycled between Braking mode and "Coast" until the train reached the center of the platform at a speed of 11 MPH, with the MC placed in the "B2" Braking position.

After passing the center of the platform, the MC cycled again between the Braking mode and the "Coast" position until the train came to the first complete stop, 188 feet from the 8-car marker, with the MC placed in the "B4" Braking position. Then, the left door push button was activated, and the left side doors opened. Therefore, doors opened 188 feet off the platform, and the station was serviced. The MC was cycled between Braking and Power positions while the train remained at a complete stop.

At 19:09:44.220, the MC was placed in the "P5" Power position, and the train started to move toward the Silver Spring platform limits. Then, it transitioned from the Power mode to the Braking mode until the consist came to a complete stop 8 feet from the 8-car marker.

At 19:10:03.544, the MC was placed in the "P5" power position, and the train started to move again toward the Silver Spring 8-car marker. Then, it transitioned from the Power mode to the Braking mode until the lead car cab passed the 8-car marker at a speed of 4 MPH and came to a third complete stop, 7 feet beyond the Platform Limits.

In addition, there was neither an Emergency Brake nor a Slip/Slide condition during the incident. Based on the VMS data, no fault was observed with the train that contributed to the cause of this incident. The train performed as commanded.

Note: The *VMS time was 3 minutes and 3 seconds late as compared to the Rocs Spots Report time.*

TIMELINE OF EVENTS

Time	Description of Events	*Train Speed*	*Master Controller*	*Distance from 8-Car Marker*
19:07:10.292	Train 126 entered Silver Spring station, track 2, at a speed of 26 MPH, with the MC placed in the "B1" Braking position.	26 MPH	B1	600 feet
19:07:10.772 19:07:10.900	The MC was in transition from "B2" to "B3" Braking positions.	26 MPH	B2/B3	583 - 578 feet
19:07:11.092	PA Audio communication started.	26 MPH	B3	571 feet
19:07:11.476	The MC was moved to the "B4" Braking position.	25 MPH	B4	557 feet

Time	Description of Events	*Train Speed*	*Master Controller*	*Distance from 8-Car Marker*
19:07:13.333	The MC was moved to the “B3” Braking position.	22 MPH	B3	496 feet
19:07:13.396 19:07:13.620	The MC was in transition from “B2” Braking mode to “Coast” position.	21 MPH	B2/B1/CST	494 - 487 feet
19:07:15.924	PA Audio communication stopped.	19 MPH	CST	424 feet
19:07:17.140 19:07:17.524	The MC was in transition from “B1” to “B5” Braking mode.	18 MPH	B1/B2/B3/B4/B5	391 - 380 feet
19:07:19.220	The MC was moved to the “B4” Braking position.	16 MPH	B4	338 feet
19:07:19.673	The MC was moved to the “B3” Braking position.	15 MPH	B3	328 feet
19:07:20.691	The MC was moved to the “B2” Braking position.	12 MPH	B2	310 feet
19:07:21.268	The train reached the center of the platform at a speed of 11 MPH, with the MC remaining in the “B2” Braking position.	11 MPH	B2	300 feet
19:07:21.588	The MC was moved to the “B1” Braking position.	11 MPH	B1	296 feet
19:07:23.412	The MC was moved to the “Coast” position.	8 MPH	Coast	272 feet
19:07:25.040	The MC was moved to the “B1” Braking position.	8 MPH	B1	253 feet
19:07:26.800	The MC was moved to the “Coast” position.	7 MPH	Coast	234 feet
19:07:27.120 19:07:27.600	The MC was in transition from “B1” to “B2” Braking mode.	7 MPH	B1/B2	231 - 227 feet
19:07:28.368	The MC was moved to the “B1” Braking position.	7 MPH	B1	219 feet
19:07:32.080 19:07:32.528	The MC was transitioned from the “Coast” position to “B1” Braking mode.	3 MPH	CST/B1	198 - 196 feet
19:07:34.576 19:07:34.832	The MC was in transition from “B2” to “B3” Braking mode.	2 MPH	B2/B3	189 feet
19:07:35.568	The MC was moved to the “B4” Braking position.	1 MPH	B4	188 feet
19:07:35.857	The Consist came to a complete stop while the MC remained in the “B4” Braking position.	0 MPH	B4	188 feet
19:07:36.976	The MC handle moved to the “B5” position.	0 MPH	B5	188 feet
19:07:39.280	The MC handle moved to the “B4” position.	0 MPH	B4	188 feet

