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Improper Door Operation

Columbia Heights, Federal Center SW, and Rhode Island Ave-Brentwood stations

November 28, 2023 – January 11, 2024 – February 17, 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 September 17, 2024.

WMSC staff recommend adoption of these investigations.

Improper Door Operation

In 2023, there were 16 improper door operations safety events reported by Metrorail to the WMSC. As of September 1,2024, there have been 13 such events reported, a small increase from the 12 events reported during the same time period last year. 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:

- Non-compliance with written operational rules and procedures
- Loss of/lack of focus and situational awareness

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

- Personnel received refresher training, including on SOP #40 Procedure for Platform Berthing, Station Servicing, and Overruns

Safety event summaries:

W-0337 – Columbia Heights Station – November 28, 2023 (WMATA ID: E23852)

The Train Operator of a Green Line train traveling toward Greenbelt Station improperly opened all doors on the non-platform side of the train, while offloading customers at Columbia Heights Station due to a mechanical malfunction after reporting a loss of speed commands. The Train operator reported to a Radio Rail Traffic Controller in the Metro Integrated Command and Communications that the train was experiencing speed command and door issues

intermittently between Naylor Road and Columbia Heights stations. The Rail Traffic Controller instructed the Train Operator to offload riders at Columbia Heights Station after an Office of Car Maintenance Road Mechanic was unable to resolve these issues. The Train Operator correctly opened the platform side doors to allow riders to exit the train, but then incorrectly opened the non-platform side doors as riders were still exiting the train. The doors on the platform side of the platform then closed on their own (uncommanded) as riders were still exiting the train. The Train Operator reported to the Rail Traffic Controller that the non-platform side doors opened and closed uncommanded.

During an investigative interview, the Train Operator stated that they did not activate the Door Open pushbutton on the non-platform side, but that it opened uncommanded. The Operator was removed from service for post-event toxicology testing and the train was removed from service for post-event inspection. The Chief Mechanical Officer's Incident Investigation Team's (CMOR-IIT) report determined that the pushbutton to open the non-platform side door was manually activated by the Train Operator and was not the result of the faults the train was experiencing at the time of the event. However, the zero speed relay fault did cause the doors on the platform side to close uncommanded, as a fail-safe to prevent train movement when train doors are open.

There were no injuries or damage as a result of this event. The train's Zero Speed Relay Module was replaced.

W-0338 – Federal Center SW Station – January 11, 2024 (WMATA ID: E24034)

The Train Operator of a Blue Line train improperly opened all doors on the non-platform side of the train at Federal Center SW Station. During an investigative interview following the event, the Operator stated they were rushing through door procedures because it was their last trip of their shift, and did not verify the platform side of the station before inadvertently activating the wrong Door Open pushbutton. Approximately 2 minutes after closing the non-platform side doors, the Train Operator reported the event to a Radio Rail Traffic Controller in the Metro Integrated Command and Communications Center. The Radio Rail Traffic Controller instructed the Train Operator to offload riders from the train and provided permission for the Operator to conduct a ground walkaround inspection to determine whether any passengers or items had fallen to the roadway. The Train Operator confirmed that no one had fallen to the roadway. The Train Operator was instructed to operate the out of service train until it could be intercepted by an Office of Rail Transportation Supervisor, who took over operations at Potomac Ave Station.

The Operator was removed from service for post-event toxicology testing. There were no injuries or damage as a result of this event. The train was removed from service for post-event inspection, which determined there were no mechanical failures and that the doors operated as commanded.

At the time of the event, the Train Operator had been certified in the position for six months. During that time, in addition to this safety event, the Train Operator also overran a station in September 2023 and a red signal in November 2023.

W-0339 – Rhode Island Ave-Brentwood Station – February 17, 2024 (WMATA ID: E24133)

A Train Operator servicing Rhode Island Ave-Brentwood Station opened doors on both the platform and non-platform sides of the train and did not report the event to the Metro Integrated Command and Communication Center (MICC) as required by Metrorail policy. The doors that were improperly opened on the non-platform side exposed riders to the risk

of a steep drop from a high elevated structure. The Train Operator continued on to Dupont Circle Station, where the train was scheduled to end its trip and then go back in service in the opposite direction toward Glenmont Station due to track maintenance. Approximately 40 minutes later the Assistant Operations Manager in the MICC, who received a report that train doors were open while the train was moving, informed the Radio Rail Traffic Controller. The Radio Rail Traffic Controller instructed the Train Operator to stop the train and check the entire consist for an open door. The Train Operator reported that no doors were opened and was instructed to continue to Fort Totten Station, offload riders on the platform and perform a ground walkaround. The Train Operator reported that the roadway was clear. An Office of Rail Transportation Supervisor was dispatched to takeover train operation and to remove the Train Operator from service for post-event toxicology testing. The train was removed from service for post-event inspection. No mechanical issues or damage were found.

Review of data confirmed that the Train Operator opened the doors on the non-platform side, using the manual Door Open pushbutton. The doors remained open for approximately 11 seconds before they were closed by the Train Operator. The event was only discovered due to a rider reporting the event via social media.

During an investigative interview, the Train Operator, with approximately four months of experience as a Train Operator, stated that another Train Operator requested a drop-off at Brentwood Yard, which they had never performed. This requires the Train Operator to stop the train at an employee only platform and allow the employee to use a physical key to open one train door to exit. As they attempted to contact the MICC in regard to the request, they opened doors on the non-platform side of the train and were informed of the error by a security guard, but did not report the event.

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

FINAL REPORT OF INVESTIGATION A&I E23852

Date of Event:	November 28, 2023
Type of Event:	Improper Door Operation
Incident Time:	20:39 hours
Location:	Columbia Heights Station
Time and How received by SAFE:	20:41 hours/MAC Notification
WMSC Notification Time:	22:01 hours
Responding Safety Officers:	None
Rail Vehicle:	Train ID 515 L3047/46X53/34XL3060/61T
Injuries:	None
Damage:	None
Emergency Responders:	None
SMS I/A Number	20231129#113066

Columbia Heights Station – Improper Door Operation

November 28, 2023

Table of Contents

Abbreviations and Acronyms

AIMS	Advanced Information Management System
ARS	Audio Recording System
ATCM	Office of Automatic Train Control
ATP	Automatic Traction Power
CCTV	Closed-Circuit Television
CMNT	Office of Car Maintenance
CMOR-IIT	Chief Mechanical Officer – Incident Investigation Team
MICC	Metro Integrated Command and Communications Center
MOR	Metrorail Operating Rulebook
NOAA	National Oceanic and Atmospheric Administration Rail Traffic
RTC	Controller
RTRA	Office of Rail Transportation
SAFE	Department of Safety
SMS	Safety Measurement System
WMATA	Washington Metropolitan Area Transit Authority Washington
WMSC	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, November 28, 2023, at 20:39 hours, Closed-Circuit Television (CCTV) at Columbia Heights Station on track 1 observed the doors on Train ID 515 (L3047/46X53/34XL3060/61T) open on the non-platform side.

Consultation of the Audio Recording System (ARS) determined that the Train Operator stated there was an issue with the doors and the dropping of speed commands between Naylor Road and Columbia Heights Stations, preceding the incident.

An Office of Car Maintenance (CMNT) Road Mechanic boarded Train ID 515 to troubleshoot the issues, attempting to recycle the Automatic Train Control (ATC) circuit breakers at L'Enfant Plaza Station. This did not rectify the issue.

Based on the recommendation of the CMNT Road Mechanic, the Train Operator of Train ID 515 was instructed by the Metro Integrated Command and Communications Center (MICC) to offload all customers at Columbia Heights Station and take Train ID 515 out of service.

The Train Operator of Train ID 515 serviced Columbia Heights Station, made announcements to the customers, and cycled the interior lighting off and on after opening the platform side doors to allow customers to alight.

Train ID 515's non-platform side doors opened while customers alighted the train.

The Train Operator's formal interview, written statement, and recorded radio communications to the MICC confirmed that they believed they did not manually activate the non-platform side doors and that the doors opened uncommanded. The Train Operator further stated the platform side doors closed uncommanded as well.

The Chief Mechanical Officer's Incident Investigation Team's (CMOR-IIT) report determined that the faults the train experienced did not contribute to, nor cause, the non-platform side door activation and that they further established the non-platform door button was pushed.

The CMOR-IIT Report further established that a malfunction with the Zero Speed Relay caused the platform side doors to close, uncommanded as a fail-safe protocol.

The Office of Rail Transportation (RTRA) removed the Train Operator from service for post-incident toxicology testing. The train consist was removed from service for post-incident inspection.

The probable cause of the Improper Door Operation event on November 28, 2023, at Columbia Heights Station was the Train Operator's human factors error in operating the train doors on the non-platform side, exacerbated by the malfunctioning train.

Incident Site

Columbia Heights Station, Track 1

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 documentation review and video.

- 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

- 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 Safety Rules and Procedures Handbook (MSRPH)
    - National Oceanic and Atmospheric Administration (NOAA)
    - Supervisor's Written Statement
    - Train Operator's Written Statement
    - Train Operator's 30-Day Work History
    - Train Operator's Training Records

- System Data Recording Review – A collection of information contained in Metro Data Recording Systems. This data includes:
    - Advanced Information Management System (AIMS) Playback
    - Audio Recording System (ARS) playback
    - Closed-Circuit Television (CCTV)

Investigation

On Thursday, November 28, 2023, at 20:07 hours, the Train Operator of Train ID 515 reported losing speed commands to the Radio Rail Traffic Controller (RTC).

At 20:12 hours, the Train Operator requested a permissive block to Congress Heights Station, followed by Anacostia Station. At 20:14 hours, the Radio RTC advised the Train Operator of Train ID 515 that the CMNT Road Mechanic was waiting for them at Waterfront Station to conduct troubleshooting of the train.

At 20:15 hours, the Train Operator requested a permissive block to Navy Yard Station. At 20:19 hours, the Train Operator requested a permissive block to Waterfront Station. At 20:20 hours, the Train Operator requested a permissive block to L'Enfant Plaza Station.

At 20:30 hours, the CMNT Road Mechanic advised the Radio RTC that Train ID 515's ATC circuit breakers had been cycled. At 20:34 hours, the Train Operator requested a permissive block to Columbia Heights Station. At 20:35 hours, the CMNT Road Mechanic advised the Button RTC that Train ID 515 would need to be removed from service.

At 20:37 hours, the Radio RTC advised the Train Operator of Train ID 515 to offload at Columbia Heights Station and requested the CMNT Road Mechanic's assistance in order to offload.

At 20:38 hours, CCTV indicated that Train ID 515 arrived at Columbia Heights Station on Track 1, and the platform-side doors were activated to allow all customers to alight.

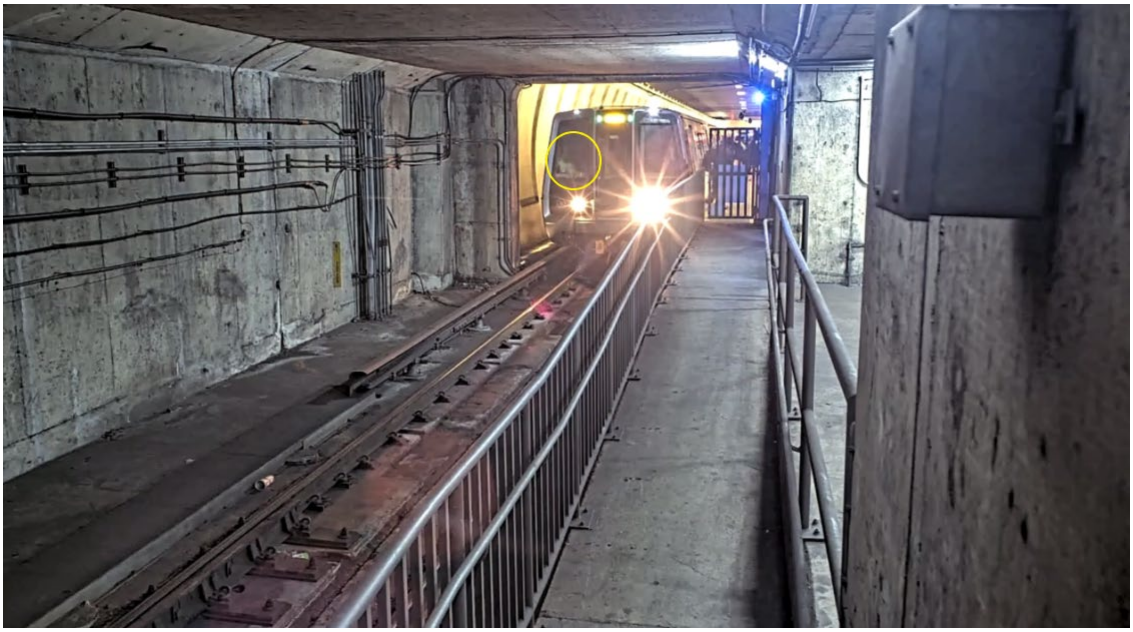


Image 1 - Train ID 515 arrived at Columbia Heights Station Track 1 at approximately 20:38 hours, and the platform side doors were activated to service the station.

At 20:39 hours, Train ID 515's non-platform side doors could be observed opening after multiple cycles of the interior lights could be observed. The non-platform side doors then closed approximately nine seconds after opening.

At 20:40 hours, the Train Operator of Train ID 515 advised the Radio RTC that the non-platform doors "opened and closed by themselves."

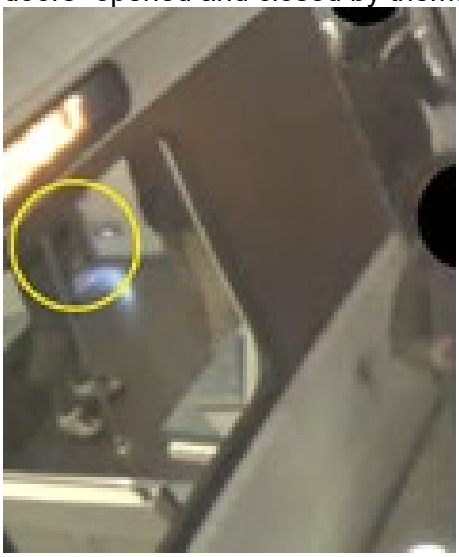


Image 2 - Train ID 515's non-platform side doors can be observed open at 20:39 hours after the interior lights were rapidly turned off and then back on again.

At 20:41 hours, the Train Operator of Train ID 515 advised the Radio RTC that all customers were clear of Train ID 515. At 20:44 hours, the Radio RTC requested the RTRA Supervisor to respond to Columbia Heights Station. At 20:55 hours, the RTRA Supervisor was on the scene and had boarded Train ID 515, now Train ID 715, to take the train to Branch Avenue Rail Yard.
By 21:50 hours, Train ID 715 had been laid up at Branch Avenue Rail Yard.

The Office of the Chief Mechanical Officer, Incident Investigation Team (CMOR/IIT) completed a post-incident inspection. It determined that there was a de-energization and re-energization of the Zero Speed Relay before this incident, causing the platform-side doors of the lead two cars to close.

CMOR-IIT affirmed that this did not affect the opening of the non-platform side doors and that these doors were opened with a push button command activated from the Operator's cab.

CMOR-IIT confirmed no issues with the consist other than the above-mentioned Zero Speed Relay incident.

CMNT replaced the Automatic Traction Power (ATP) module (Maximo #18264145), which is believed to be responsible for the Zero Speed Relay energization issue. CMNT reported no further issues with the consist.

The Office of Automatic Train Control (ATCM) advised that the wayside equipment failure was addressed.

Chronological Event Timeline

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

Time	Description
20:07:32 hours	Train Operator of Train ID 515: Reported to the Radio RTC that they were losing speed commands. Radio RTC: Acknowledged. [Radio, OPS 3] [SPOTS puts the Train Operator at Naylor Road Station]
20:12:11 hours	Train Operator of Train ID 515: Requested a permissive block to Congress Heights Station and then Anacostia Station. Radio RTC: Acknowledged and granted permission. [Radio, OPS 3]
20:14:35 hours	Radio RTC: Advised the Train Operator that CMNT was waiting for them at Waterfront Station in order to troubleshoot. Train Operator of Train ID 515: Acknowledged. [Radio, OPS 3]
20:15:52 hours	Radio RTC: Provided a permissive block to Navy Yard Station Train Operator of Train ID 515: Acknowledged. [Radio, OPS 3]
20:19:16 hours	Radio RTC: Provided a permissive block to Waterfront Station Train Operator of Train ID 515: Acknowledged. [Radio, OPS 3]
20:20:56 hours	Radio RTC: Provided a permissive block to L'Enfant Plaza Station Train Operator of Train ID 515: Acknowledged. [Radio, OPS 3]
20:23:56 hours	Radio RTC: Advised Train ID 515 to remain at Gallery Place Station after a separate Train Operator reported an emergency. Train Operator of Train ID 515: Acknowledged. [Radio, OPS 3]
20:30:42 hours	CMNT Road Mechanic: Advised the Radio RTC that Train ID 515's ATC package had been recycled. Button RTC: Acknowledged. [Phone, OPS 3]
20:34:50 hours	Radio RTC: Provided a permissive block to Columbia Heights Station Train Operator of Train ID 515: Acknowledged. [Radio, OPS 3]
20:35:53 hours	CMNT Road Mechanic: Advised the Button RTC that Train ID 515 would need to be removed from service. Radio RTC: Acknowledged. [Radio, OPS 3]
20:37:09 hours	Radio RTC: Advised the Train Operator to offload at Columbia Heights Station and requested the CMNT Road Mechanic's assistance in order to offload. Train Operator of Train ID 515: Acknowledged. CMNT Road Mechanic: Acknowledged. [Radio, OPS 3]
20:38:47 hours	CCTV determined that the Train Operator of Train ID 515 opened the platform side doors to allow service of the Station.
20:39:15 hours	CCTV determined that the Train Operator of Train ID 515 opened the non-platform side doors.
20:39:24 hours	CCTV determined that the Train Operator of Train ID 515 closed the non-platform side doors.
20:40:29 hours	Train Operator of Train ID 515: Advised the Radio RTC that the non-platform side doors "opened and closed by themselves." Radio RTC: Acknowledged. [Radio, OPS 3]
20:41:55 hours	Train Operator of Train ID 515: Advised the Radio RTC that all customers were clear of Train ID 515. Radio RTC: Acknowledged. [Radio, OPS 3]
20:44:27 hours	Radio RTC: Requested the RTRA Supervisor to respond to Columbia Heights Station. RTRA Supervisor: Acknowledged. [Radio, OPS 3]
20:55:16 hours	RTRA Supervisor: Advised the Radio RTC that they were aboard Train ID 715. Radio RTC: Acknowledged. [Radio, OPS 3]