Time	Description of Events	*Train Speed*	*Master Controller*	*Distance from 8-Car Marker*
19:07:59.372 19:07:59.436	The MC handle was in transition from “B5” to “B4” Braking mode.	0 MPH	B5/B4	188 feet
19:08:02.572	The MC handle moved to the “B5” position.	0 MPH	B5	188 feet
19:08:13.804	The Left Door Close Pushbutton was pressed.	0 MPH	B5	188 feet
19:08:14.572	The Left Doors Open Pushbutton was pressed, and the left side doors opened while the consist was 188 feet off the platform.	0 MPH	B5	188 feet
19:08:14.604	The MC handle was moved to the “B4” position.	0 MPH	B4	188 feet
19:08:46.116	The Left Door Close Pushbutton was Activated.	0 MPH	B4	188 feet
19:08:53.764	The Left Doors Closed.	0 MPH	B4	188 feet
19:08:53.956	The MC handle moved to the “B5” position.	0 MPH	B5	188 feet
19:09:10.335 19:09:10.463	The MC handle was in transition from “B4” to “B1” Braking mode.	0 MPH	B4/B3/B1	188 feet
19:09:11.040	The MC handle moved to the “P5” Power position.	0 MPH	P5	188 feet
19:09:12.256 19:09:12.561	The MC handle was transitioned from the “P4” Power position to the “B5” Braking position.	0 MPH	P4/P3/P1/CST/B1/B2/B4/B5	188 feet
19:09:31.868 19:09:31.964	The MC handle was in transition from “B4” to “B1” Braking mode.	0 MPH	B4/B3/B1	188 feet
19:09:32.541 19:09:32.860	The MC handle was transitioned from the “P1” Power position to the “B5” Braking position.	0 MPH	P1/CST/B1/B2/B3/B4/B5	188 feet
19:09:43.580 19:09:43.676	The MC handle was in transition from “B4” to “B1” Braking mode.	0 MPH	B4/B3/B1	188 feet
19:09:44.220	The MC was placed in the “P5” Power position, and the train started to move toward the Silver Spring 8-car marker.	<1 MPH	P5	188 feet
19:09:49.883	The MC was moved to the “P4” Power position.	8 MPH	P4	159 feet
19:09:50.012	The MC was moved to the “P3” Power position.	9 MPH	P3	156 feet
19:09:50.556 19:09:50.973	The MC handle was transitioned from “P2” to “P5” Power mode.	10 MPH	P2/P3/P4/P5	147 - 140 feet
19:09:51.648 19:09:51.931	The MC handle was transitioned from “P4” to “Coast” Power mode.	12 MPH	P4/P3/P2/P1/CST	129 - 123 feet
19:09:52.156	The MC was moved to the “B1” Braking position.	12 MPH	B1	119 feet

Time	Description of Events	*Train Speed*	*Master Controller*	*Distance from 8-Car Marker*
19:09:53.947 19:09:54.076	The MC handle was transitioned from “B2” to “B3” Braking mode.	14 MPH	B2/B3	81 - 79 feet
19:09:57.208	The MC was moved to the “B4” Braking position.	9 MPH	B4	28 feet
19:09:58.424	The MC was moved to the “B3” Braking position.	6 MPH	B3	17 feet
19:09:59.032	The MC was moved to the “B2” Braking position.	5 MPH	B2	13 feet
19:09:59.672	The MC was moved to the “B1” Braking position.	4 MPH	B1	11 feet
19:10:00.504 19:10:01.080	The MC was cycled between Braking positions.	2 MPH	B2/B3/B3/B4/B5/ B4/B3/B1	9 - 8 feet
19:10:02.328	The Consist came to a complete stop while the MC was in the “B1” Braking position.	0 MPH	B1	8 feet
19:10:02.616 19:10:03.063	The MC handle was in transition from “B4” to “B1” Braking mode.	0 MPH	B4/B3/B2/B1	8 feet
19:10:03.544	The MC was placed in the “P5” Power position, and the train started to move again toward the Silver Spring 8-car marker.	<1 MPH	P5	8 feet
19:10:06.520 19:10:07.000	The MC handle was transitioned from “P4” Power mode to “B5” Braking mode.	2 MPH	P4/P3/CST/B1/B 2/B3/B4/B5	5 - 3 feet
19:10:07.417	The train reached Silver Spring platform limits at a speed of 4 MPH, with the MC remaining in the “B5” Braking position.	4 MPH	B5	0 feet
19:10:09.592	The Consist came to a complete stop while the MC remained in the “B5” Braking position. Overran the station by 7 feet.	0 MPH	B5	-7 feet