20:53:43 hours	RTRA Supervisor: Advised the Button RTC of the incident. Button RTC: Acknowledged and advised them to offload the train and conduct a ground walk-around. RTRA Supervisor: Acknowledged. [Radio, OPS 3]
20:56:06 hours	Radio RTC: Dispatched Train ID 715 to Branch Avenue Station. RTRA Supervisor: Acknowledged. [Radio, OPS 1]
21:39:00 hours	RTRA Supervisor: Advised the Radio RTC that Train ID 715 was at Branch Avenue Station. Radio RTC: Acknowledged. [Radio, OPS 3]
21:50:50 hours	RTRA Supervisor: Advised the Radio RTC that Train ID 715 was at Branch Avenue Rail Yard. Radio RTC: Acknowledged. [Radio, OPS 3]

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

Advanced Information Management System (AIMS)

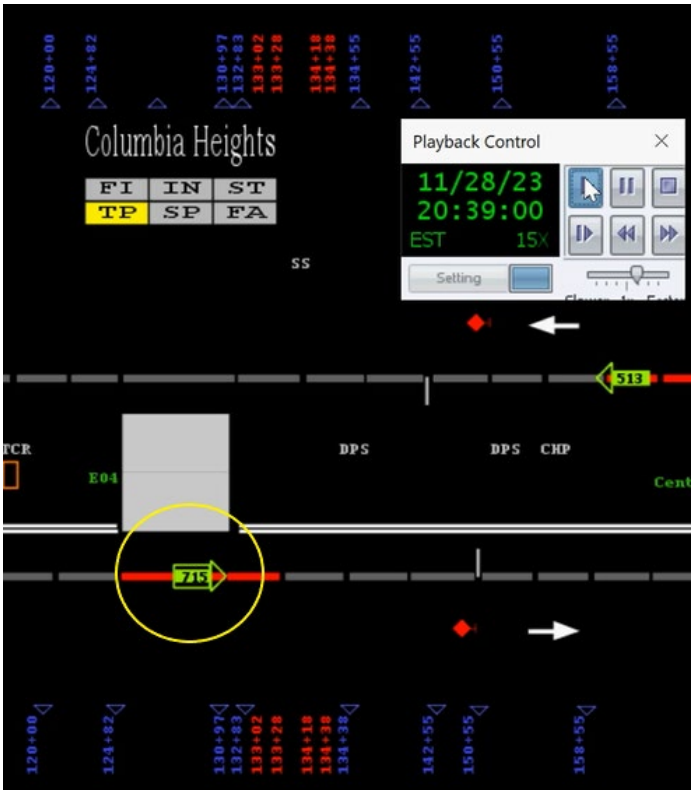


Figure 1 – AIMS depicting Train ID 515 located at Columbia Heights Station at 20:39 hours.

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

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

IIT has completed the data analysis retrieved from car 3047, the lead car on Train ID# 515 at the time of this incident.

Based on VMS data, at 20:40:23.104, Train ID 515 stopped at the Columbia Heights station 8th car marker, track #1. The left-side door open pushbutton was activated, the left-side doors opened on the normal side of the platform, and the station was serviced. Then, the Zero Speed Relay was

intermittently energized and de-energized. CMNT will require further troubleshooting to assess the root cause of the Zero Speed Relay failure. When this failure occurred all the doors were closed automatically on cars 3047-46 as designed.

The right-side door open pushbutton was activated, and this caused the opposite side of the platform doors to open. After 03.136 seconds, the right-side doors close pushbutton was activated to close the right-side doors. After all right-side doors closed, the left-side door open pushbutton was activated, which caused the doors to open again on the platform side.

The Zero Speed Relay intermittently energized and de-energized, causing the left-side doors to close automatically on cars 3047-46. After the Zero Speed Relay was energized at the station platform, the left-side door open/close pushbuttons were activated, and the lead car 3047 was keyed down at 20:43:00.396.

Door #8 was opened/closed with a crew switch, and at 20:57:53.537, car 3047 was keyed up and started to move at 20:58:16.652.

Based on the VMS data and its analysis, the intermittent Zero Speed Relay signal caused the doors to close (fail-safe design) automatically. This failure was not the cause of the doors opening on the opposite side of the platform.

Time	Description of Events
20:40:23.104	Train ID515 came to a complete stop at 8-car Marker at Columbia Heights Station, track #1 with car 3047.
20:40:26.752	Left-side door open pushbutton activated.
20:40:26.784	DCKR (door closed check relay) signal goes low, indicating Left-side doors opened on the normal side of the platform.
20:40:31.544 **20:40:38.996**	Zero Speed Relay intermittently energized and de-energized. Therefore, all doors closed automatically on 3047-46.
20:40:39.412	Zero Speed signal high.
20:40:40.656	Right-side door open pushbutton activated on the opposite side of the platform.
20:40:43.792	Right-side door close pushbutton activated on the opposite side of the platform.
20:40:52.036	Left-side door open pushbutton activated.
20:40:57.472 **20:41:02.140**	Zero Speed Relay intermittently energized and de-energized. Therefore, all doors closed automatically on 3047-46.
20:41:07.223	Zero Speed relay energized.
20:41:13.556	Left-side door open pushbutton activated.

20:41:16.336	Left-side door close pushbutton activated.
20:41:24.520	DCKR signal went high, indicating all doors were closed and locked.
20:42:32.745	Mode direction switch turned to Auto Store.
20:43:00.396	Lead car 3047 keyed down.
20:43:11.332	Door #8 opened on Lead car 3047 with the crew switch.
20:43:21.785	Door #8 closed on Lead car 3047 with the crew switch.
20:45:39.672	Door #8 opened on Lead car 3047 with the crew switch.
20:45:59.140	Door #8 closed on Lead car 3047 with the crew switch.
20:51:54.452	Door #8 opened on Lead car 3047 with the crew switch.
20:57:53.537	Lead car 3047 keyed up.
20:57:55.936	Door #8 closed on Lead car 3047 with the crew switch. DCKR signal went high, condition of all doors closed and locked.
20:58:11.856	Mode direction switch turned to MANUAL/FORWARD.
20:58:16.652	Zero Speed signal went low, train started to move.

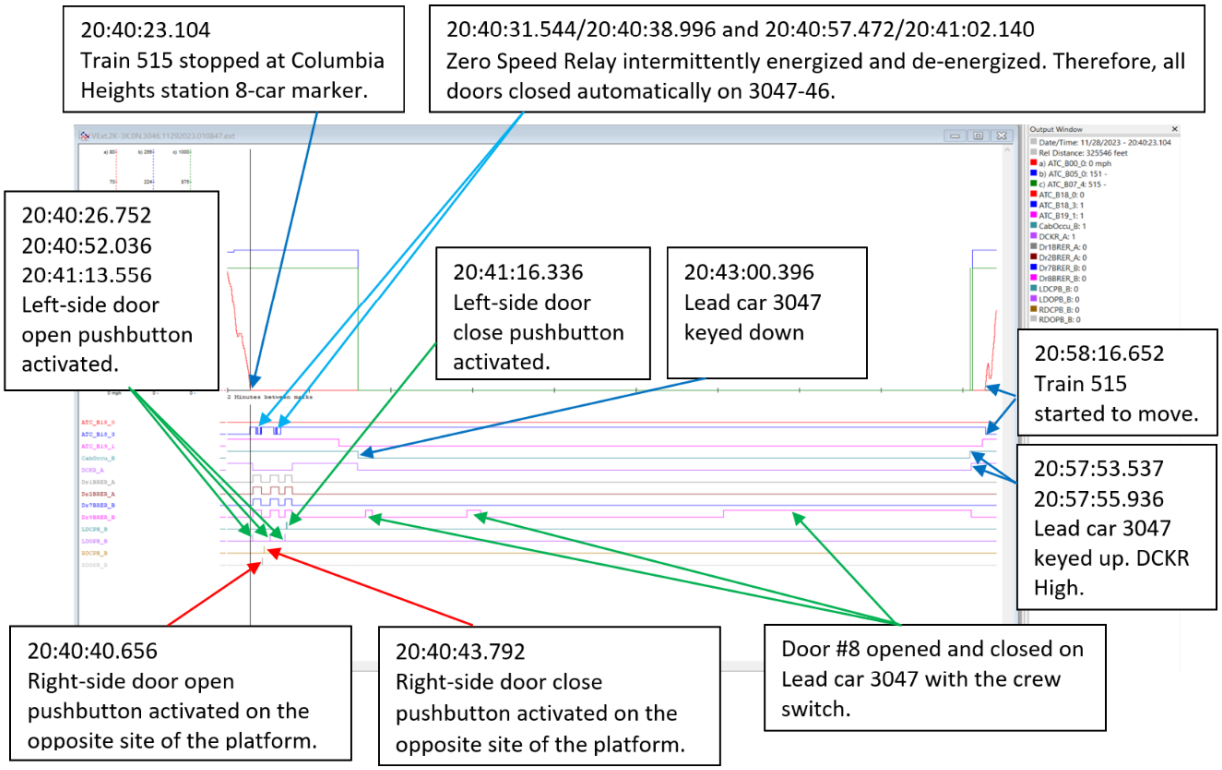


Figure 2 – Braking modes engaged prior to the incident.

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

Office of Car Maintenance (CMNT)

Time and Incident Chronology for You		
Time	**Order of Events** Add Row Delete Row	
21:10	Already on the scene from a previous incident. While assisting with the passenger offload, the doors suddenly closed on the platform side and reopen on the non-platform side.	
21:11	The doors then closed on the non-platform side. Doors then reopened on the platform side.	
21:12	Contacted the operator on intercom and let him know what I observed. He stated that the doors closed and opened on their own. I told him he needed to contact ROCC and update them on the situation. Train holding.	
21:30	Train on the move. Exited at L'Enfant Plaza.	

Figure 3 – CMNT Report

ROCS SPOTS Report

ROCS SPOTS REPORT

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

Current date/time: Sun Dec 3 15:49:05 2023

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

and/or Select 4-digit car number: 3061 Leave blank to remove criteria

Select Date: Nov 28 2023 Select Times (0-24HRS): From 20:00 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
515	F09-1	6	44				20:07:09	20:07:25	16	20:06:28	20:07:59	3061-3060.3034-3035.3046-3047	-
515	F08-1	6	44				20:10:06	20:10:22	16	20:09:30	20:10:44	3061-3060.3034-3035.3046-3047	2:57
515	F07-1	6	44				20:13:20	20:13:37	17	20:11:57	20:14:08	3061-3060.3034-3035.3046-3047	3:14
515	F06-1	6	44				20:15:56	20:16:16	20	20:15:26	20:16:42	3061-3060.3034-3035.3046-3047	2:36
515	F05-1	6	44				20:18:35	20:19:30	55	20:18:02	20:19:50	3061-3060.3034-3035.3046-3047	2:39
515	F04-1	6	44				20:20:50	20:21:06	16	20:20:23	20:21:49	3061-3060.3034-3035.3046-3047	2:15
515	F03-1	6	44							20:22:51	20:24:38	3061-3060.3034-3035.3046-3047	-
515	F02-1	6	44				20:25:52	20:26:05	13	20:25:12	20:26:27	3061-3060.3034-3035.3046-3047	5:02
515	F01-1	6	44				20:27:23	20:28:22	59	20:26:44	20:29:01	3061-3060.3034-3035.3046-3047	1:31
515	E01-1	6	44				20:31:06	20:31:20	14	20:30:33	20:31:39	3061-3060.3034-3035.3046-3047	3:43
515	E02-1	6	44				20:32:31	20:32:44	13	20:32:01	20:33:11	3061-3060.3034-3035.3046-3047	1:25
515	E03-1	6	44				20:34:08	20:34:21	13	20:33:39	20:35:52	3061-3060.3034-3035.3046-3047	1:37
515	E03-1	6	44							20:35:55	20:35:57	3061-3060.3034-3035.3046-3047	-
515	E03-1	6	44							20:36:00	20:36:05	3061-3060.3034-3035.3046-3047	-
515	E03-1	6	44							20:36:11	20:36:13	3061-3060.3034-3035.3046-3047	-
715	E04-1	0	92	20:39:19	20:39:28	9	20:39:05	20:40:01	56	20:38:32	20:57:15	3061-3060.3034-3035.3046-3047	4:57
715	E05-1	6	92							20:59:17	21:01:31	3061-3060.3034-3035.3046-3047	-

Figure 4 – Train ID 515 schedule 20:00 – 21:00 hours.

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

No communications issues were identified during this incident.

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

At approximately 20:40 hours, Train ID 515 at Columbia Heights Station, track 1 was experiencing intermitting speed commands.

CMNT personnel boarded at L'Enfant Plaza Station and recycled the ATC package due to the intermittent speed command issue.

The train was instructed to offload. During this offloading period, the Train Operator reported that the doors closed on the platform side and opened on the non-platform side.

At approximately 21:00 hours, a ground walk around inspection was completed. Single tracking commenced until the train was removed from revenue service and transported to Branch Avenue Yard.

At approximately 22:40 hours, the Train Operator was transported for post incident testing.

Interview 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. Findings detailed below include reported information from involved personnel and may conflict with other data sources contained in the report.

Train Operator Train ID 515

- The Train Operator stated they were on their second trip operating on the Green Line toward Greenbelt Station. The Train Operator stated they had just relieved a Train Operator at Navy Yard Station whom they had heard over the radio having issues with speed commands and Train ID 515. The Train Operator stated this issue persisted when they took over the operation of Train ID 515.
- The Train Operator stated they then picked up the CMNT Road Mechanic at Waterfront Station, and the Road Mechanic recycled the ATC circuit breakers at L'Enfant Plaza Station. The Train Operator said they continued losing speed commands after the recycle.
- The Train Operator stated the CMNT Road Mechanic recommended to the MICC that Train ID 515 be removed from service. The Train Operator stated that they prepared to offload the train at Columbia Heights Station.
- The Train Operator stated that once on the scene at Columbia Heights Station, they activated the platform side doors that allowed customers to alight Train ID 515. The Train Operator stated they also made announcements for all customers to alight and flashed the interior lights off and on to make it known that Train ID 515 was out of service.
- The Train Operator stated that during this time, the non-platform side doors opened. The Train Operator stated they did not activate the non-platform side doors instead stating they believed the doors activated as a result of the ongoing faults with Train ID 515.
- The Train Operator stated they were not stressed during the incident, and they further stated they did not believe that they accidentally, manually opened the non-platform side doors.
- The Train Operator stated they then relayed the information to the MICC, and an RTRA Supervisor took over the operation of Train ID 515 in order to move it to Branch Avenue Rail Yard.

Weather

On November 28, 2023, at the time of the incident, NOAA recorded the temperature as 38°F, with moderate cloud cover, winds averaging 12.6 mph, and 43% average humidity. Weather was not a contributing factor in this incident (Weather source: NOAA) – Location: Washington, DC.

Related Rules and Procedures

MSRPH SOP #40: Door Operations and Station Servicing Procedures.

Human Factors

Fatigue

Signs and Symptoms of Fatigue

Conditions at the time of the incident were evaluated to distinguish whether evidence of fatigue was present. No video of the incident was reviewed for behaviors suggesting fatigue. The employee reported feeling fully alert at the time of the incident and reported experiencing no symptoms of fatigue in the time leading up to the incident.

Fatigue Risk

Incident data was evaluated for fatigue risk factors. There were no major risk factors for fatigue identified. The incident time of day (20:39 hours) does not suggest an increased risk of fatigue-related impairment. The employee worked evening shifts (14:50 – 00:40 hours) in the days leading up to the incident. The employee reported 7 hours of sleep in the last sleep period preceding the incident and was awake for 11.65 hours at the time of the incident. The employee was off duty for a total of 14.167 hours, which provided the opportunity for 7-9 hours of sleep. The employee reported usual workday sleep durations of 7 hours and no issues with sleep.

Post-Incident Toxicology Testing

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

Findings

- Train ID 515 experienced intermittent speed commands between Naylor Road and Columbia Heights Stations.
- The Radio RTC provided permissive blocks for Train ID 515 to continue movement.
- The Road Mechanic boarded Train ID 515 at Waterfront Station and attempted to troubleshoot the problems, and at L'Enfant Plaza Station, the Road Mechanic recycled the ATC circuit breakers but this did not rectify the issue.
- The Road Mechanic advised the MICC that Train ID 515 should be removed from service.
- The Train Operator then commenced offloading at Columbia Heights Station, opening the platform side doors and flashing the interior lights while making announcements.

- The non-platform side doors were opened, and the Train Operator affirmed that they did not open the non-platform side doors at any point during the incident.
- CMOR-IIT's download of Train ID 515 determined a fault with the Zero Speed Relay that closed the platform side doors, uncommanded as a fail-safe.
- CMOR-IIT's report further established that the push button activated the non-platform side doors in the Operator's cabin.

Immediate Mitigation to Prevent Recurrence

- Train Operator Train ID 515 was removed from service post-incident
- Train ID 515 was removed and sent to Branch Avenue Rail Yard for download and analysis.
- CMNT replaced Train ID 515's ATP module, rectifying the Zero Speed Relay issue.

Probable Cause Statement

The probable cause of the Improper Door Operation event on November 28, 2023, at Columbia Heights Station was the Train Operator's human factors error in operating the train doors on the non-platform side, exacerbated by the malfunctioning train.

Recommended Corrective Actions

Corrective Action Code	Description	Responsible Party	Estimated Completion Date
113066_SAFECAPS_RTRA_001	Retraining of the Train Operator.	RTRA SRC	Completed
113066_SAFECAPS_CMNT_001	Repair of Train ID 515 and replacement of the Zero Speed Relay module.	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.

Train Operator Train ID 515

The Train Operator stated that they had been with WMATA for approximately 14 years and had spent 9.5 years' operating trains. The Train Operator stated they currently hold an RWP Level 2 that expires on 08/31/2024.

The Train Operator stated they were on their second trip operating on the Green Line toward Greenbelt Station. The Train Operator stated they had just relieved a Train Operator at Navy Yard Station who they had heard over the radio having issues with speed commands and Train ID 515. The Train Operator stated this issue persisted when they took over the operation of Train ID 515.