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

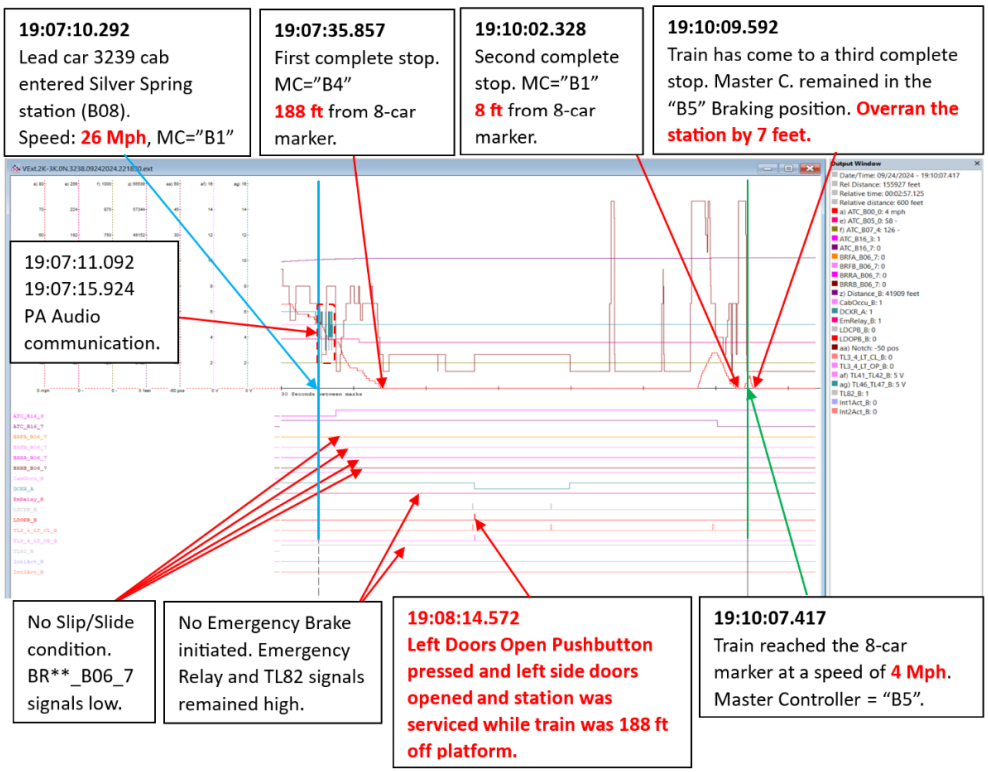


Figure 4 – 3238 VMS Graph Analysis..

Select Platform: and/or Select ID: Leave blank to remove criteria

and/or Select 4-digit car number: 3239 Leave blank to remove criteria

Select Date: Sep 24 2024 Select Times (0-24HRS): From 19:00 To 20:00

Generate Report

ID	Platform	length	dcode	Right door open	Right door close	dwell	Left door open	Left door close	dwell	Head Arrived	Tail cleared	cars	Headway door open to door open
126	B10-2	8	12				19:04:09	19:04:28	19	19:03:34	19:04:56	3239-3238.3240-3241.3265-3264.3152-3153	-
126	B09-2	8	12				19:07:15	19:07:37	22	19:06:34	19:08:06	3239-3238.3240-3241.3265-3264.3152-3153	3:06
726	B08-2	8	83				19:11:17	19:11:54	37	19:10:10	19:34:06	3239-3238.3240-3241.3265-3264.3152-3153	4:02
726	B07-2	0	83							19:35:57	19:36:43	3239-3238.3240-3241.3265-3264.3152-3153	-
726	B06-2	8	83							19:39:10	19:41:10	3239-3238.3240-3241.3265-3264.3152-3153	-
726	B05-2	8	83							19:42:53	19:43:31	3239-3238.3240-3241.3265-3264.3152-3153	-
726	B04-2	8	83							19:44:53	19:46:52	3239-3238.3240-3241.3265-3264.3152-3153	-

Figure 5 - ROCS SPOTS report.

Office of Systems Maintenance, Office of Radio Communications (COMR)

The Office of Radio Communication (COMR) technician advised the RTC to perform a radio check with the next train that entered Silver Spring Station on track 2. It was reported that all transmissions were loud and clear.

Office of Rail Transportation (RTRA)
Adopted from RTRA report:

Per the Rail Transportation (RTRA) report, the Rail Operations Supervisor #1 was operating Train ID 126 on track 2 at Silver Spring Station, stopped short of the 8-car marker, and opened the doors of the train off the platform with two and a half cars outside of the platform limits. After doing so, Rail Operations Supervisor #1 closed the train doors and proceeded to berth at the 8-car marker properly but overran the station. Rail Operations Supervisor #2, who was assigned to Silver Spring Station, noticed the incident. Rail Operations Supervisor #2 notified the MICC of the incident and followed all instructions and procedures. There were no reported damages to any equipment, injuries, or customers reported on the roadway. Rail Operations Supervisor #1 was removed from service and transported for post-incident testing.

In accordance with the Disciplinary Guidelines Matrix, Rail Operations Supervisor #1 was suspended for 30 days for the Serious Safety Violation.

Interview Findings and Written Statements
As part of the investigation launched into the event, SAFE interviewed two 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.

Rail Operations Supervisor #1

- The Rail Operations Supervisor #1 stated that when they noticed the scaffolding, that is where they berth the train.
- The Rail Operations Supervisor #1 stated they placed their head out the operator's window to verify if the train doors opened but could not see to the end of the platform.
- Rail Operations Supervisor #1 stated they manually opened and closed the train doors while berthed at the scaffolding and did not notify the RTCs.
- Rail Operations Supervisor #1 stated they moved the train to the 8-car marker without a permissive block.
- Rail Operations Supervisor #1 stated they did not initially report the incident because they froze up.

Rail Operations Supervisor #2

- Rail Operations Supervisor #2 stated that they noticed Train ID 126 was taking too long to reach the end of the platform.
- Rail Operations Supervisor #2 stated that when they looked out the door of the terminal, they noticed the train passing them and signaled for them to stop.
- Rail Operations Supervisor #2 stated they completed a ground walkaround of Train ID 126.

Weather

On September 24, 2024, at the time of the incident, NOAA recorded the temperature as 67°F, with cloudy skies, winds of 5 MPH, and 87% humidity. The weather was not a contributing factor in this incident (Weather source: NOAA) – Location: (Silver Spring, Maryland)

Related Rules and Procedures

Metrorail Operating Rulebook (MOR)

8.18 Door Operation

8.18.2 In revenue service, Rail Vehicle Operators shall not manually operate any OPEN DOORS control except the crew door key switch while any side doors of the train are outside the limits of a station platform, except when directed by the Rail Traffic Controller.

8.18.3 In revenue service, when the train is otherwise within the limits of a station platform, Rail Vehicle Operators shall not manually operate the OPEN DOORS control on the side of the train opposite the platform.

8.18.4 In the event the train doors are opened outside the platform limits or on the side opposite the platform, Rail Vehicle Operators shall close doors, notify the Rail Traffic Controller, and conduct a ground walk-around inspection. The Rail Traffic Controller will determine if the rain is to be taken out of service and if it is safe to discharge customers at that station.

8.13 Station Overruns

Rail Vehicle Operators shall stop and request instruction from the Rail Traffic Controller whenever a train unintentionally overruns a station platform.

Standard Operating Procedure (SOP) 40 *Procedure for Platform Berthing, Station Servicing and Overruns.*

6.2 Door Opening Procedures

6.2.2 When train is operating in Mode 2 and the Door Mode Selector is in the Auto/Manual position, to automatically open the doors, the Rail Vehicle Operator shall:

6.2.2.1 Depress the Train Berth pushbutton at three (3) miles per hour (mph) or less; and

6.2.2.2 Properly berth the train on the platform.

6.3 Station Stop Misalignment Procedures

6.3.1 When a train is approaching the station and stops short, the Rail Vehicle Operator shall adjust the train's position in Mode 2 Level 1 to align it with the platform at the eight (8)-car marker position.

6.3.1.1 The Rail Vehicle Operator shall: 6.3.1.1.1 Activate the ATO STOP pushbutton if train is operated in Mode 1;

6.3.1.1.2 Contact RTC for permission to change operating mode from Mode 1 to Mode 2 Level 1;

6.3.1.1.3 Make sure vehicles are at a complete stop prior to changing operating modes;

6.3.1.1.4 Announce over public address (PA) system, “Your attention please, this train will move forward”;

6.3.1.1.5 Sound the horn;

6.3.1.1.6 Properly berth train at the eight (8)-car marker position;

Human Factors

Fatigue

Signs and Symptoms of Fatigue

A Safety Investigator evaluated 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. A video of the incident was reviewed to see if Rail Operations Supervisor #1 showed any signs of fatigue. No signs or symptoms of fatigue were evident from the video. The employee reported feeling fully alert at the time of the incident. The employee reported experiencing no symptoms of fatigue in the time leading up to the incident.

Fatigue Risk

A Safety Investigator evaluated incident data for fatigue risk factors. Risk factors for fatigue were present. The incident time of day did not suggest an increased risk of fatigue-related impairment. The employee reported some variation in the sleep schedule in the days leading up to the incident. The employee performed day and night work in the days leading up to the incident. The employee was awake for fourteen hours and eight minutes at the time of the incident. The employee reported 6 hours of sleep in the 24 hours preceding the incident. The off-duty period was seventy-seven hours and thirty minutes, providing an opportunity for 7-9 hours of sleep. This was more than the employee's usual workday sleep durations. The employee reported no issues with sleep.

Post-Incident Toxicology Testing

WMATA's Drug and Alcohol Program determined that Rail Operations Supervisor #1 complied with the Drug and Alcohol Policy and Testing Program 7.7.3/6.

Findings

- Train ID 126 left side doors were manually opened while the train was 188 feet away from the 8-car marker.
- Rail Operations Supervisor #1 operated the train.
- The scaffolding on the platform extended 188 feet from the 8-car marker.
- Rail Operations Supervisor #1 stopped the train at the scaffolding and serviced the station.
- Rail Operations Supervisor #1 did not complete a ground walkaround of Train ID 126 before moving the train to the 8-car marker.
- Rail Operations Supervisor #1 stopped the train 7 feet beyond the 8-car marker.

Immediate Mitigation to Prevent Recurrence

- Rail Operations Supervisor #1 was removed from service for Post-Incident toxicology testing.
- Train ID 126 was removed from service for post-incident inspection.
- Signage was placed at the beginning of the scaffolding - “Train Operators: Proceed to the end of the platform” to alert Rail Vehicle Operators to continue to the 8-car marker at the end of the platform.

Probable Cause Statement

The probable cause of improper door operation at Silver Spring Station was the Rail Transportation Supervisor’s misjudgment in stopping the train, which led to incorrect positioning relative to the 8-car marker at the end of the station’s platform. A contributing factor was the presence of temporary scaffolding on the platform, which created a visual illusion of an earlier platform endpoint, further influencing the Supervisor’s misjudgment.

Recommended Corrective Actions

Corrective Action Code	Description	Responsible Party	Estimated Completion Date
120114_SAFECAPS_RTRA_001	(Red Line) Re-issue RTRA-603-117-00 “September 1st Reopening of Silver Spring, Forest Glen, Wheaton, & Glenmont Following Summer Shutdown”.	RTRA SRC	Completed
120114_SAFECAPS_RTRA_002	Rail Supervisor #1 attend refresher training with the Rail Operation Quality Training (ROQT).	RTRA SRC	Completed
120114_SAFECAPS_RTRA_004	Post communication signage at the beginning of the scaffolding to alert RVO to continue to the 8-car marker/end of the platform.	RTRA SRC	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 Operations Supervisor #1

Rail Operations Supervisor #1 has been a WMATA employee for 18 years and a Rail Operations Supervisor #1 for one year. Rail Operations Supervisor #1 is RWP Level 2 certified, expiring September 2024. Rail Operations Supervisor #1's last Supervisor certification was March 15, 2024, and the last Train certification was February 5, 2024.

During a formal interview, Rail Operations Supervisor #1 stated they were operating Train ID 126 from Metro Center due to relieving a Rail Vehicle Operator for a personal break. The Rail Operations Supervisor #1 stated that they had previously operated on the Red Line, including Silver Spring Station.