The Train Operator stated they then picked up the CMNT Road Mechanic at Waterfront Station, and the Road Mechanic recycled the ATC circuit breakers at L'Enfant Plaza Station. The Train Operator said they continued losing speed commands after the recycle.

The Train Operator stated the CMNT Road Mechanic recommended to the MICC that Train ID 515 be removed from service. The Train Operator stated that they prepared to offload the train at Columbia Heights Station.

The Train Operator stated that once on the scene at Columbia Heights Station, they activated the platform side doors that allowed customers to alight Train ID 515. The Train Operator stated they also made announcements for all customers to alight and flashed the interior lights off and on to make it known that Train ID 515 was at its final stop.

The Train Operator stated that during this time, the non-platform side doors then opened. The Train Operator stated they did not activate the non-platform side doors; instead, they believed the doors were activated due to the ongoing faults with Train ID 515.

The Train Operator stated they were not stressed during the incident, and they further stated they did not believe that they accidentally, manually opened the non-platform side doors.

The Train Operator stated they then conducted a ground walkaround and found nothing out of place.

The Train Operator stated they then relayed the information to the MICC, and an RTRA Supervisor took over the operation of Train ID 515 in order to move it to Branch Avenue Rail Yard.

The Train Operator stated they were then subjected to post-incident drug and alcohol testing.

Drafted By: SAFE 705 - 12/05/2023
Reviewed By: SAFE 707 – 12/11/2023
Approved By: SAFE 70 – 12/12/2023

Appendix B – RTRA Documentation

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#
11-28-2023	20:40	Columbia Heights	Track#1

Equipment Number (Train ID & Car Numbers; Escalator/Elevator #,
Train#515 LC:3047-3035-3060

Incident Description
Reportedly doors automatically opened off the platform side

WMATA Personnel Involved	Employee #	Rule Violation?	Home Division	Post Incident
[redacted]	[redacted]		Branch Avenuie	Yes

Name	Address	Injury?
n/a		
Name	Address	Injury?
n/a		
Name	Address	Injury?
n/a		

Arrival Time	Unit Number	Person In Charge	Remarks

Chronological Account of Incident

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

At approximately 20:40 hours, train#515 at Columbia Heights track#1 was experiencing intermitting speed commands. The train was instructed per ROCCS to be offloaded. However, during the offload operator reported that the doors automatically closed on the platform side as well as opened off the platform side.

At approximately 21:00 hours, a ground walk around inspection was completed. Single tracking commenced until the train was removed from revenue service and transported via unit#56 to F99 yard.

At approximately 22:40 hours, I transported operator Davis for testing.

In addition, [redacted] stated that Car maintenance personnel boarded the train at L'Enfant Plaza and recycled the ATC package due to the intermitting speed commands which was prior to the incident occurrence.

50.437 09/10

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

Document 1 – RTRA Supervisor's Report Page 1 of 1.

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 ❑
11-28-23	8:40pm	8:40 pm	

Location

Station	Mezzanine #	Track #/Destination	Chain Marker/Signal Number
Columbia Heights		1 / Greenbelt	

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:
515	Greenbelt		3047

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.

As I off loaded Train ID # 515 Track "1" Columbia Heights I noticed Train doors reopen platform side By themselve. I reopened the doors then noticed off platform open I closed and reported to Central.

Employee Completing Report

Employee Name:(print)	Employee Signature:(sign)	Employee #:	Date:
[redacted]	[redacted]	[redacted]	11-25-23

Division:	Run #	Block #	Assigned Days:
Branch Ave	507	515	F/S

To Be Completed By Reviewing Manager

Supervisor Name:(print)	Supervisor Signature	Employee #	Date:

Action taken/needed

SMS Number:

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

Document 2 – Train Operator's Written Statement Page 1 of 1.

Appendix C – CMNT Documentation

Washington Metropolitan Area Transit Authority

CMNT INCIDENT REPORT

Modified Incident Report Prepared by:	[redacted]						
Date of Incident:	11/28/2023	Time of Incident:	21:10	Department:	CMNT	Division or Section:	ROCC
Train No.:	515	Car No(s).:	L 3047/46 - 3035/34 - 3060/61 T				
Location of Incident:	E04 - COLUMBIA HEIGHTS						
Type of Incident:	DOORS OPEN OFF PLATFORM						

▼▼ Describe Incident and Your Involvement With It ▼▼

Time and Incident Chronology for You

Time	Order of Events (Add Row / Delete Row)
21:10	Already on the scene from a previous incident. While assisting with the passenger offload, the doors suddenly closed on the platform side and reopen on the non-platform side.
21:11	The doors then closed on the non-platform side. Doors then reopened on the platform side.
21:12	Contacted the operator on intercom and let him know what I observed. He stated that the doors closed and opened on their own. I told him he needed to contact ROCC and update them on the situation. Train holding.
21:30	Train on the move. Exited at L'Enfant Plaza.

Submitted Signature:		Employee Number:	
Title / Position:		Date:	

Document 3 – CMNT Road Mechanic's Timeline Page 1 of 1.

Appendix D – Maximo

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

Work Order #: 18264145
Type: CM

Status: COMP
12/01/2023 14:35

Work Description: The operator reported the doors opened off the platform automatically while performing an offload., 11/20, E04, OTH, INVE, 515
Job Plan Description:

Work Information

Asset:	R3046 3046, RAIL CAR, BREDA, 3000 AC, A CAR	Owning Office:	CMNT-CMNT-CMNT	Parent:	
Asset Tag:	R3046	Maintenance Office:	CMNT-WFCH-INSP	Create Date:	11/29/2023 20:48
Asset S/N:	3046	Labor Group:	CMNT	Actual Start:	11/29/2023 20:48
Location:	2494 K99, WEST FALLS CHURCH YARD	Crew:		Actual Comp:	12/01/2023 14:35
Work Location:	2279 F99, BRANCH AVENUE YARD	Lead:		Item:	L18050002
Failure Class:	CMNT014 DOOR	GL Account:	WMATA-02-33370-50499160-041-**********-*****-OPR**		
Problem Code:	2438 N/A CODE (DOOR SYSTEM)	Supervisor:	E002079	Target Start:	
Requested By:		Requestor Phone:	301/955-2230	Target Comp:	
Chain Mark Start:		Chain Mark End:		Scheduled Start:	
Create-Mileage:	2693258.0	Complete-Mileage:	2693746.0		

Task IDs

Task ID						
10	TRAIN IN SHOP, FOLLOWING IIT/CENV RECOMMENDATIONS: VISUAL INSPECTED ATP AND ATO MODULES BACK PLAIN, INSPECTED NONE-VITAL INPUT AND VITAL INPUT (SBO) BOARDS, INSPECTED ATC VITAL RELAY FOR ZERO SPEED IN ATC CABINET ALL CHECK OK, NO SIGN OF DEFECTS NOR DAMAGE. CYCLED DOORS BOTH SIDE OK SINCE ATC ZERO SPEED RELAY AND/OR SIGNALS FUNCTION PROPERLY. END OF SHIFT, NEED CONTINUE WORK ON THE REST OF IIT RECOMMANDATIONS. 000-300-S00 SUBSYSTEM; AUTOMATIC TRAIN					
Component:	CONTROL (ATC); 2K/3K/6K/7K	Work Accomp: INSPECTED	Reason: INTERMITTENT	Status: COMP	Position:	Warranty?: N
20	see details below based on ITT recommendations. 1. Inspected ATC zero speed vital relay board on car 3046, for wiring and loose connection. Good. 2. Inspect the voltage at the VPC board. The voltage indication is good. The light indication is "ON". 3. Inspect the SBO board. Found "SYSGO", not lit on. Upon ATP console r/r'ed SYSGO turned "ON". 4. Measured Voltage at zero speed relay is Zero. (P4-16 to P4-20 = 0 . Thus as per ITT recommendation "if no voltage present" replaced ATP module. Further, DST on both cars tested good. 000-300-S00 SUBSYSTEM; AUTOMATIC TRAIN					
Component:	CONTROL (ATC); 2K/3K/6K/7K	Work Accomp: INSTALLED	Reason: INTERNAL FAILURE	Status: COMP	Position:	Warranty?: N

Planned Materials

Task ID	Item	Description	Storeroom	Issue Unit	Quantity	Unit Cost	Line Cost
	M18593004	MODULE,ATP:2K/3K	252	EA	1	$0.00	$0.00
					Total Planned Materials:		$0.00

Actual Labor

Task ID	Labor	Start Date	End Date	Start Time	End Time	Approved?	Regular Hours	Premium Hours	Line Cost
10	[redacted]	11/29/2023	11/29/2023	12:00	14:00	Y	02:00	00:00	$100.41
20	[redacted]	11/29/2023	11/29/2023	15:00	22:00	Y	07:00	00:00	$359.83

WT_plust_woprint.rptdesign 12/5/2023 11:32

Document 4 – CMNT Replacement order of ATP Module Page 1 of 2.

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

Work Order #: 18264145
Type: CM

Status: COMP
12/01/2023 14:35

Work Description: The operator reported the doors opened off the platform automatically while performing an offload., 11/20, E04, OTH, INVE, 515
Job Plan Description:

Actual Labor

Task ID	Labor	Start Date	End Date	Start Time	End Time	Approved?	Regular Hours	Premium Hours	Line Cost
						Total Actual Hour/Labor:	09:00	00:00	$460.23

Related Incidents

Ticket	Description	Class	Status	Relationship
8713698	The operator reported the doors opened off the platform automatically while performing an offload., 11/20, E04, OTH, INVE, 515	SR	RESOLVED	ORIGINATOR

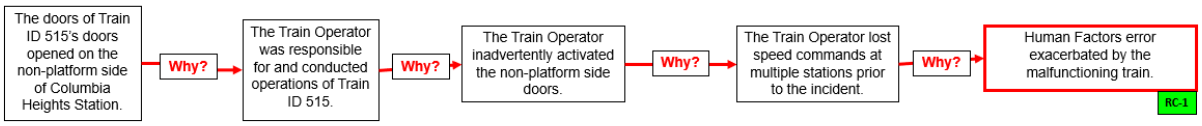
Failure Reporting

Cause		Remedy		Supervisor	Remark Date
2349	MATERIAL FAILURE	0004	REPLACED	E002079 Saunders, Bradley	12/01/2023
Remarks:	UNABLE TO VERIFY FAILURE, REPLACED ATP MODULE PER IIT RECCOMENDATIONS.				

Document 5 – CMNT Replacement order of ATP Module Page 2 of 2.

Appendix E – Why-Tree Analysis

Problem Statement	Major Cause	Causes	Causes	Root Causes



Root Cause Analysis

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

FINAL REPORT OF INVESTIGATION A&I E24034

Date of Event:	January 11, 2024
Type of Event:	O-15: Improper Door Operation
Incident Time:	23:26 hours
Location:	Federal Center SW Station, Track 1
Time and How received by SAFE:	23:27 hours via MAC
WMSC Notification Time:	00:08 hours
Responding Safety Officers:	WMATA SAFE: No WMSC: No Other: No
Rail Vehicle:	Train ID 411 [L6052-6053.6014-6015.6133-6132T]
Injuries:	None
Damage:	None
Emergency Responders:	Office of Rail Transportation (RTRA)
SMS I/A Number	20240121#114147

Federal Center SW Station – Improper Door Operation

January 11, 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
CMNT	Office of Car Maintenance
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
ROCC	Rail Operations Control Center
ROQT	Rail Operations Quality Training
SAFE	Department of Safety
SMS	Safety Measurement System
SPOTS	System Performance On Time Summary
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, January 11, 2024, at 23:26 hours, a Largo Division Train Operator operating outbound revenue Train ID 411 [L6052-6053.6014-6015.6133-6132T], opened the train doors on the non-platform side (right-side) at Federal Center SW Station (a center platform station) on Track 1.

After closing the non-platform side doors, the Train Operator of Train ID 411 contacted the Metro Integrated Command and Communications Center (MICC) Radio Rail Traffic Controller (RTC) and reported the incident. The Radio RTC subsequently instructed the Train Operator of Train ID 411 to announce that the train was being offloaded, key down, and perform a ground walkaround inspection.

The Train Operator of Train ID 411 verified that the train was clear of customers and conducted a ground walkaround inspection and reported negative results. The Radio RTC dispatched an Office of Rail Transportation (RTRA) Rail Supervisor to assist and instructed them to intercept Train ID 411 at Potomac Avenue Station. The RTRA Supervisor boarded Train ID 411 at the Potomac Avenue Station and assumed control of the train operations.

The Train Operator was removed from service for post-incident testing. The incident train was also removed from service for further investigation.

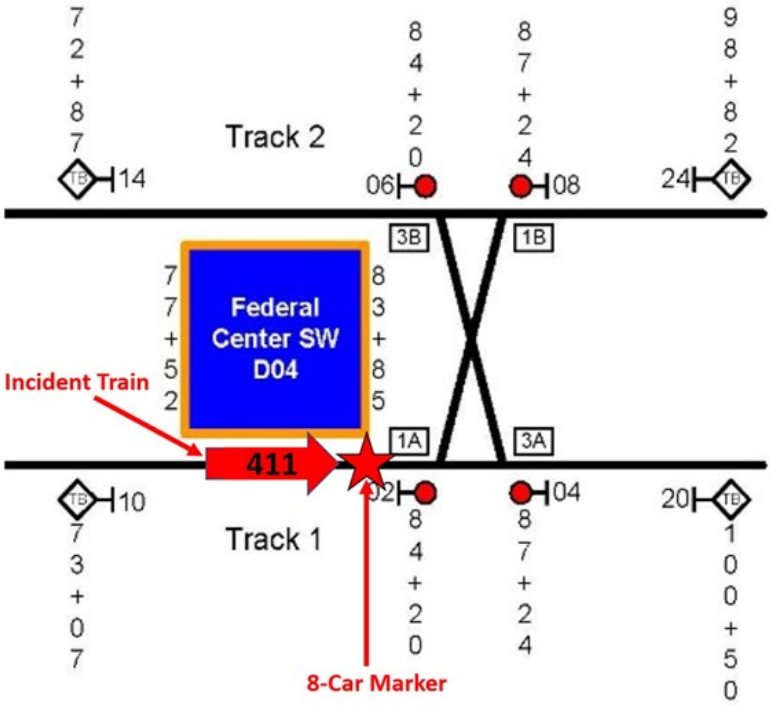
No injuries or damages were reported as a result of this incident.

The probable cause of the Improper Door Operation event on January 11, 2024, at Federal Center SW Station was an incorrect application of door operation procedures that resulted in the Train Operator mistakenly commanding the non-platform side doors to open. The Train Operator activated the non-platform side open door button prior to verifying the platform side of the station. This action led to the right-side doors being opened off the platform.

Incident Site

Federal Center SW Station is a Direct Fixation Track governed by signals D04-06, 08, and D04-02, 04. This is an above-ground station with a center 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 documentation

- Formal Interview – 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) were invited to participate. SAFE interviewed the following individuals:
    - Train Operator – Train ID 411

- Documentation Review – A collection of relevant work history information and process documentation contained in Metro systems of record. These records include:
    - Train Operator Incident Statement
    - Train Operator Training Record
    - Train Operator 30-day Work History
    - RTRA Supervisor's Report
    - RTRA Managerial Incident Investigation Report

- SOP 40 – Procedure for Platform Berthing, Station Servicing and Overruns
- Metrorail Operating Rulebook (MOR)
- National Oceanic and Atmospheric Administration (NOAA)
- Metro Integrated Command and Communications Center (MICC) Incident Report
- Maximo Data

- System Data Recording Review – A collection of information contained in Metro Data Recording Systems. This data includes:
  - Audio Recording System (ARS) playback, including OPS 2 Radio
  - The Office of Chief Mechanical Officer (CMOR) Incident Investigation Team (IIT) Vehicle Monitoring System (VMS)
  - System Performance On-Time Summary (SPOTS)
  - Closed-circuit television (CCTV)

Investigation

On Thursday, January 11, 2024, at 23:26 hours, a Largo Division Train Operator operating outbound revenue Train ID 411 [L6052-6053.6014-6015.6133-6132T], opened the train doors on the non-platform side (right-side) at Federal Center SW Station (a center platform station) on Track 1.

Image 1 - Train ID 411 doors open the doors on the non-platform side (right side) at Federal Center SW Station, Track 1, at 23:26:01 hours.

After closing the non-platform side doors, the Audio Recording System (ARS) revealed that the Train Operator of Train ID 411 contacted the MICC Radio RTC and reported the incident. The Radio RTC subsequently instructed the Train Operator of Train ID 411 to announce that the train was being offloaded, key down, and perform a ground walkaround inspection.

Image 2 - Train ID 411 doors were closed the non-platform side (right side) at 23:26:03 hours.

The Train Operator of Train ID 411 verified that the train was clear of customers, conducted a ground walkaround inspection, and reported negative results. The Radio RTC instructed the Train Operator of Train ID 411 to change their identification marker to Train 711 and continue in non-revenue service towards New Carrollton Station.

The Radio RTC dispatched an RTRA Supervisor to assist with the incident and directed them to intercept the train at Potomac Avenue Station. The RTRA Supervisor boarded Train ID 411 (711) at the Potomac Avenue Station and assumed control of the train operations.

The Train Operator was removed from service for post-incident testing. The incident train was also removed from service for further investigation.

No injuries or damages were reported as a result of this incident.

The Closed-Circuit Television (CCTV) revealed that at 23:25:51 hours, Train ID 411 arrived at Federal Center SW Station on Track 1. The Train Operator of Train ID 411 subsequently opened the right-side doors on the non-platform side at 23:26:01 hours.

The Train Operator closed the right-side doors and opened the left-side cab window of Train ID 411 in lead car 6052 at 23:26:12 hours. The Train Operator opened the platform side doors and serviced the station at 23:26:13 hours.

The Audio Recording System (ARS) revealed that at 23:28 hours, the Train Operator of Train ID 411 contacted the MICC and reported that they opened the doors off the platform side. At 23:31 hours, the Train Operator of Train ID 411 reported the train was clear of customers, was granted foul time, and commenced their ground walkaround inspection. At 23:48 hours, the RTRA Supervisor reported they intercepted Train ID 411 (711) at Potomac Avenue Station, and the Train Operator was removed from service.