After departing Glenmont Station, they arrived at Silver Spring Station and noticed the scaffolding on the platform. They thought the platform was extended from the construction. They properly berthed the train at the 8-car marker on track 1. However, they never operated the train on track 2.

The Rail Operations Supervisor #1 stated they berthed the train on the platform on track 2 at the scaffolding and depressed the train berth. The train lost speed commands, and they placed their head out the operator's window to verify if the train doors opened. They noticed the doors did not open and manually opened the train doors without notifying the RTC. They stated that they could not see the end of the platform.

Rail Operations Supervisor #1 stated they noticed the train was not at the 8-car marker, so they closed the doors and moved the train up to it. They notified Rail Operations Supervisor #2 of the incident, and Rail Operations Supervisor #2 conducted a ground walk around the incident train.

Rail Operations Supervisor #1 stated that they contacted the MICC and reported the incident after Rail Operations Supervisor #2 began operating the train. They stated that they did not initially report the incident to the MICC because they froze up.

Rail Operations Supervisor #2

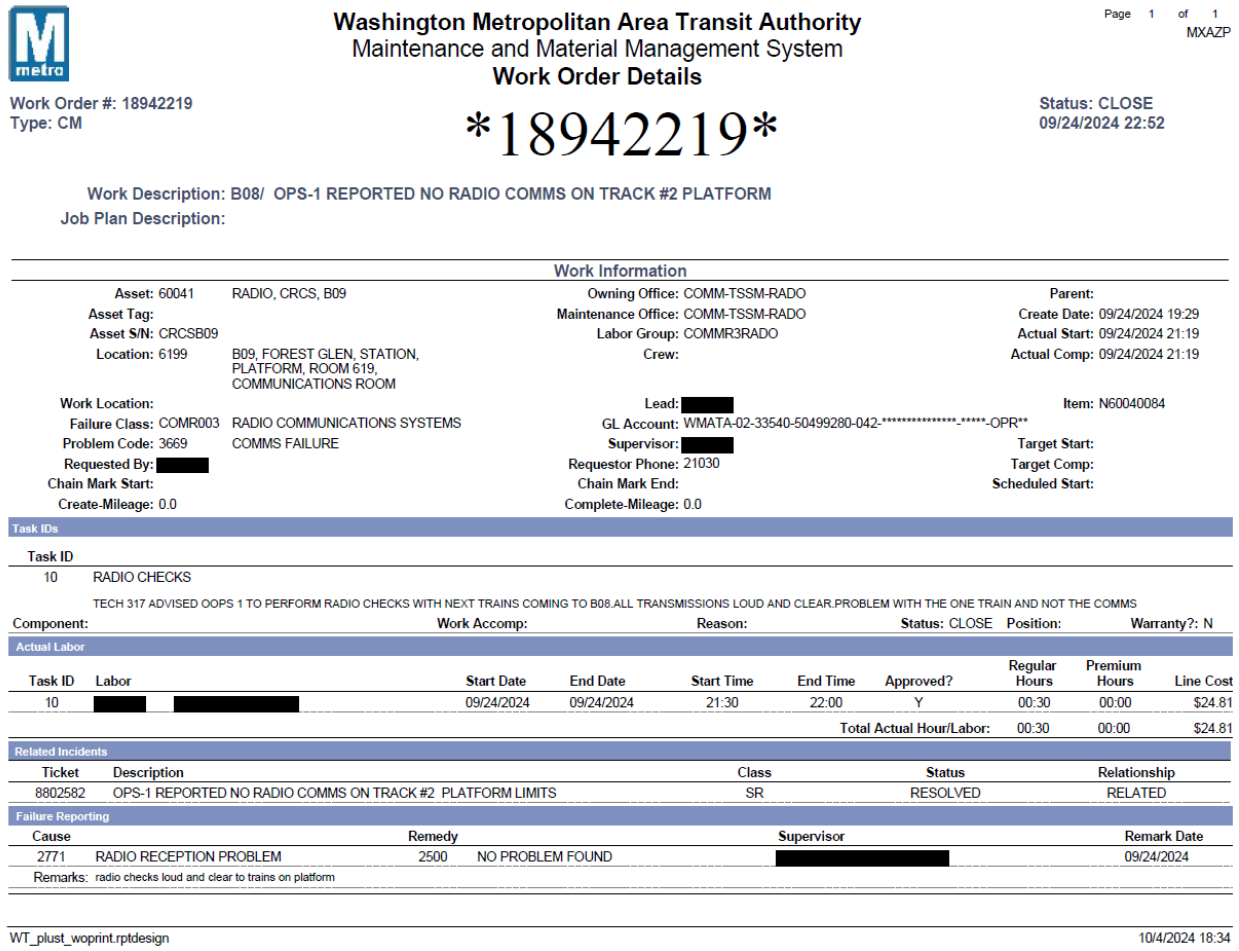
Rail Operations Supervisor #2 has been a WMATA employee for 26 years and a Rail Operation Supervisor for 12 years. Rail Operations Supervisor #2 is RWP Level 2 certified, expiring November 2024. Rail Operations Supervisor #2's last Supervisor certification was on September 11, 2024.

During a formal interview, Rail Operations Supervisor #2 noticed Train ID 126 was taking too long to reach the end of the platform. When they looked out the door of the terminal, they noticed the train passing them and signaled for them to stop. They asked the Rail Operations Supervisor #1 if they serviced Silver Spring Station further down the platform, to which they replied, "No, it was

station overrun." They stated they notified the RTC, which was unsure of what type of incident occurred and wanted to verify if it was a station overrun or improper door operation.

Rail Operations Supervisor #2 stated they were unsure if an improper door operation occurred but completed a ground walk-around of Train ID 126.

Appendix B – Work Order



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

Page 1 of 1
MXAZP

Work Order #: 18942219
Type: CM

18942219

Status: CLOSE
09/24/2024 22:52

Work Description: B08/ OPS-1 REPORTED NO RADIO COMMS ON TRACK #2 PLATFORM
Job Plan Description:

Work Information

Asset:	60041 RADIO, CRCS, B09	Owning Office:	COMM-TSSM-RADO	Parent:	
Asset Tag:		Maintenance Office:	COMM-TSSM-RADO	Create Date:	09/24/2024 19:29
Asset S/N:	CRCSB09	Labor Group:	COMMR3RADO	Actual Start:	09/24/2024 21:19
Location:	6199 B09, FOREST GLEN, STATION, PLATFORM, ROOM 619, COMMUNICATIONS ROOM	Crew:		Actual Comp:	09/24/2024 21:19
Work Location:		Lead:	[redacted]	Item:	N60040084
Failure Class:	COMR003 RADIO COMMUNICATIONS SYSTEMS	GL Account:	WMATA-02-33540-50499280-042-**********-*****-OPR**		
Problem Code:	3669 COMMS FAILURE	Supervisor:	[redacted]	Target Start:	
Requested By:	[redacted]	Requestor Phone:	21030	Target Comp:	
Chain Mark Start:		Chain Mark End:		Scheduled Start:	
Create-Mileage:	0.0	Complete-Mileage:	0.0		

Task IDs

Task ID	
10	RADIO CHECKS

TECH 317 ADVISED OOPS 1 TO PERFORM RADIO CHECKS WITH NEXT TRAINS COMING TO B08.ALL TRANSMISSIONS LOUD AND CLEAR.PROBLEM WITH THE ONE TRAIN AND NOT THE COMMS

Component: Work Accomp: Reason: Status: CLOSE Position: Warranty?: N

Actual Labor

Task ID	Labor	Start Date	End Date	Start Time	End Time	Approved?	Regular Hours	Premium Hours	Line Cost
10	[redacted]	09/24/2024	09/24/2024	21:30	22:00	Y	00:30	00:00	$24.81
						Total Actual Hour/Labor:	00:30	00:00	$24.81

Related Incidents

Ticket	Description	Class	Status	Relationship
8802582	OPS-1 REPORTED NO RADIO COMMS ON TRACK #2 PLATFORM LIMITS	SR	RESOLVED	RELATED

Failure Reporting

Cause		Remedy		Supervisor	Remark Date
2771	RADIO RECEPTION PROBLEM	2500	NO PROBLEM FOUND	[redacted]	09/24/2024
Remarks:	radio checks loud and clear to trains on platform				

WT_plust_woprint.rptdesign 10/4/2024 18:34

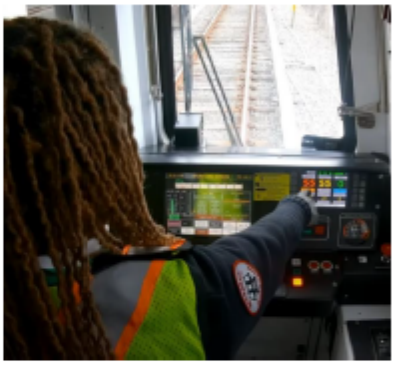
Figure 6 - Radio Communication Work Order.

RTRA OPERATIONS PERSONNEL NOTICE

Wednesday, June 12, 2024

RTRA-603-161-00

'Point and Call' Training Required for All Operating Personnel



To assist rail vehicle operators with staying focused and attentive, while performing critical tasks, Rail Transportation has adopted the **'Point and Call'** method. By following a systematic process of pointing and verbalizing, rail vehicle operators shall ensure that correct actions are taken at critical process points. Moreover, pointing and calling keeps rail vehicle operators focused on the task at hand and seeks to alleviate major incidents and violations by actively being aware of what is next, instead of passively operating.

Please be advised, 'Point and Call' training will be required for all operating personnel immediately. Therefore, today **Wednesday, June 12th**, Division Management will begin enrolling operating personnel in the 'Point and Call' CBT. All operating personnel are expected to have completed the training by **Friday, August 2nd**. For reference, the course code in ELM is: **OPRROPOINTCALL-20240607CBT**.

'Point and Call' training will be incorporated into all rail vehicle operator training to include, initial and refresher training. Also, Rail Operations Supervisors and oversight staff will be responsible for monitoring compliance during normal spot checks. Additionally, Division Management will be expected to monitor compliance as a part of any applicable post-incident investigation.

If there are any questions regarding the contents within this notice, please see a supervisor and/or Division Manager. Thank you and please be safe.

To report a potential safety risk, please scan the QR code or use this link: tinyurl.com/ReportRisks

Electronic devices shall only be used in designated areas and in accordance with the WMATA Electronic Device Policy.

Figure 7 - RTRA Operations Personnel Notice "Point and Call".

Washington Metropolitan Area Transit Authority

Office of Rail Transportation: Managerial Incident Investigation Report

Incident Status: Preliminary

GENERAL INCIDENT INFORMATION

Incident Type: Improper Door Operation

Delay (Minutes): 17 minutes to customers. 24 minutes to Trains.