The System Performance On-Time Summary (SPOTS) revealed that Train ID 411 arrived at Federal Center SW Station on Track 1 at 23:25:27 hours. At 23:26:02 hours, the right-side doors

(non-platform side) were opened and closed at 23:26:05 hours. The Train Operator opened the doors on the non-platform side twice before opening the doors on the platform side. The station was serviced at 23:26:16 hours by opening the left-side doors, and subsequently, the identification marker was changed to Train ID 711.

ROCS SPOTS REPORT

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

Current date/time: Wed Jan 24 21:47:25 2024

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

and/or Select 4-digit car number: 6052 Leave blank to remove criteria

Select Date: Jan 11 2024 **Select Times (0-24HRS): From** 23:00 **To** 24:00

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
411	C10-1	6	72				23:00:41	23:01:55	74	23:00:04	23:02:26	6133-6132.6015-6014.6053-6052	-
411	C09-1	6	72	23:03:35	23:03:53	18				23:03:03	23:04:14	6133-6132.6015-6014.6053-6052	2:54
411	C08-1	6	72	23:05:33	23:05:49	16				23:05:05	23:06:10	6133-6132.6015-6014.6053-6052	1:58
411	C07-1	6	72				23:07:20	23:07:35	15	23:06:48	23:08:03	6133-6132.6015-6014.6053-6052	1:47
411	C06-1	6	72							23:09:55	23:10:24	6133-6132.6015-6014.6053-6052	-
411	C05-1	6	72				23:12:01	23:12:19	18	23:11:30	23:12:44	6133-6132.6015-6014.6053-6052	4:41
411	C04-1	6	72				23:14:54	23:15:08	14	23:14:19	23:15:34	6133-6132.6015-6014.6053-6052	2:53
411	C03-1	6	72	23:16:39	23:16:54	15				23:16:09	23:17:15	6133-6132.6015-6014.6053-6052	1:45
411	C02-1	6	72	23:18:09	23:18:25	16				23:17:34	23:18:50	6133-6132.6015-6014.6053-6052	1:30
411	C01-1	6	72				23:19:51	23:20:07	16	23:19:16	23:20:34	6133-6132.6015-6014.6053-6052	1:42
411	D01-1	6	72				23:21:17	23:21:30	13	23:20:44	23:21:55	6133-6132.6015-6014.6053-6052	1:26
411	D02-1	6	72	23:22:46	23:23:03	17				23:22:18	23:23:27	6133-6132.6015-6014.6053-6052	1:29
411	D03-1	6	72				23:24:27	23:24:50	23	23:23:52	23:25:16	6133-6132.6015-6014.6053-6052	1:41
711	D04-1	6	74	23:26:02	23:26:05	3	23:26:16	23:30:23	247	23:25:27	23:45:06	6133-6132.6015-6014.6053-6052	1:35
711	D05-1	6	74							23:45:57	23:46:32	6133-6132.6015-6014.6053-6052	-
711	D06-1	6	74							23:47:10	23:47:40	6133-6132.6015-6014.6053-6052	-
711	D07-1	6	74				23:49:34	23:49:43	9	23:48:20	23:51:12	6133-6132.6015-6014.6053-6052	23:32
711	D08-1	6	74							23:52:03	23:52:35	6133-6132.6015-6014.6053-6052	-
711	D09-1	6	74							23:56:16	23:56:46	6133-6132.6015-6014.6053-6052	-
711	D10-1	6	74							23:57:52	23:58:24	6133-6132.6015-6014.6053-6052	-
711	D10-1	6	74							23:58:28	23:58:29	6133-6132.6015-6014.6053-6052	-
711	D11-1	6	74							23:59:50	00:00:16	6133-6132.6015-6014.6053-6052	-

Table 1 - SPOTS report illustrating the arrival time, departure time, and door activity for Train ID 411.

The Office of Chief Mechanical Officer (CMOR) / Incident Investigation Team (IIT) provided an analysis after performing an inspection and determined that no mechanical failure could have contributed to this incident.

During the formal interview, the Train Operator stated that they were on their last trip for the night when the incident occurred, and was rushing through the door procedures and inadvertently pushed the incorrect door open button.

Chronological Event Timeline

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

Time	Description
23:25 hours	Train ID 411 arrived at Federal Center SW Station, Track 1. [SPOTS]
23:26 hours	Train Operator of Train ID 411: Opened the train doors on the non-platform side twice at Federal Center SW Station on Track 1. [SPOTS]
23:28 hours	Train Operator of Train ID 411: Contacted the MICC and reported they opened the doors on the non-platform side at Federal Center SW Station on Track 1. Radio RTC: Acknowledged the report and instructed the Train Operator of Train ID 411 to close the doors and offload the train on the platform side only, verify the train was clear of customers, and conduct a ground walkaround inspection. Train Operator of Train ID 411: Acknowledged. [Ops 2]
23:31 hours	Train Operator of Train ID 411: Reported the train was clear of customers, and they were ready to conduct the ground walkaround inspection. Radio RTC: Acknowledged the Train Operator's transmission and granted foul time to conduct the inspection. Instructed an RTRA Supervisor to assist with the incident. [Ops 2]
23:38 hours	Train Operator of Train ID 411: Reported the ground walkaround inspection was complete, and no persons were found on the roadway, and no injuries. Radio RTC: Acknowledged. [Ops 2]
23:44 hours	Radio RTC: Instructed the Train Operator of Train ID 411 to change the identification marker to Train ID 711 and continue in non-revenue service toward New Carrollton Station. Train Operator of Train ID 411: Acknowledged. [Ops 2]
23:48 hours	RTRA Supervisor: Reported they had intercepted Train ID 711 at Potomac Avenue Station on Track 1, and took over operating the train. Radio RTC: Acknowledged. [Ops 2]

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

Closed-Circuit Television (CCTV)

Image 3 - At 23:26:12 hours, the Train Operator of Train ID 411 opened the left-side cab window and looked down the left side (platform side) of the train.

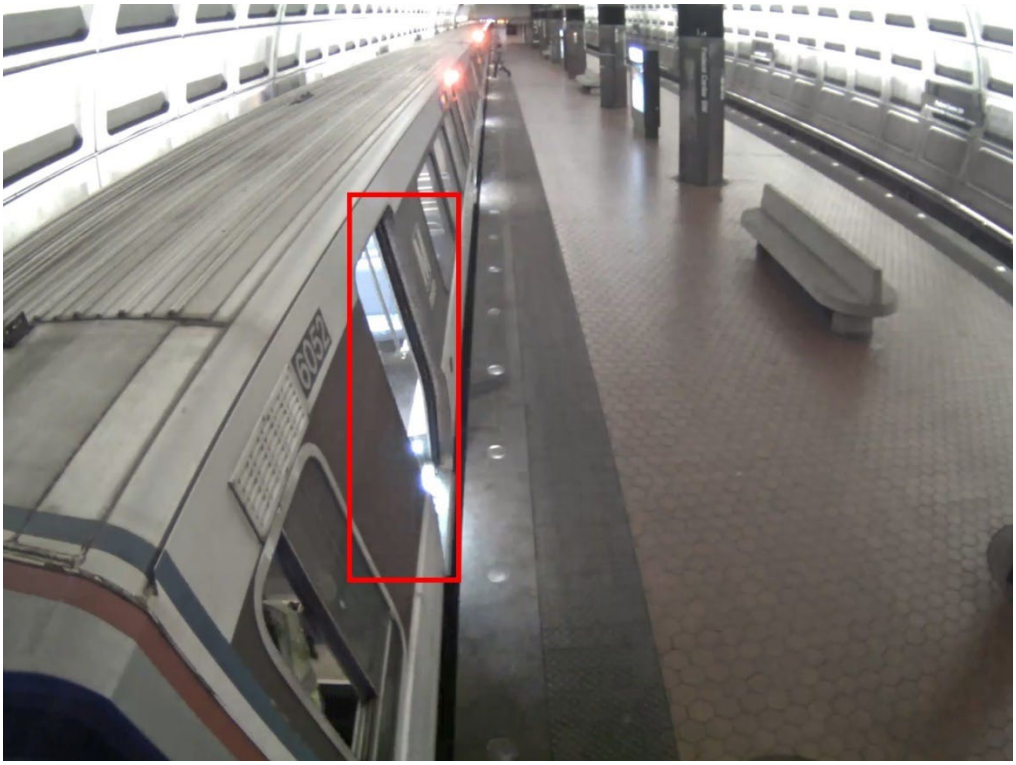
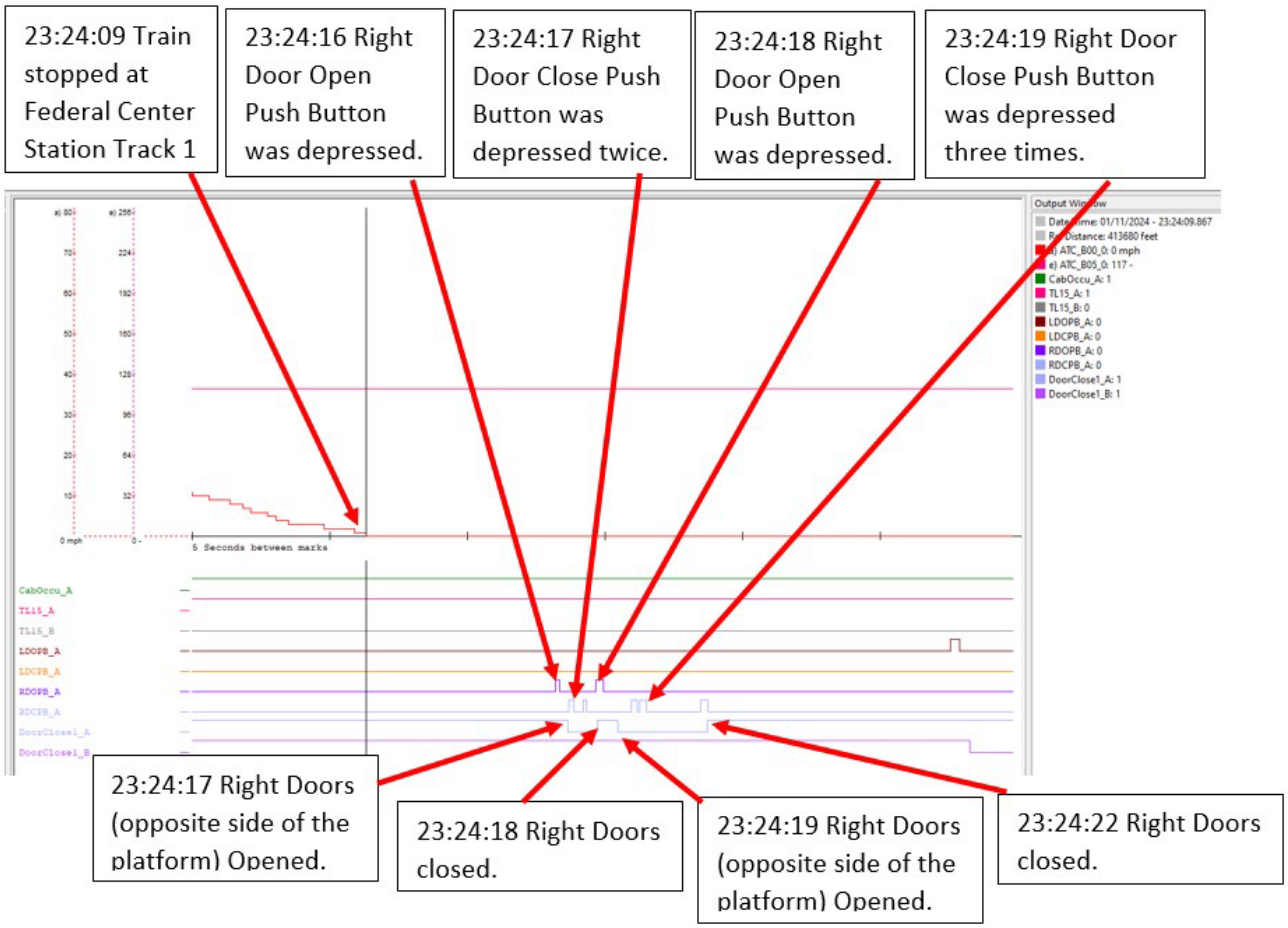


Image 4 - The platform side doors are opened at 23:26:13 hours.

Office of Chief Mechanical Officer (CMOR) / Incident Investigation Team (IIT)
Adopted from the CMOR IIT report:

"Based on Vehicle Monitoring System (VMS) data, the IIT determined that no mechanical failure could have contributed to this incident. In summary, the right doors (opposite side of the platform) were manually operated twice while the train was stopped at Federal Center SW Station. The right signals that monitor the right-side door control push buttons confirmed the door push button was manually operated, and the analysis is provided. See the timeline of events below:"

Time	Description
23:24:09 hours	Train ID 411 stopped at Federal Center SW Station on Track 1
23:24:16 hours	The Right Door Open Push Button was depressed.
23:24:17 hours	The right doors (opposite side of the platform) opened.
23:24:17 hours	The Right Door Close Push Button was depressed twice.
23:24:18 hours	The right doors closed.
23:24:18 hours	The Right Door Open Push Button was depressed.
23:24:19 hours	The right doors (opposite side of the platform) opened.
23:24:19 hours	The Right Door Close Push Button was depressed three times.
23:24:22 hours	The right doors closed.



Graph 1 – Data analysis of Lead Car 6052 door operations.

Office of Car Maintenance (CMNT)

CMNT personnel performed door operational checks and inspections as recommended by CMOR IIT. CMNT inspected all Door Push Buttons, microswitches, and associated wiring. All door pushbuttons were depressed without sticking, and CMNT cleared the train for service.
(See Appendix E).

Interview 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. Findings detailed below include reported information from involved personnel and may conflict with other data sources contained in the report.

Train Operator – Train ID 411

- The Train Operator stated that they were on their last trip of the night when the incident occurred.
- The Train Operator stated that after they berthed at the 8-car marker, they accidentally pushed the right-side door open button without looking at which button they were actuating.
- The Train Operator stated they immediately reported the incident to the MICC and followed their directions.
- The Train Operator stated that there were no mechanical issues with the train.

Weather

On January 11, 2024, at the time of the incident, NOAA recorded the temperature as 38° F, clear, no wind, and 83% humidity. This is a below ground station. Weather was not a contributing factor in this incident (Weather source: NOAA – Location: Washington, DC).

Related Rules and Procedures

- SOP 40 – Procedure for Platform Berthing, Station Servicing and Overruns

Human Factors

Evidence of Fatigue

Conditions at the time of the incident were evaluated to distinguish whether evidence of fatigue was present. The video of the incident was reviewed for behaviors suggesting fatigue. No indications of fatigue were evident from the video. The Train Operator reported feeling alert at the time of the incident. The Train Operator reported experiencing no symptoms of fatigue leading up to the incident.

Fatigue Risk

Incident data was evaluated for fatigue risk factors. No significant risk was identified. The incident time of day (23:24 hours) does not suggest an increased risk of fatigue-related impairment. The Train Operator reported keeping a regular sleep schedule in the days leading up to the incident. The Train Operator worked the evening shift in the days leading up to the incident. The Train Operator was awake for 6.18 hours at the time of the incident. The Train Operator reported 10 hours of sleep in the 24 hours preceding the incident. The off-duty period was 93 hours, which provided the opportunity for 7-9 hours of sleep. This was a comparable amount of sleep to the employee's usual workday sleep durations. The Train Operator reported usual workday sleep durations of 8-9 hours and no issues with sleep.

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.

Office of Rail Transportation (RTRA)

RTRA determined that the Train Operator would receive discipline in accordance with the Disciplinary Administration Program (DAP). The Train Operator is scheduled to attend refresher training with the Office of Rail Operations Quality Training (ROQT).

Work History

The Train Operator is a WMATA employee with over five years of service: four and a half years as a Bus Operator and six months as a Train Operator. The Train Operator is certified to the RWP-2 Level and expires in March 2024. This employee has no history of sleep issues to report.

Certifications

The Train Operator completed their train qualification on July 3, 2023, with 80% on the MSRPH Exam and 79% on the TVOIM/TOIM Exam. The Train Operator completed the practical application portion on August 4, 2023, with a QL – 3 rating. In the first attempt, the Train Operator's scores in each section are as follows: QL-2 in preparation for service, QL-1 in Mainline Operations, QL-3 in Yard Operations, and QL-3 in Miscellaneous.

Findings

- The Train Operator stated that they were on their last trip for the night when the incident occurred.
- The Train Operator stated that they were rushing through the door procedures and inadvertently pushed the incorrect door open button.
- The Train Operator was operating in manual mode.

Immediate Mitigation to Prevent Recurrence

- Train ID 411 was offloaded at Federal Center SW Station, Track 1.
- The MICC instructed the Train Operator to perform a ground walkaround inspection.
- The MICC dispatched an RTRA Supervisor to take over operating the train.
- The Train Operator was removed from service for post-incident testing.
- Train ID 411 was removed from service for post-incident inspection.

Probable Cause Statement

The probable cause of the Improper Door Operation event on January 11, 2024, at Federal Center SW Station was an incorrect application of the procedures that resulted in the Train Operator mistakenly commanding the non-platform side doors to open. The Train Operator activated the non-platform side open door button prior to verifying the platform side of the station. This action led to the right-side doors being opened off the platform.

Recommended Corrective Actions

Corrective Action Code	Description	Responsible Party	Estimated Completion Date
114147_SAFECAPS_RTRA_001	(RC-1) Train Operator to attend refresher training with an emphasis on SOP #40 Procedure for Platform Berthing, Station Servicing, and Overruns.	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 Train Operator is a WMATA employee with over five years of total service: four and a half years as a Bus Operator and six months as a Train Operator. The Train Operator is certified to the RWP-2 Level and expires in March 2024. This employee has no history of sleep issues to report.

During the interview, the Train Operator stated at the time of the incident, they were on their last trip for the night. After arriving at Federal Center SW Station, the Train Operator stated they mistakenly operated the right-side open doors button and immediately closed the doors.