Incident Date: Tuesday September 24, 2024,

Vehicles Involved: L3239*3240*3265*3152

Incident Time: 19:10

First Reported By: Rail Operations Supervisor [redacted]

Location: Silver Spring Station Track #2

BRIEF DESCRIPTION:

At approximately 19:10, Rail Operations Supervisor [redacted] while operating ID 126 on track #2 at Silver Spring Station, stopped short of the 6-car marker and opened the doors of the trains off the platform with two and a half cars outside of the platform limits. After doing so he closed the trains doors and proceeded to properly berth at the 8-car marker. RTRA Supervisor [redacted] who was assigned to Silver Spring noticed the incident. The supervisor notified the MICC of the incident and followed all instructions and procedures. There were no reported damages to any equipment, injuries or, customers reported on the roadway. Supervisor [redacted] was taken out of service and transported for post-incident testing.

Key Employees Involved & Employee Statements:

Supervisor [redacted] report stated that berthed the train (8) at the scaffold assuming the 8-car marker hit train birth. Physical open the doors, moved the train to the gate (8 car marker) notified unit 18 of what happened. Ground walk around was performed, and I notified MICC over the WMATA issued cell phone @ 7:37pm."

Supervisor [redacted] report states "19:09 I noticed ID 126 track 2 a while to get to the 8-car marker Silver Spring, when I opened the door train ID 126 was passing me and I hollered Supv. [redacted] stopped his train with two doors off the platform, I looked down the platform and saw figures moving on the opposite end of the platform only. I asked Supv. [redacted] if he serviced the station at the six car marker and he didn't say and said it was a station over I went back contacted MICC and asked them to look at the tape. I asked Supv. [redacted] again and he said he wasn't clear. At 1925 I asked MICC for foul time to perform a ground walk around and relinquished at 19:29. 19:34 I operated ID 726 out of service to Brentwood yard (B99) securing ID 726 on Track 17 at 19:54.

Post Incident Testing & Employee History:

- Rail Operations Supervisor [redacted] was removed from service and transported for post incident testing.
- Supervisor [redacted] was hired on August 6, 2006
- Supervisor [redacted] has been a certified Rail Operations Supervisor since March 15, 2024.
- Supervisor [redacted] last Train Certification was February 5, 2024

Office of Rail Transportation: Managerial Incident Investigation Report Page 1 of 3

Figure 8 – RTRA Managerial Incident Investigation Report page 1 of 3.

Washington Metropolitan Area Transit Authority

Office of Rail Transportation: Managerial Incident Investigation Report

SIGNIFICANT INCIDENT TIMELINE:

19:10 – Supervisor [redacted] enters Silver Spring station on track #2 and stops this train with 2.5 cars off the platform.
19:10 – After attempting to utilize the train berth feature Supervisor [redacted] manually opened the trains doors on the platform side of the train.
19:12 - He then closes the doors and begins to move the train, stops at the 8-car marker and starts to move the train.
19:13 – Supervisor [redacted] witnesses the incident and steps out of Silver Spring blockhouse to question the Supervisor [redacted] about servicing the platform, Supervisor [redacted] asks was this the 8-car marker he was unsure.
19:20 – Supervisor [redacted] is notified of the incident and contacts the MICC by way of radio and landline to make notification of the incident.
19:25 – Incident train is being offloaded in preparation for a ground walk around. Supervisor [redacted] is granted foul time to perform the ground walk around.
19:29 - Supervisor [redacted] completed ground walk around and relinquishes foul time.
19:34 – Supervisor [redacted] transports ID 726 non-revenue to B99 yard.
19:54 – Train ID 726 is secured on Track 17 B99 Yard.
20:35 – Supervisor [redacted] is transported for Post Incident Testing by Assistant Superintendent [redacted].

SIGNIFICANT FINDINGS & PENDING ISSUES:

CORRECTIVE ACTIONS:

This incident is under investigation. At a minimum the supervisor will be held in a non-operational status until they can be refreshed by ROQT. Any other corrective actions are forthcoming.

INCIDENT PHOTOS: ATTACH ANY SIGNIFICANT PHOTOS BASED ON THE INITIAL INCIDENT INVESTIGATION.

Figure 9 – RTRA Managerial Incident Investigation Report page 2 of 3

Washington Metropolitan Area Transit Authority

Office of Rail Transportation: Managerial Incident Investigation Report

Report Prepared by: Assistant Superintendent – [redacted]