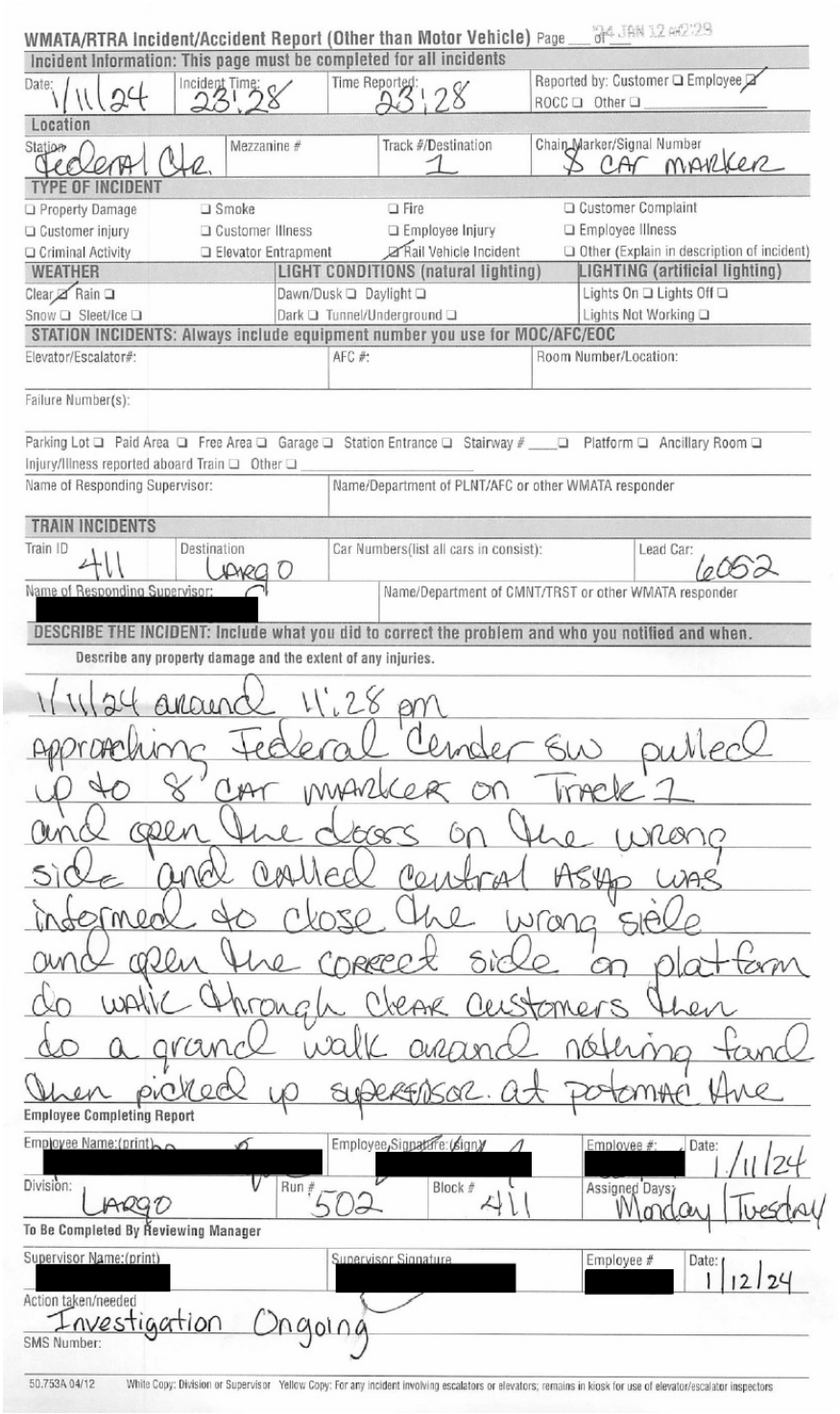
The Train Operator stated that after they closed the right-side doors, they contacted the MICC to report the incident. They were instructed to key down, clear the train of customers, and conduct a ground walkaround inspection of the area.

The Train Operators stated they conducted the inspection and determined that no one had fallen from the train. The Train Operator stated that they were then instructed to continue on and pick up an RTRA Supervisor at Potomac Avenue Station.

The Train Operator stated that they were rushing through their door procedures and inadvertently pushed the incorrect door open button upon arriving at the Federal Center SW Station. The Train Operator stated that there were no distractions during the incident and no mechanical issues with the train.

The Train Operator reported no problems with their sleep; they were fully alert at the time of the incident and made an honest mistake by operating the doors on the non-platform side.

Appendix B – Train Operator Incident Statement (Abridged)



WMATA/RTRA Incident/Accident Report (Other than Motor Vehicle) Page ___ of ___ '24 JAN 12 A8:29

Incident Information: This page must be completed for all incidents

Date:	Incident Time:	Time Reported:	Reported by: Customer ❑ Employee ☑ ROCC ❑ Other ❑
1/11/24	23:28	23:28	

Location

Station:	Mezzanine #	Track #/Destination	Chain Marker/Signal Number
Federal Ctr.		1	8 CAR MARKER

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:
411	Largo		6052

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

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.

1/11/24 around 11:28 pm approaching Federal Center SW pulled up to 8 CAR MARKER on Track 1 and open the doors on the wrong side and called central ASAP was informed to close the wrong side and open the correct side on platform do walk through clear customers then do a grand walk around nothing found then picked up supervisor at Potomac Ave

Employee Completing Report

Employee Name:(print)	Employee Signature:(sign)	Employee #:	Date:
[redacted]	[redacted]	[redacted]	1/11/24

Division:	Run #	Block #	Assigned Days:
Largo	502	411	Monday / Tuesday

To Be Completed By Reviewing Manager

Supervisor Name:(print)	Supervisor Signature	Employee #	Date:
[redacted]	[redacted]	[redacted]	1/12/24

Action taken/needed
Investigation Ongoing

SMS Number:

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

Document 1 -Train Operator's Incident Report.

Appendix C – RTRA Supervisor's Report (Abridged)

RTRA Supervisors' Report

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

DEPARTMENT OF OPERATIONS-RAIL SERVICE

Office of Rail Transportation

Date:	Incident Time Approx.	Incident Location (Station Mezzanine#)	Track/Mezzanine
01-11-2024	23:28	Federal Center SW	Track #1

Incident Description
Customer claimed someone injured him

WMATA Personnel Involved	Employee #	Rule Violation?	Home Division	Post Incident
Train Operator [redacted]	[redacted]		Largo	Yes

Name (Witness)	Injury?
Name	Injury?
Name (Witness)	Injury?

Arrival Time	Unit Number	Person In Charge	Remarks
Supervisor [redacted] (Arrival Time Unknown) Keyed on train at Potomac Avenue Track #1	48		

Chronological Account of Incident

Train operator states [redacted] pulled up to the eight car marker at Federal Center SW, opened [redacted] right side window, and opened the right side doors (opposite side of the platform). [redacted] immediately informed ROCC and followed their directives.

Document 2 - RTRA Supervisor's Report (page 1 of 2).

Supervisor Submitting Report (include payroll #)	Date	Report Reviewed by	Date
[redacted]	01-11-2024	[redacted]	1-12-24

Document 3 - RTRA Supervisor's Report (page 2 of 2).

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):	16 Minutes
Incident Date:	Thursday, January 11, 2024	Vehicles Involved:	L-6052-6014-6132
Incident Time:	11:28 PM	First Reported By:	RVO [redacted]
Location:	Federal Center SW (D04) Track #1		

BRIEF DESCRIPTION:

At approximately 11:28pm, Rail Vehicle Operator [redacted] report to ROCC that she opened the doors on the opposite side of the platform. Operator [redacted] was instructed to off-load the train and perform a ground walk around.

Key Employees Involved & Employee Statements:

- Operator [redacted] stated in [redacted] Incident Report "1/11/24 around 11:28pm approaching Federal Center SW pulled up to the 8-car marker on Track 1 and open the doors on the wrong side and called Central ASAP was informed to close the wrong side and open on the correct side on platform do walk through clear customers then do a ground walk around nothing found then picked up Supervisor at Potomac Ave.

Post Incident Testing & Employee History:

- Rail Vehicle Operator [redacted] was removed from service and transported for Post Incident Testing.
- [redacted] was hired on November 13, 2018.
- [redacted] has been a Certified Rail Vehicle Operator since August 2023, (Passed on 2nd Attempt).
- Operator [redacted] had a STOV in September 2023.
- Operator [redacted] had a Red Signal Overrun in November 2023.
- Operator [redacted] was removed from service in January 2024 for Failure to Follow Instructions and being combative towards an RTRA Supervisor. (Investigation Ongoing)

SIGNIFICANT INCIDENT TIMELINE:

11:28 pm – Train 411, Operator [redacted], reported opening the train doors on the opposite side of the platform track one at Federal Center SW. Operator [redacted] was instructed to close the train doors, offload her train on the platform side only, verify the train is clear of customers and to conduct a ground walk around of her train.

11:31 pm – Operator [redacted] reported that the train was clear of customers. Operator [redacted] was granted foul time to perform a ground walk around inspection of the train. Unit [redacted] RTRA Supervisor [redacted], was dispatched to assist.

11:38 pm – Operator [redacted] reported a ground walk around inspection was completed and no unauthorized personnel on the roadway track one at Federal Center SW. No reported injuries.

11:44 pm – Train 411 was instructed to re-block Train ID to 711 and continue non-revenue towards New Carrollton Yard. RTRA Supervisor [redacted] instructed to intercept train 711 at Potomac Avenue Station.

12:00 am – Operator [redacted] was removed from service and transported for post incident evaluation by RTRA Supervisor [redacted]. Operator [redacted] was instructed to submit an incident report. Division Management was notified.

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

Document 4 - RTRA Managerial Incident Report (page 1 of 2).

SIGNIFICANT INCIDENT TIMELINE:

SIGNIFICANT FINDINGS & PENDING ISSUES:

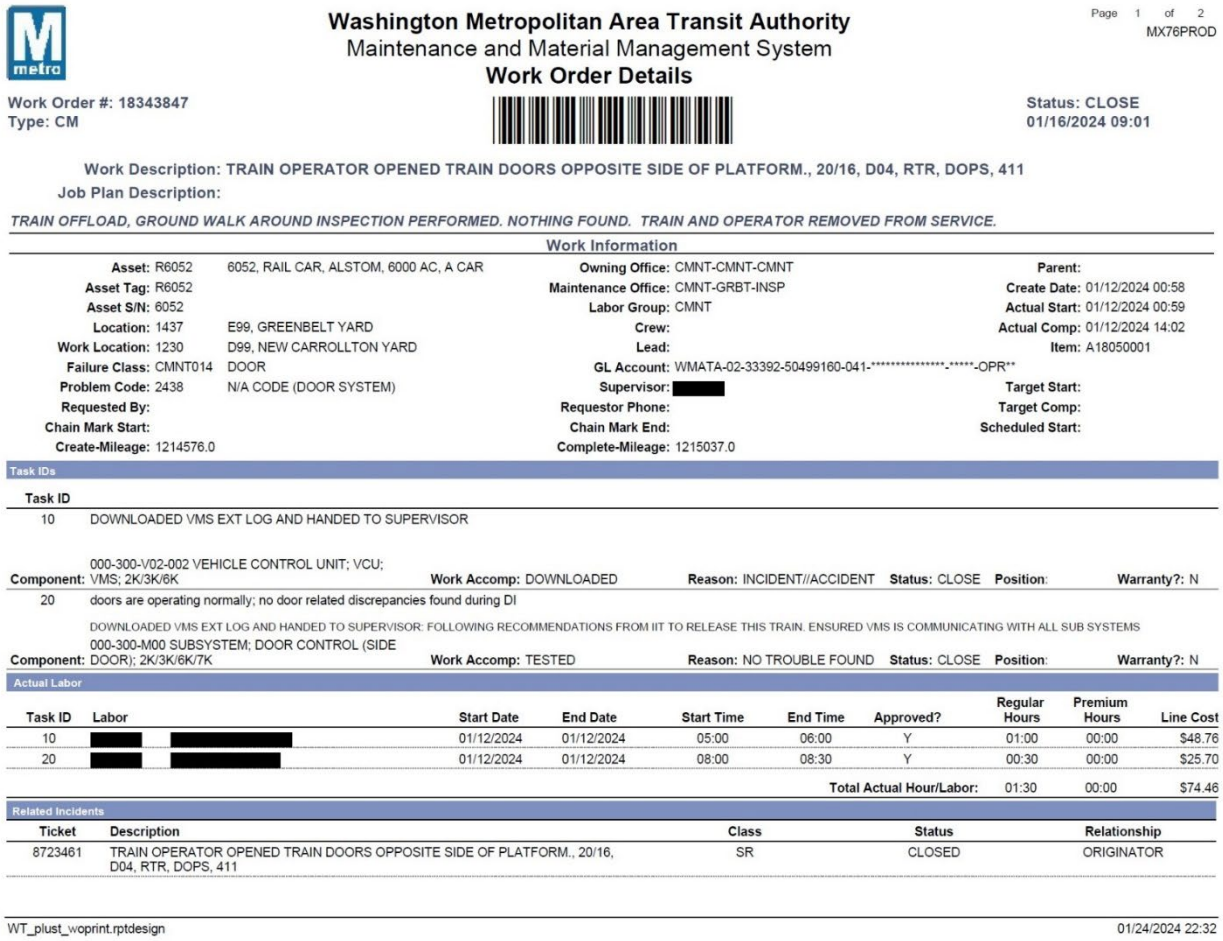
While reviewing Operator [redacted] Incident Report, [redacted] admitted opening the doors on the opposite side of the platform.

CORRECTIVE ACTIONS:

The investigation is ongoing.

Document 5 - RTRA Managerial Incident Report (page 2 of 2).

Appendix E – CMNT Maximo Report



Page 1 of 2
MX76PROD

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

Work Order #: 18343847
Type: CM

Status: CLOSE
01/16/2024 09:01

Work Description: TRAIN OPERATOR OPENED TRAIN DOORS OPPOSITE SIDE OF PLATFORM., 20/16, D04, RTR, DOPS, 411
Job Plan Description:

TRAIN OFFLOAD, GROUND WALK AROUND INSPECTION PERFORMED. NOTHING FOUND. TRAIN AND OPERATOR REMOVED FROM SERVICE.

Work Information

Asset:	R6052 6052, RAIL CAR, ALSTOM, 6000 AC, A CAR	**Owning Office:**	CMNT-CMNT-CMNT	**Parent:**	
Asset Tag:	R6052	**Maintenance Office:**	CMNT-GRBT-INSP	**Create Date:**	01/12/2024 00:58
Asset S/N:	6052	**Labor Group:**	CMNT	**Actual Start:**	01/12/2024 00:59
Location:	1437 E99, GREENBELT YARD	**Crew:**		**Actual Comp:**	01/12/2024 14:02
Work Location:	1230 D99, NEW CARROLLTON YARD	**Lead:**		**Item:**	A18050001
Failure Class:	CMNT014 DOOR	**GL Account:**	WMATA-02-33392-50499160-041-**********-*****-OPR**		
Problem Code:	2438 N/A CODE (DOOR SYSTEM)	**Supervisor:**	[redacted]	**Target Start:**	
Requested By:		**Requestor Phone:**		**Target Comp:**	
Chain Mark Start:		**Chain Mark End:**		**Scheduled Start:**	
Create-Mileage:	1214576.0	**Complete-Mileage:**	1215037.0		

Task IDs

Task ID						
10	DOWNLOADED VMS EXT LOG AND HANDED TO SUPERVISOR					
Component:	000-300-V02-002 VEHICLE CONTROL UNIT; VCU; VMS; 2K/3K/6K	**Work Accomp:** DOWNLOADED	**Reason:** INCIDENT//ACCIDENT	**Status:** CLOSE	**Position:**	**Warranty?:** N
20	doors are operating normally; no door related discrepancies found during DI					
	DOWNLOADED VMS EXT LOG AND HANDED TO SUPERVISOR: FOLLOWING RECOMMENDATIONS FROM IIT TO RELEASE THIS TRAIN. ENSURED VMS IS COMMUNICATING WITH ALL SUB SYSTEMS					
Component:	000-300-M00 SUBSYSTEM; DOOR CONTROL (SIDE DOOR); 2K/3K/6K/7K	**Work Accomp:** TESTED	**Reason:** NO TROUBLE FOUND	**Status:** CLOSE	**Position:**	**Warranty?:** N

Actual Labor

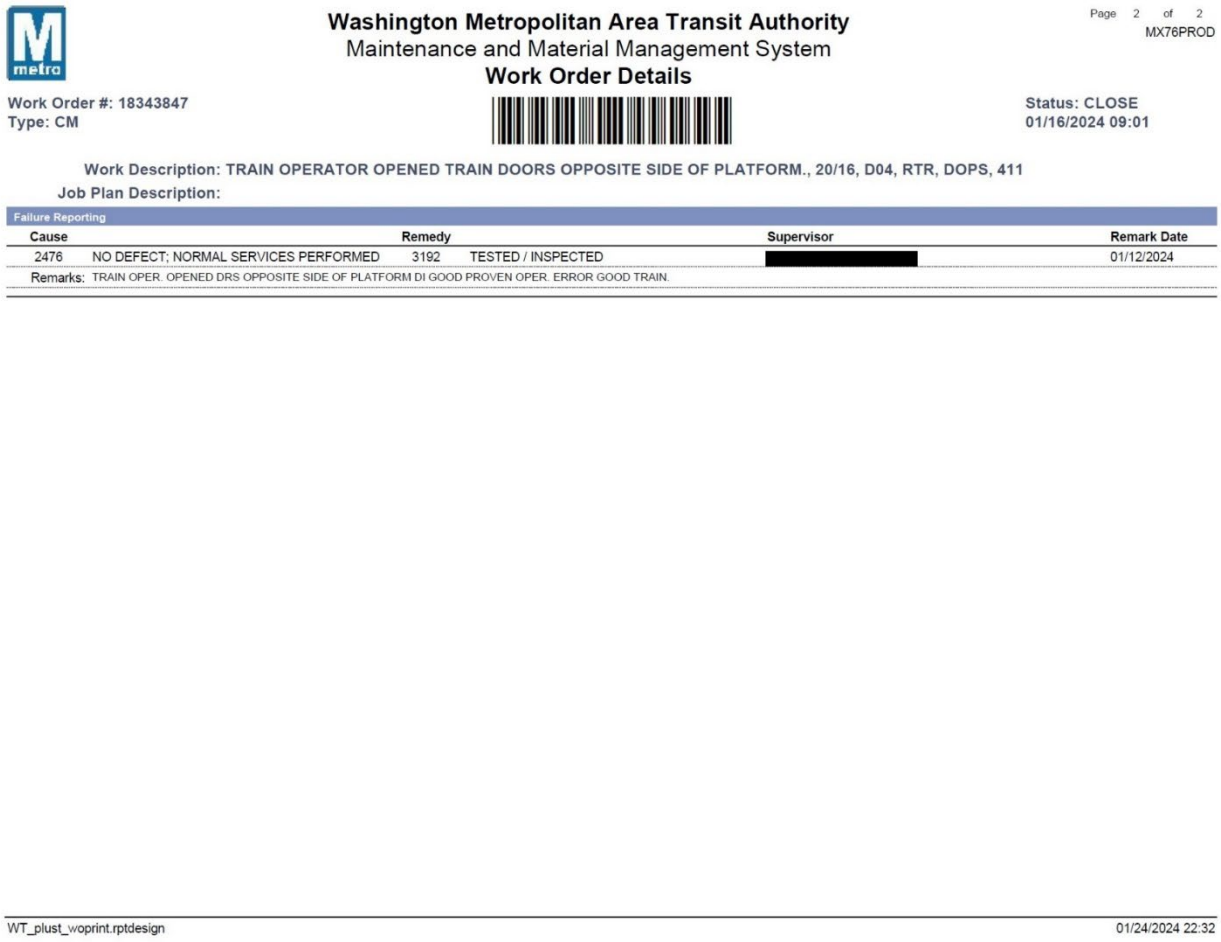
Task ID	Labor	Start Date	End Date	Start Time	End Time	Approved?	Regular Hours	Premium Hours	Line Cost
10	[redacted]	01/12/2024	01/12/2024	05:00	06:00	Y	01:00	00:00	$48.76
20	[redacted]	01/12/2024	01/12/2024	08:00	08:30	Y	00:30	00:00	$25.70
						Total Actual Hour/Labor:	01:30	00:00	$74.46

Related Incidents

Ticket	Description	Class	Status	Relationship
8723461	TRAIN OPERATOR OPENED TRAIN DOORS OPPOSITE SIDE OF PLATFORM., 20/16, D04, RTR, DOPS, 411	SR	CLOSED	ORIGINATOR

WT_plust_woprint.rptdesign 01/24/2024 22:32

Document 6 - CMNT work order illustrating the inspections conducted (page 1 of 2).