Report Reviewed

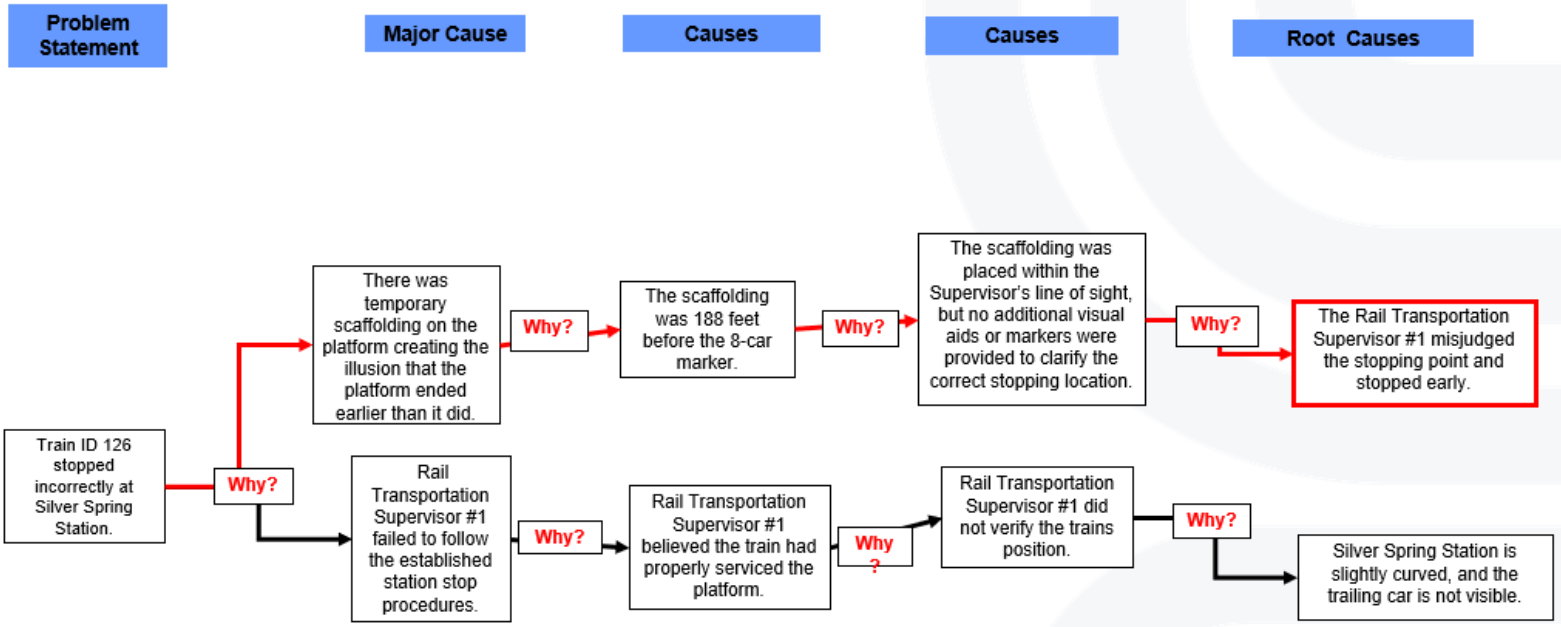
Figure 10 - RTRA Managerial Incident Investigation Report page 3 of 3.

Appendix E – Scene Photographs

Figure 11 – Inbound signage at the beginning of the platform scaffolding.

Figure 12 - Outbound signage at the beginning of the platform scaffolding.

Appendix F – Why-Tree Analysis

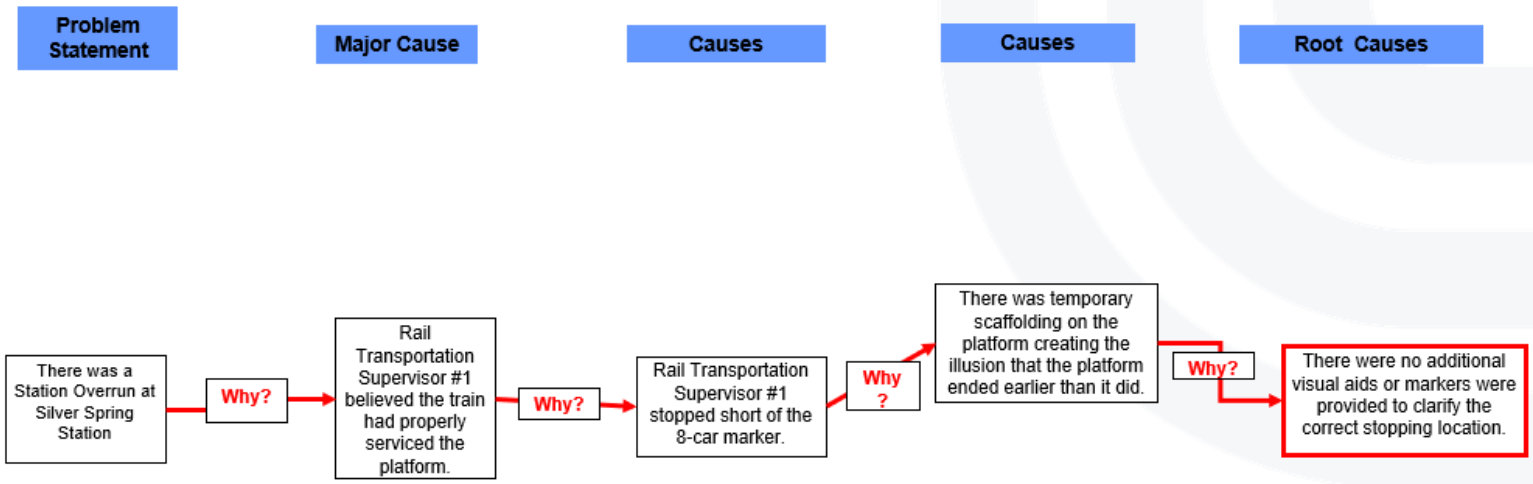


Root Cause Analysis

6

E24755 – Improper Door Operation – Silver Spring Station

Figure 13 – Root Cause 1 of 2.



Root Cause Analysis

Figure 14 - Root Cause 2 of 2.