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

Page 2 of 2
MX76PROD

Work Order #: 18343847
Type: CM

Status: CLOSE
01/16/2024 09:01

Work Description: TRAIN OPERATOR OPENED TRAIN DOORS OPPOSITE SIDE OF PLATFORM., 20/16, D04, RTR, DOPS, 411

Job Plan Description:

Failure Reporting

Cause		Remedy		Supervisor	Remark Date
2476	NO DEFECT; NORMAL SERVICES PERFORMED	3192	TESTED / INSPECTED	[redacted]	01/12/2024

Remarks: TRAIN OPER. OPENED DRS OPPOSITE SIDE OF PLATFORM DI GOOD PROVEN OPER. ERROR GOOD TRAIN.

WT_plust_woprint.rptdesign 01/24/2024 22:32

Document 7 - CMNT work order illustrating the inspections conducted (page 2 of 2).

View Approved Incident Report

INCIDENT ID: 2024011BLUE6

DATE	TIME	LINE	ITEM
2024-01-11	2328	Blue	6

LOCATION (STATION/YARD)
Federal Center SW (D04)

LOCATION/CHAIN MARKER (If Applicable)

REPORTED BY
Train Operator [redacted]
(Largo)

TRAIN ID	DIRECTION	TRACK NUMBER	DEPTS NOTIFIED
411	O/B	1	Everbridge Alert/Messaging

CAR NUMBERS (XXXX-XXXX)
Lead Car

6052-6053	6014-6015	6132-6133	-
Caused Issue ☑	Caused Issue ☐	Caused Issue ☐	Caused Issue ☐

TRBL CODE
DOPS-DOORS
OPENED
OPPOSITE
SIDE

RESP CODE
RTR

TYPE INCIDENT
Train Operator opened doors opposite side of platform

ACTION PLAN
Offload, ground walk around, dispatch RTRA Supervisor

DELAYS IN MINUTES

LINE	INCIDENT	TRAIN	TOTAL DURATION
20	20	16	0

TRIPS MODIFIED

PARTIAL	GAP TRAIN	LATE DISPATCHES	REROUTED	NOT DISPATCHED	OFFLOADS
1	0	0	0	0	1

FIVE PRIMARY CONSOLE INDICATIONS

BCP	BRAKES ON ILLUMINATED	ALL DOORS CLOSED ILLUMINATED	AUTO\MANUAL ILLUMINATED	BPP
			AUTO	

Document 8 - MICC Incident Report (page 1 of 2).

View Approved Incident Report

INCIDENT CHRONOLOGY	
TIME	**DESCRIPTION**
2328	Train 411, Operator [redacted], reported opening the train doors on the opposite side of the platform track one at Federal Center SW. Operator [redacted] was instructed to close the train doors, offload [redacted] train on the platform side only, verify the train is clear of customers and to conduct a ground walk around of [redacted] train. MICC Assistant Operations Manager, CMNT, Communications Section, MTPD, MAC and all concerned personnel were notified.
2331	Operator [redacted] reported that the train was clear of customers. Operator [redacted] was granted foul time to perform a ground walk around inspection of the train. Unit 48, RTRA Supervisor [redacted], was dispatched to assist.
2338	Operator [redacted] reported a ground walk around inspection was completed and no unauthorized personnel on the roadway track one at Federal Center SW. No reported injuries.
2344	Train 411 was instructed to re-block Train ID to 711 and continue non-revenue towards New Carrollton Yard. RTRA Supervisor [redacted] instructed to intercept train 411 at Potomac Ave.
2348	Train 608 serviced train 411 customers, track one, at Federal Center SW in the direction of Largo and ending the longest customer delay.
2349	RTRA Supervisor [redacted] took over operations of Train 711 at Potomac Ave. in the direction of New Carrollton Yard.
0000	NOTE: Operator [redacted] was removed from service and transported for post incident evaluation by RTRA Supervisor [redacted] Operator [redacted] was instructed to submit an incident report. Division Management was notified.

MAXIMO TICKET#
8723461

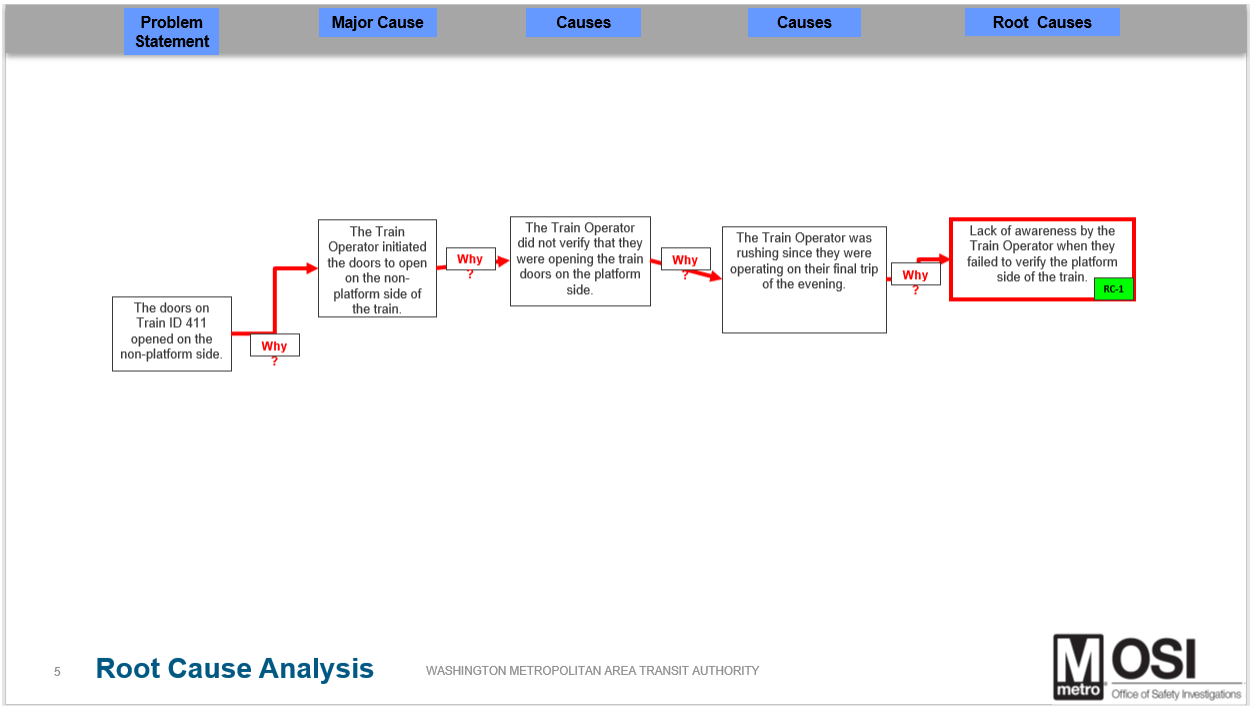
REPORT PREPARED BY	NAME	CLICK TO SIGN
RADIO CONTROLLER 1	[redacted]	✓
BUTTON CONTROLLER 1		✓
RADIO CONTROLLER 2		
BUTTON CONTROLLER 2		

SUPERINTENDENTS OR ASSISTANTS SECTION	
ADDITIONAL FOLLOW-UP CORRECTIVE ACTIONS OR REMARKS	
FOLLOW-UP INFORMATION OBTAINED FROM SUPPORT DEPARTMENTS	
NOTIFICATIONS/PAGE GROUPS	#1/CEO ☐ #2/DGM &BELOW ■
ADDITIONAL NOTIFICATIONS MADE BY PHONE	

APPROVED BY	NAME	CLICK TO SIGN
REPORT APPROVED BY SUPT. OR ASST SUPT.	[redacted]	✓

Document 9 - MICC Incident Report (page 2 of 2).

Appendix G – Why-Tree Analysis


Problem Statement
Major Cause
Causes
Causes
Root Causes
The doors on Train ID 411 opened on the non-platform side.
Why ?
The Train Operator initiated the doors to open on the non-platform side of the train.
Why ?
The Train Operator did not verify that they were opening the train doors on the platform side.
Why ?
The Train Operator was rushing since they were operating on their final trip of the evening.
Why ?
Lack of awareness by the Train Operator when they failed to verify the platform side of the train.
RC-1
5
Root Cause Analysis
WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY
OSI
Office of Safety Investigations

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

FINAL REPORT OF INVESTIGATION A&I E24133

Date of Event:	February 17, 2024
Type of Event:	O-15(a): Improper Door Operation
Incident Time:	12:54 hours
Location:	Rhode Island Station, track 2
Time and How received by SAFE:	13:52 hours MAC Desk
WMSC Notification Time:	15:36 hours
Responding Safety Officers:	N/A
Rail Vehicle:	Train ID 124 (**L**7094/95**X**7003/02**X**7454/55**X** 83/7082**T**)
Injuries:	N/A
Damage:	N/A
Emergency Responders:	NA
SMS I/A Number	20240217#114841MX

February 17, 2024
Table of Contents

Abbreviations and Acronyms

ADO	Automatic Door Operations
AIMS	Advanced Information Management System
AOM	Assistant Operations Manager
ARS	Audio Recording System
CCTV	Closed-Circuit Television
CMOR	Office of Chief Mechanical Officer
IIT	Incident Investigation Team
MAC	Mission Assurance Coordinator
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
ROCC	Rail Operations Control Center
SAFE	Department of Safety
SMS	Safety Measurement System
SPOTS	System Performance On-Time Summary
TWC	Train Wayside Communication
WMATA	Washington Metropolitan Area Transit Authority
WMSC	Washington Metrorail Safety Commission

Executive Summary

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

On Saturday, February 17, 2024, at 12:53 hours, Train ID 124 (**L**7094/95**X**7003/02**X**7454/55**X** 83/7082**T**) entered the platform limits at Rhode Island Station on track 2. The train stopped at the 8-car marker, and then the Train Operator opened the doors on the platform side and serviced the station. After servicing the station, at 12:54 hours the platform side doors were closed. Moments later, the non-platform side doors opened at 12:54:54 hours and closed at 12:55:05 hours. The Train Operator did not report opening the doors on the non-platform side to the Metro Integrated Command and Communications Center (MICC), and Train ID 124 continued toward Dupont Circle Station.

At 12:57 hours, a customer who was aboard the train reported the event via social media. Closed-circuit television (CCTV) revealed that the train doors were opened on the non-platform side.

Train ID 124 continued to Dupont Circle Station on track 2, then placed out of service and re-blocked as Train ID 123 in service to Glenmont Station on track 1. At 13:45 hours, the Radio Rail Traffic Controller (RTC) instructed the Train Operator to offload the train at Fort Totten 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 Radio RTC dispatched a Rail Supervisor to relieve the Train Operator from duty for post-incident testing.

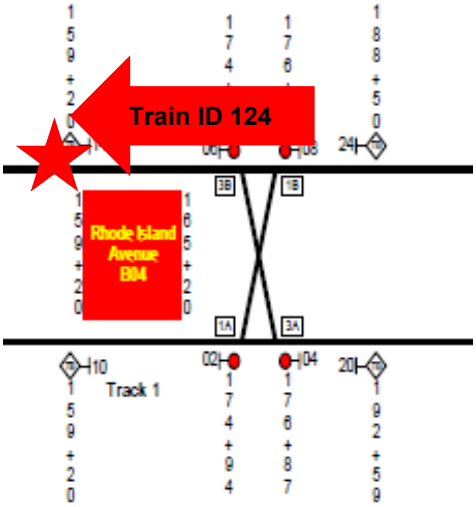
In accordance with the Office of the Chief Mechanical Officer (CMOR) Incident Investigation Team (IIT) Operations Administrative Policy (OAP) 102.06, the Metro Integrated Command and Communications Center (MICC) initiated the removal of Train ID 124 from revenue service for post-incident investigative measures. This action adhered to the Rail Vehicle Event Investigation Policy, ensuring a comprehensive examination of the incident.

The probable cause for the Improper Door Operation at Rhode Island Station on February 17, 2024, was complacency. The Train Operator failed to follow the proper procedures after they serviced the station.

Incident Site

Rhode Island Station is an outdoor aerial station with a center platform and direct fixation tracks. There is an interlocking on the outbound 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

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 124
- 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)
    - CMOR Incident Report
    - Train Operator 30 Day Work History
    - Train Operator Training Record

    - Train Operator Certification Record
    - Signal Engineering Report

- System Data Recording Review – A collection of information contained in Metro Data Recording Systems. This data includes:
    - Audio Recording System (ARS) playback, including OPS 1 Radio
    - Closed-circuit television (CCTV)
    - Train Wayside Communication (TWC)
    - System Performance On-Time Summary (SPOTS)

Investigation

On Saturday, February 17, 2024, track maintenance was scheduled on the red line. Trains were single-tracking between Van Ness Station and Friendship Heights Station, and some trains were operating between Dupont Circle Station and Glenmont Station.

The System Performance On-Time Summary (SPOTS) revealed that at 12:53 hours, Train ID 124 entered the platform limits at Rhode Island Station on track 2. At 12:53:58 hours, the Train Operator opened the doors on the platform side and serviced the station. After servicing the station, the platform doors closed at 12:54:29 hours.

The non-platform side doors opened seconds later at 12:54:54 hours and then closed at 12:55:05 hours. The Train Operator did not report opening the doors on the non-platform side at Rhode Island Avenue Station to the MICC, and then continued toward Dupont Circle Station.

At 12:57 hours, a customer who was aboard the train reported the event via social media. CCTV confirmed an improper door operation occurred. The cameras on the platform captured the improper door operation. However, the cameras do not have a clear view of the doors opening off the platform. The shadow on the railcar floor showed the doors were open.

At 13:11 hours, Train ID 124 arrived at Dupont Circle Station on track 2, was offloaded, and continued to the interlocking. At 13:14 hours, Train ID 124 returned to Dupont Circle Station on track 1 as Train ID 123 and then departed towards Glenmont Station at 13:18 hours.

At 13:35 hours, the MICC Assistant Operations Manager (AOM) contacted the Button RTC to inform them that they received notification that the doors on Train ID 123 opened while the train was moving.

At 13:36 hours after departing Brookland Station, the Radio RTC instructed Train ID 123 to stop the train, key down, and walk through the train to make sure all the doors were closed. The Train Operator advised the Radio RTC they did not see any opened doors nor did any customers say the doors opened. The Radio RTC instructed the Train Operator to key up and offload their train at Fort Totten Station.

An RTRA Rail Supervisor was dispatched to meet the train at Fort Totten Station, where they and the Station Manager assisted with offloading the train. The Rail Supervisor took over operating the train, and the train was transported to Glenmont Yard for post-incident inspection.

Chronological Event Timeline

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

Time	Description
12:53:28 hours	Train ID 124 arrived at Rhode Island Avenue Station on track 2. [SPOTS]
12:54:54 hours	Train ID 124 doors opened on the non-platform side. [SPOTS]
12:55:05 hours	Train ID 124 doors closed on the non-platform side. [SPOTS]
12:55:55 hours	Train ID 124 departed at Rhode Island Avenue Station on track 2. [SPOTS]
12:57:00 hours	A customer reported the doors open on the non-platform side via social media. [Social Media]
13:11:17 hours	Train ID 124 arrived at Dupont Circle Station on track 2. [SPOTS]
13:13:00 hours	Train ID 124 departed at Dupont Circle Station on track 2. [SPOTS]
13:14:15 hours	Train ID 124 returned to Dupont Circle Station on track 1 as Train ID 123. [SPOTS]
13:18:34 hours	Train ID 123 departed at Dupont Circle Station on track 1. [SPOTS]
13:35:44 hours	MICC Assistant Operations Manager: Contacted the Buttons RTC to inform them there was a report of Train ID 123 doors opening while the train was moving, and the train needed to be offloaded at Fort Totten Station. [Rail 2 Phone]
13:36:11 hours	Radio RTC: Instructed the Train Operator of Train ID 123 to stop their train, key down, perform a radio check on their handheld, and walk through the train to make sure all doors were closed because they received notification that the doors may have opened while the train was moving. Train Operator: Gave 100% repeat back. [Ops. 1]
13:39:19 hours	Train Operator: Advised that no customers said the doors opened while the train was moving. [Ops. 1]
13:42:28 hours	Radio RTC: Instructed the Train Operator to key up and continue to Fort Totten Station, and an RTRA Supervisor would meet them on the platform. Train Operator: Gave a 100% repeat back. [Ops. 1]
13:44:18 hours	Radio RTC: Instructed the RTRA Supervisor to check the emergency doors when boarding the train and ensure the seals were not broken. RTRA Supervisor: Gave 100% repeat back. [Ops. 1]
13:45:47 hours	Radio RTC: Advised the Train Operator they would be offloading at Fort Totten Station, track 1. Train Operator: Gave 100% repeat back. [Ops. 1]
13:47:36 hours	Train ID 123 arrived at Fort Totten Station on track 1. [SPOTS]
13:48:49 hours	Radio RTC: Instructed the Train Operator to stay in the cab and wait while the RTRA Supervisor and Station Manager verified the train was clear of customers. Train Operator: Gave 100% repeat back. [Ops. 1]
13:51:33 hours	Train Operator: Contacted the Radio RTC to ask if they were servicing the next station or staying out of service and alighting back to Glenmont. Radio RTC: Advised the Train Operator to reblock to 723, remain out of service, and the RTRA Supervisor would operate to Glenmont Yard. [Ops. 1]
13:52:41 hours	RTRA Supervisor: Informed the Radio RTC that the train was cleared of customers, and they had a report that a Hispanic woman was messing with the doors. [Ops. 1]
13:53:23 hours	Train ID 123 (723) departed at Fort Totten Station on track 1. [SPOTS]
14:06:28 hours	Train ID 123 (723) arrived at Glenmont Station on track 1. [SPOTS]
14:10:09 hours	Train ID 123 (723) was dispatched at Glenmont Yard and was stored on track 1. [Radio GM-YD2]

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

On February 17, 2024, at approximately 12:53:28 (ROCS SPOTS time – See Figure 2), Train ID 124, traveling inbound on track 2, entered Rhode Island Avenue Station (B04-2). Per a ROCC Alert (Figure 1) a tweet was received at approximately 12:37p, with a photo showing a door on a 7K vehicle with a door opened on the off-platform side, on an ariel structure. The photo of the opened door was taken on car 7454, which was part of consist L7094/95 x 03/7002 x 7454/55 x 83/7082T.

The data reveals the train was operating in Auto Doors Mode. The train received the Left-Side Door Open command at 12:53:58. The Left-Side doors were manually closed at 12:54:29. The Right-Side Doors were manually opened via the Auxiliary Door Control Panel at 12:54:54 and manually closed at 12:55:05. Train ID 124 departed Rhode Island Station at 12:55:55.

C2: Rail Incident - Rhode Island Avenue

Incident Summary: Communications Section received a tweet at approximately 1237, showing a door opened on a 7K consist off of the platform side on an ariel structure. Upon Investigation, MICC rail section confirmed the incident Train to be Train 123, Car #7454. The train was offloaded at Fort Totten, track #1 and proceeded non-revenue to Glenmont Yard (B98) for post incident inspection. Additional information via Rail Operations Control System and Closed Circuit Television, shows that the Train Operator appeared to perform a door operation opposite side of the platform. Division Management was notified and the Glenmont Train Operator was removed from service. Track inspections are in the process of being performed between Rhode Island Avenue and NoMa-Gallaudet. Update to follow.

Additional Information

Incident Date/Time: 02-17-2024 14:00

Incident Level: C2

Location: Rhode Island Avenue

Track Number: 2

Figure 1

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
103	B04-1	8	13				12:01:56	12:02:12	16	12:01:24	12:02:38	7082-7083.7455-7454.7002-7003.7095-7094	-
103	B05-1	8	13				12:04:01	12:04:15	14	12:03:29	12:04:41	7082-7083.7455-7454.7002-7003.7095-7094	2:05
103	B06-1	8	13				12:09:50	12:10:10	20	12:09:21	12:10:38	7082-7083.7455-7454.7002-7003.7095-7094	5:49
103	B07-1	8	13				12:13:10	12:13:25	15	12:12:39	12:13:50	7082-7083.7455-7454.7002-7003.7095-7094	3:20
103	B08-1	8	13				12:15:49	12:16:05	16	12:15:19	12:16:31	7082-7083.7455-7454.7002-7003.7095-7094	2:39
103	B09-1	8	13				12:19:08	12:19:24	16	12:18:36	12:19:51	7082-7083.7455-7454.7002-7003.7095-7094	3:19
103	B10-1	8	13				12:22:13	12:22:34	21	12:21:38	12:22:59	7082-7083.7455-7454.7002-7003.7095-7094	3:05
124	B11-1	8	12	12:32:22	12:33:37	75	12:25:47	12:25:48	1	12:25:06	12:34:22	7082-7083.7455-7454.7002-7003.7095-7094	3:34
124	B10-2	8	12				12:36:52	12:37:16	24	12:36:18	12:37:42	7094-7095.7003-7002.7454-7455.7083-7082	11:05
124	B09-2	8	12				12:39:56	12:40:37	41	12:39:19	12:41:04	7094-7095.7003-7002.7454-7455.7083-7082	3:04
124	B08-2	8	12				12:43:29	12:43:48	19	12:42:59	12:44:14	7094-7095.7003-7002.7454-7455.7083-7082	3:33
124	B07-2	8	12				12:46:09	12:46:26	17	12:45:36	12:46:49	7094-7095.7003-7002.7454-7455.7083-7082	2:40
124	B06-2	8	12				12:49:12	12:49:30	18	12:48:38	12:49:56	7094-7095.7003-7002.7454-7455.7083-7082	3:03
124	B05-2	8	12				12:51:59	12:52:15	16	12:51:27	12:52:42	7094-7095.7003-7002.7454-7455.7083-7082	2:47
124	B04-2	8	12	12:54:54	12:55:05	11	12:53:58	12:54:29	31	12:53:28	12:55:55	7094-7095.7003-7002.7454-7455.7083-7082	1:59
124	B35-2	0	1				12:58:57	12:59:18	21	12:58:21	12:59:45	7094-7095.7003-7002.7454-7455.7083-7082	4:59
124	B03-2	8	1				13:01:13	13:01:35	22	13:00:38	13:02:00	7094-7095.7003-7002.7454-7455.7083-7082	2:16
124	B02-2	8	1	13:03:19	13:03:37	18				13:02:47	13:03:59	7094-7095.7003-7002.7454-7455.7083-7082	2:06

Figure 2

Lead Car 7094 Incident Time Event Table #1

Time	Event
02/17/24 12:53:45	lead Car 7094 came to a complete stop on Track-2 at Rhode Island Ave (B04)
02/17/24 12:53:50	Left Door open Train line command goes high, ALL Door closed and locked signal goes low indicating Door opened left side.
02/17/24 12:54:18	Left Door close push button is depressed and ALL Door closed, and the locked signal goes high, indicating the Door closed Left-hand side, the correct side of the Platform
02/17/24 12:54:46	Right Door open push button depressed, Right Door open Train line command goes high, All Door closed and locked signal goes low indication Door also opened on the Right as seen in the NVR Video
02/17/24 12:54:53	Right Door Close push button is depressed, and ALL Door closed, and locked signal goes high, indicating All Door closed and locked on both sides, and the Train begins moving to the next station (Noma-Gallaudet on Track-2)
02/17/24 12:55:21	Master Controller in P1-P4, and the Train began moving to the next Station (B35) Noma-Gallaudet on Track-2

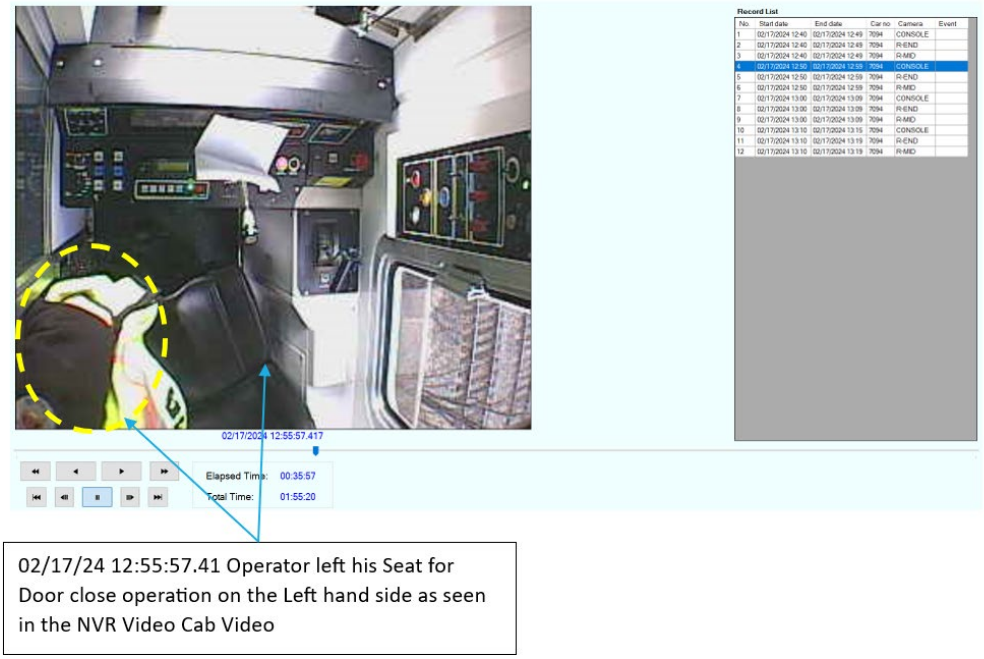


Figure 1: Car 7094 NVR Video Screenshots for Operator reaching out to the Left side Door Control Panel for Door operation.

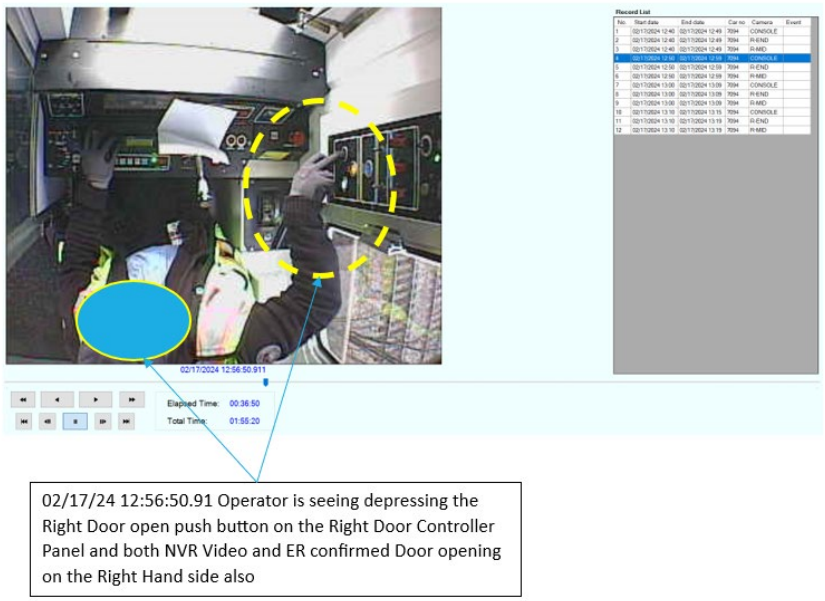


Figure 2: Car 7094 Cab video screenshot showing the Operator's finger depressing the Right Door open push button on the Right Door Controller panel.

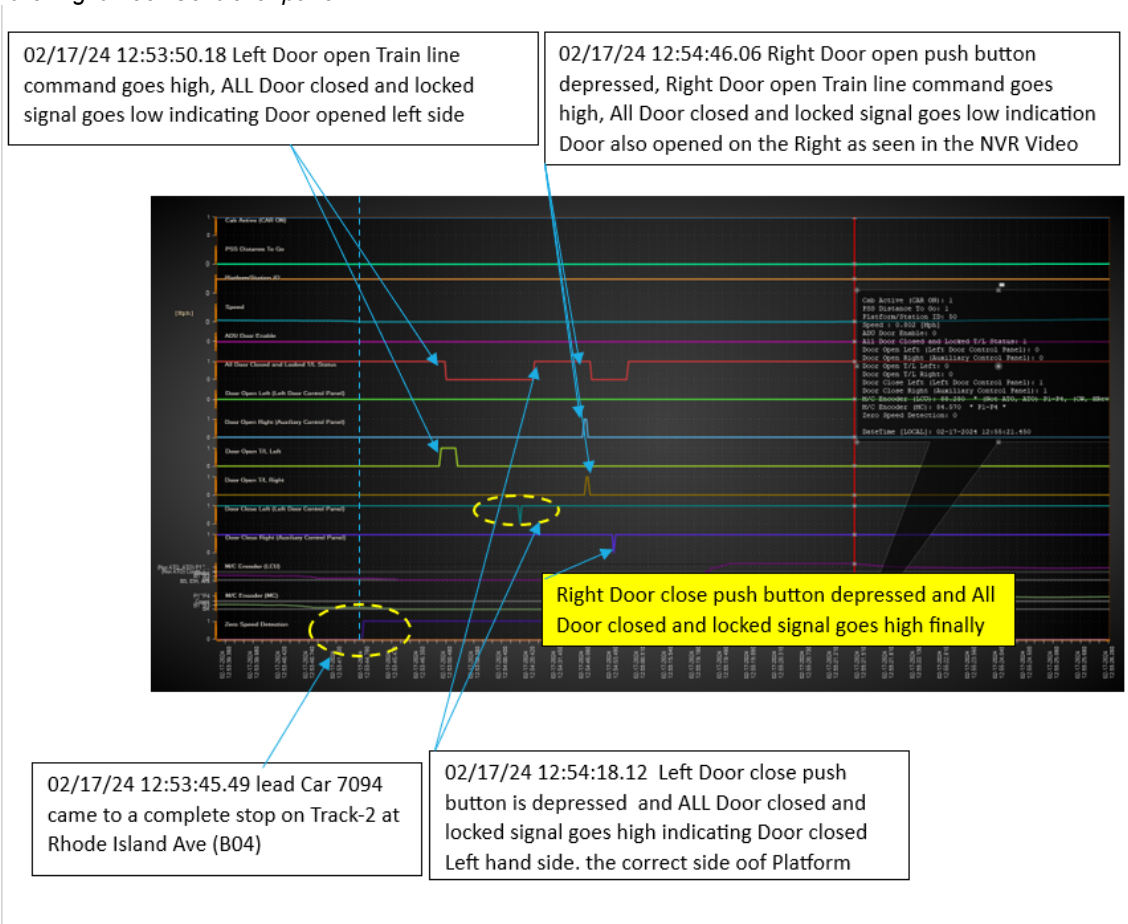


Figure 3: Lead Car 7094 ER Analysis Graph #1 of this Incident.

Train ID 124, operating in Auto Doors Mode, on Track 2 at Rhode Island Avenue station, properly berthed and opened the Left-Side doors as expected. The Operator manually closed the Left-

Side, prior to manually opening the Right-Side Doors via the Auxiliary Control Panel. The Right-Side doors were manually closed shortly thereafter, and the train resumed its route.
The were no faults found with the operation of Train ID 124.

System Performance On-Time Summary (SPOTS)

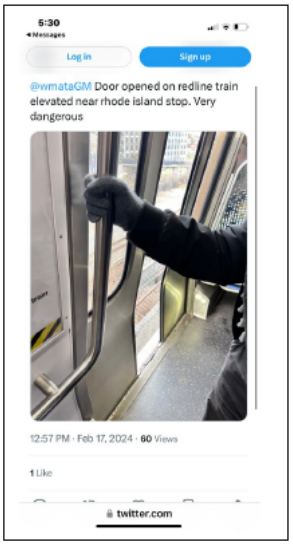
Select Platform: and/or Select ID: Leave blank to remove criteria
and/or Select 4-digit car number: 7094 Leave blank to remove criteria
Select Date: Feb 17 2024 Select Times (0-24HRS): From 12:00 To 15:00
Generate Report

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
103	B04-1	8	13				12:01:56	12:02:12	16	12:01:24	12:02:38	7082-7083.7455-7454.7002-7003.7095-7094	-
103	B05-1	8	13				12:04:01	12:04:15	14	12:03:29	12:04:41	7082-7083.7455-7454.7002-7003.7095-7094	2:05
103	B06-1	8	13				12:09:50	12:10:10	20	12:09:21	12:10:38	7082-7083.7455-7454.7002-7003.7095-7094	5:49
103	B07-1	8	13				12:13:10	12:13:25	15	12:12:39	12:13:50	7082-7083.7455-7454.7002-7003.7095-7094	3:20
103	B08-1	8	13				12:15:49	12:16:05	16	12:15:19	12:16:31	7082-7083.7455-7454.7002-7003.7095-7094	2:39
103	B09-1	8	13				12:19:08	12:19:24	16	12:18:36	12:19:51	7082-7083.7455-7454.7002-7003.7095-7094	3:19
103	B10-1	8	13				12:22:13	12:22:34	21	12:21:38	12:22:59	7082-7083.7455-7454.7002-7003.7095-7094	3:05
124	B11-1	8	12	12:32:22	12:33:37	75	12:25:47	12:25:48	1	12:25:06	12:34:22	7082-7083.7455-7454.7002-7003.7095-7094	3:34
124	B10-2	8	12				12:36:52	12:37:16	24	12:36:18	12:37:42	7094-7095.7003-7002.7454-7455.7083-7082	11:05
124	B09-2	8	12				12:39:56	12:40:37	41	12:39:19	12:41:04	7094-7095.7003-7002.7454-7455.7083-7082	3:04
124	B08-2	8	12				12:43:29	12:43:48	19	12:42:59	12:44:14	7094-7095.7003-7002.7454-7455.7083-7082	3:33
124	B07-2	8	12				12:46:09	12:46:26	17	12:45:36	12:46:49	7094-7095.7003-7002.7454-7455.7083-7082	2:40
124	B06-2	8	12				12:49:12	12:49:30	18	12:48:38	12:49:56	7094-7095.7003-7002.7454-7455.7083-7082	3:03
124	B05-2	8	12				12:51:59	12:52:15	16	12:51:27	12:52:42	7094-7095.7003-7002.7454-7455.7083-7082	2:47
124	B04-2	8	12	12:54:54	12:55:05	11	12:53:58	12:54:29	31	12:53:28	12:55:55	7094-7095.7003-7002.7454-7455.7083-7082	1:59
124	B35-2	0	1				12:58:57	12:59:18	21	12:58:21	12:59:45	7094-7095.7003-7002.7454-7455.7083-7082	4:59
124	B03-2	8	1				13:01:13	13:01:35	22	13:00:38	13:02:00	7094-7095.7003-7002.7454-7455.7083-7082	2:16
124	B02-2	8	1	13:03:19	13:03:37	18				13:02:47	13:03:59	7094-7095.7003-7002.7454-7455.7083-7082	2:06
124	B01-2	8	1	13:04:52	13:05:15	23				13:04:15	13:05:39	7094-7095.7003-7002.7454-7455.7083-7082	1:33
124	A01-2	8	1	13:06:20	13:06:38	18				13:05:44	13:07:07	7094-7095.7003-7002.7454-7455.7083-7082	1:28
124	A02-2	8	12				13:09:09	13:09:28	19	13:08:20	13:10:17	7094-7095.7003-7002.7454-7455.7083-7082	2:49
124	A03-2	8	12	13:12:00	13:12:36	36				13:11:17	13:13:00	7094-7095.7003-7002.7454-7455.7083-7082	2:51
123	A03-1	8	13	13:15:02	13:18:06	184	13:16:14	13:16:26	12	13:14:15	13:18:34	7082-7083.7455-7454.7002-7003.7095-7094	3:02
123	A02-1	8	13				13:19:28	13:19:45	17	13:18:56	13:20:14	7082-7083.7455-7454.7002-7003.7095-7094	4:26
123	A01-1	8	13	13:21:29	13:21:50	21				13:20:55	13:22:13	7082-7083.7455-7454.7002-7003.7095-7094	2:01
123	B01-1	8	13	13:22:47	13:23:13	26				13:22:15	13:23:34	7082-7083.7455-7454.7002-7003.7095-7094	1:18
123	B02-1	8	13	13:24:23	13:24:42	19				13:23:48	13:25:04	7082-7083.7455-7454.7002-7003.7095-7094	1:36
123	B03-1	8	13				13:26:23	13:26:40	17	13:25:46	13:27:19	7082-7083.7455-7454.7002-7003.7095-7094	2:00
123	B35-1	8	13				13:28:37	13:28:57	20	13:27:55	13:29:21	7082-7083.7455-7454.7002-7003.7095-7094	2:14
123	B04-1	8	13				13:32:11	13:32:36	25	13:31:34	13:33:06	7082-7083.7455-7454.7002-7003.7095-7094	3:34
123	B05-1	8	13				13:34:26	13:34:41	15	13:33:53	13:35:05	7082-7083.7455-7454.7002-7003.7095-7094	2:15
723	B06-1	8	86				13:48:09	13:51:49	220	13:47:36	13:53:23	7082-7083.7455-7454.7002-7003.7095-7094	13:43
723	B07-1	8	86							13:55:25	13:55:58	7082-7083.7455-7454.7002-7003.7095-7094	-
723	B08-1	8	86				13:57:58	13:58:05	7	13:57:24	13:59:16	7082-7083.7455-7454.7002-7003.7095-7094	9:49
723	B09-1	8	86							14:01:14	14:01:41	7082-7083.7455-7454.7002-7003.7095-7094	-
723	B10-1	8	86							14:03:20	14:03:49	7082-7083.7455-7454.7002-7003.7095-7094	-
	B11-1	8	0							14:06:28	14:09:41	7082-7083.7455-7454.7002-7003.7095-7094	-

Figure 4: Shows that the doors were opened on both sides at Rhode Island Station.

Signal Engineering Investigation Report

Title:	B04 TK 2 - Improper Door Operation
Date/Time:	February 17, 2024 12:53 hours
Location:	Rhode Island Station, Track 2



Event Description

Saturday, February 17, 2024, Signal Engineering received notification of a Door Opening on the wrong side at Rhode Island Station, track 2. See notification from Twitter.

Summary of Findings (Review of TWC Report)

1. Red Line is operating in Auto Doors. Manual requests are not required.
2. The train to Wayside Communications report indicates that the Train Doors were opened twice.
3. 1st time the doors were open via Auto Doors. (Indication "2" Left Side Doors – Correct Side Door Opening)
4. 2nd time the doors were open via Manual. (Indication "1" Right Side Doors – Wrong Side Door Opening) See below.
5. "3" indicates doors closed

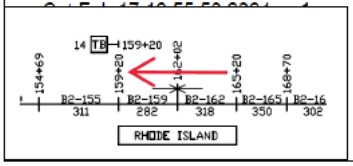
B04-2 TWC and Occupancy Data

Date/Time	B2-165 Pre Occ	B2-162 Pltf Occ	B2-155 Post Occ	ID	Dest	Len	PSS	Train Auto	ATP	Doors	Ready	Berth	Motion	Door Man
Sat Feb 17 12:45:37 2024	1	1	1	0	0	0	0	0	0	0	0	0	0	0
Sat Feb 17 12:53:20 2024	0	1	1	0	0	0	0	0	0	0	0	0	0	0
Sat Feb 17 12:53:27 2024	0	0	1	0	0	0	0	0	0	0	0	0	0	0
Sat Feb 17 12:53:29 2024	0	0	1	124	12	8	1	0	1	3	0	0	1	0
Sat Feb 17 12:53:42 2024	0	0	1	124	12	8	0	0	1	3	0	0	1	0
Sat Feb 17 12:53:44 2024	0	0	0	124	12	8	0	0	1	3	0	0	1	0
Sat Feb 17 12:53:50 2024	0	0	0	124	12	8	0	0	1	3	0	1	1	0
Sat Feb 17 12:53:51 2024	0	0	0	124	12	8	0	0	1	3	0	1	0	0
Sat Feb 17 12:53:57 2024	0	0	0	124	12	8	0	0	1	2	0	1	0	0
Sat Feb 17 12:54:05 2024	0	0	0	124	12	8	0	0	1	2	0	0	0	0
Sat Feb 17 12:54:29 2024	0	0	0	124	12	8	0	0	1	3	0	0	0	0
Sat Feb 17 12:54:51 2024	0	0	0	124	12	8	0	0	1	3	0	0	0	1
Sat Feb 17 12:54:53 2024	0	0	0	124	12	8	0	0	1	1	0	0	0	1
Sat Feb 17 12:54:54 2024	0	0	0	124	12	8	0	0	1	1	0	0	0	0
Sat Feb 17 12:55:05 2024	0	0	0	124	12	8	0	0	1	3	0	0	0	0
Sat Feb 17 12:55:27 2024	0	0	0	124	12	8	0	0	1	3	0	0	1	0
Sat Feb 17 12:55:31 2024	1	0	0	124	12	8	0	0	0	3	0	0	1	0
Sat Feb 17 12:55:32 2024	1	0	0	0	0	0	0	0	0	0	0	0	0	0
	1	0	0	0	0	0	0	0	0	0	0	0	0	0
	1	1	0	0	0	0	0	0	0	0	0	0	0	0

1st - Auto Door Operation

Wrong Side Door Opening

2nd - Manual Door Request



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

See Appendix D

Interview 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.

- The Train Operator stated that they were working the extra board.
- The Train Operator stated that they were completing their first-round trip.
- The Train Operator stated that they were operating in ADO, auto/manual, when the incident occurred.
- The Train Operator stated that they serviced the station according to SOP 40.
- The Train Operator stated that another Train Operator asked for a southbound drop-off at Brentwood Yard.
- The Train Operator stated that they were hesitant because they had never performed a southbound drop-off at Brentwood Yard, and they attempted to contact the MICC.
- The Train Operator stated that they were waiting for Central when they opened the doors on the non-platform side.
- The Train Operator stated that a security guard informed them of the improper door operation.
- The Train Operator stated that they never reported the improper door operation to the MICC.

Weather

On February 17, 2024, at the time of the incident, NOAA recorded the temperature as 37.4°F, with clear skies, winds of 17 mph, and 47.69% humidity. The weather did not contribute to this incident (Weather source: NOAA) – Location: [Washington, DC].

Related Rules and Procedures

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.

Human Factors

Evidence of Fatigue

We evaluated conditions at the time of the incident to distinguish whether evidence of fatigue was present. No sign of fatigue was indicated by the available data. Video of the incident was reviewed for behaviors suggesting fatigue. No indications of fatigue were evident from the video. The Train Operator reported feeling moderately alert at the time of the incident. The Train Operator reported experiencing no symptoms of fatigue in the time leading up to the incident.

Fatigue Risk

We evaluated incident data for fatigue risk factors. Risk factors for fatigue were not present. The incident time of day did not suggest an increased risk of fatigue-related impairment. The Train Operator reported keeping a regular sleep schedule in the days leading up to the incident. The Train Operator performed day and night work in the days leading up to the incident. The Train Operator was awake for 4.9 hours at the time of the incident. The Train Operator reported 10 hours of sleep in the 24 hours preceding the incident. The off-duty period was 14 hours, providing an opportunity for 7-9 hours of sleep. This was a comparable amount of sleep as the Train Operator's usual workday sleep durations. The employee reported no issues with sleep.

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.

Findings

- The Train Operator reports to Glenmont Division and certified as a Train Operator in October 2023.
- The Train Operator has only operated on the red line.
- The Train Operator was a Bus Operator for four years before transitioning to rail operations.
- The Train Operator was working the extra board and completing their first-round trip when the event occurred.
- Train ID 124 was operated in ADO, auto/manual.
- The Train Operator used ADO according to SOP 40.
- The Train Operator reported that while on the platform at Rhode Island Avenue Station and waiting for the MICC to request to perform a platform stop at Brentwood Yard, they intended to reopen the doors and could have mistakenly opened the doors on the non-platform side.
- The Train Operator did not contact the MICC to manually reopen the doors after servicing the station.

Immediate Mitigation to Prevent Recurrence

- The Radio RTC instructed the Train Operator to verify if any doors were opened in the consist.
- The train was offloaded.
- A Rail Supervisor was dispatched to take over operating the train.
- The Train Operator was removed from service.
- The consist was removed for post incident inspection.

Probable Cause Statement

The probable cause for the Improper Door Operation at Rhode Island Station on February 17, 2024, was complacency. The Train Operator failed to follow the proper procedures after they serviced the station.

Recommended Corrective Actions

Corrective Action Code	Description	Responsible Party	Estimated Completion Date
114841_SAFECAPS_RTRA_001	Train Operator will complete refresher training with an emphasis on SOP 40.	RTRA SRC	Completed

Appendices

Appendix A – Interview Summary

The below narrative summarizes the incident and represent the statement 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 is a WMATA employee with four (4) years of experience but less than a year of experience as a Train Operator. The Train Operator certified as a Train Operator in October 2023. The Train Operator previously worked as a Bus Operator. The Train Operator is RWP Level 2 certified and must recertify in May 2024.

The Train Operator stated the most challenging part of the training was the radio communications. The Train Operator mentioned feeling moderately alert while operating their train. The Train Operator stated no non-work-related circumstances affected their opportunity to get good sleep. The Train Operator did not experience any mechanical issues while operating Train ID 124. The Train Operator was completing their first-round trip when this event occurred. The Train Operator has only operated on the Red Line. The Train Operator was working the extra board on the day of the incident.

During the interview, the Train Operator stated they operated in Automatic Door Operations (ADO), auto/manual, when the incident happened. The Train Operator was certified for ADO in November 2023. The Train Operator stated after servicing the station; another Train Operator was asking them to do a southbound drop-off at Brentwood Station. The Train Operator said, “So I was kind of stuck for a minute because I've never done a southbound before, and I was trying to figure out where the southbound was located before I was like, OK, let me do the southbound, so when the operator requested that, I sat down and I thought about, let me contact central before proceeding towards southbound because once you get like really deep into Brentwood, like communication is almost nonexistent.” The Train Operator continued to say, “I was trying to contact Central and then in my mind I figured since I'm at the platform, let me reopen the doors.”

The Train Operator said they were confused when the security guard told them it was an emergency. The Train Operator noticed they opened the doors on the non-platform side but failed to inform the MICC. The Train Operator continued their trip to Shady Grove Station without reporting the improper door operation to the MICC. On their return trip to Glenmont, the Train Operator was contacted by the MICC to stop their train, key down, and walk through to ensure all doors were closed because they received notification that the doors opened while the train was moving. The Train Operator did not locate any open doors and was instructed to offload their train at Fort Totten Station.

Appendix B – RTRA Operations Personnel Notice: Return to Automatic Door on the Red Line

RTRA OPERATIONS PERSONNEL NOTICE

Tuesday, December 05, 2023
RTRA-603-121-00

UPDATE: Return to Automatic Door Operations on the Red Line

Metrorail resumed the use of Auto/Manual Train Doors **on Red Line trains only** on December 5, 2023. Below is some early feedback from staff in the field on Auto/Manual Train Doors operations on the Red Line.

1. Operators need clarification on when to contact RTC related to SOP 40 (manual door operations).	See reference to SOP 40 6.2.4 below.
2. Operators need clarification on bypassing a station and NOT opening the doors.	If given permission from the RTC to bypass the station, Train operators should make good announcements to customers and continue to the next station without berthing the train.

When after initiating train berth and train doors fail to open, Red Line operators shall:

- Follow the Door Opening Procedures outlined in SOP 40 under 6.2.4 (6.2.4.1 – 6.2.4.4)

6.2.4 When train doors fail to open automatically for a properly berthed train, the Rail Vehicle Operator shall:

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

6.2.4.2 Contact the RTC and obtain permission to open doors manually on the platform side, **NOTE:** For 7K only, once manual door operation is approved by RTC, perform the steps needed to manually enable the door control push-buttons;

6.2.4.3 After the RTC grants permission, verify the platform side of the train, place their head out of the cab window and look at the doors to observe any activity in front of the doors, with hands to their side for five (5) seconds; and

6.2.4.4 Depress the Open Doors pushbutton on the platform side of the train.

Do not hesitate to contact a Rail Supervisor for additional information on Auto/Manual Train Doors operations.

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.

RTRA Auto Doors Job Task Proficiency Evaluation

Name: [redacted] Emp. No: [redacted] Date: 11/15/23 Start Time: 9:36 End Time: 9:55

Division: Glenmont Train ID#: 110 Lead Car#: 7094 No of Cars: 8 Cert Attempt #: 1

OCC Contacted prior to breaking seal? (Y) N

Auto Doors CBT completed prior to cert? (Y) N

Line: B Track #: 2

No.	Station Stops	1. Verifies TMC TX and TMC RX lights are alternately flashing mid platform. (On ADU for 7K)	2. At 3mph–5mph, depresses the TRAIN BERTH Button. 7K ONLY	3. Verifies TB (Train Berth) is illuminated on the ADU.	4. Verifies BEC is illuminated on the Console.	5. Verifies Speed Commands have dropped to Zero / Stops at 8-car marker.	6. On platform side, opens window/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 - 5.	9. If doors fail to open again/Reports to ROCC/Follows manual door opening procedure (SOP #40).	10. Speed commands (dwell time ends)/roadway 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	B40												
2	B09												
3	B08												
4	B07												
5	B06												
6	B05												
	Additional station stops listed below, if deemed necessary by Examiner.												
7													
8													
9													

Verified w/ Operator Door Mode resealed in Manual/Manual? (Y) N

OCC Contacted to report Door Mode resealed in Manual/Manual? (Y) N

Employee Signature [redacted] Date 11/15/23

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

Auto Doors Practical Score: QL- 1

Examiner Signature [redacted] Date 11/15/23

Updated: 09/12/2023 RTRA QA/DC Group - RTRA-600-0308

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

INVESTIGATION REPORT	DIVISION: Glenmont	GARAGE: N/A	FILE NO: 20240220-114894

DATE OF OCCURRENCE:	TIME:	VEHICLE NO.:	RUN NO.:	SHIFT:	BLOCK NO.:
February 17, 2024	12:54PM	L7094-7003-7454-7083	Platform 02-1	11am-2:30p	

LINE:	LOCATION:	DESTINATION:
Red Line	Rhode Island Ave. Track #2	Dupont Circle

TYPE OF CASE	REPORTED BY
Violation: MOR 1.1.5, 1.2.1, 1.6.1, 1.6.2, 1.16.7, 8.18.2, 8.18.3, 8.18.4	Customer Comment via social media

NAME OF EMPLOYEE INVOLVED:	EMPLOYEE NO:
[redacted]	[redacted]

NATURE OF OCCURRENCE: Improper Door Operation - Doors Open Opposite Platform Side

1. SUMMARY OF INVESTIGATION **2.** STATEMENT OF EMPLOYEE **3.** SUMMARY OF VIOLATION.
4. ANALYSIS OF FACTS / EVIDENCE IN SUPPORT OF RULE VIOLATION **5.** ASSESSMENT OF DISCIPLINE

1.Train Operator [redacted], an investigation into this incident was conducted using all incident reports, CENV data downloads, video recordings, and audio recordings, all of which combined, revealed the following:

On Saturday, February 17, 2024, you were assigned platform duties working As Directed at Glenmont Terminal. You were assigned a round trip of run GM-401 operating ID 124 on the Red Line by Supervisor [redacted]. At 12:53:58pm, Train ID 124 received the left-side door open command at Rhode Island Avenue track #2. The left-side doors were manually closed at 12:54:29pm. The right-side doors were then manually opened via the right-side Auxiliary Door Control Panel at 12:54:54 and manually closed at 12:55:05pm. Train ID 124 departed Rhode Island Station at 12:55:55pm without notifying the MICC of the incident.

2. Operator [redacted], you stated in your incident report: "While in approach to Fort Totten after servicing Brookland MICC ordered me to stop the train due to a report of doors opening while train was in motion. I stopped the train to investigate, questioning the passengers on board of the incident. Nobody confirmed seeing an open door. I was instructed off load the train one I arrived at Fort Totten." In addition, when interviewed by Superintendent [redacted] on the day of the incident, you stated in your interview that, "I didn't open the doors on the opposite side."

When interviewed by Assistant Superintendent [redacted] and Supervisor [redacted] on 2/20/2024, you stated that, "I didn't realize I opened the doors on the opposite side of the platform." After viewing the video of the incident where you saw yourself initiate the open door and close door buttons on the auxiliary panel, you stated that, "I didn't realize I opened the doors on the wrong side."

ACTION TAKEN: **30 Working Day Suspension**

DATE	ACTION TAKEN BY:	TITLE:
March 18, 2024	[redacted]	Assistant Superintendent

EMPLOYEE SIGNATURE: Certified Mailed due to employee unavailable for signing

I certify that the above has been called to my attention, and I understand that my signature does not imply admission of guilt

EMPLOYEE MAY WRITE A STATEMENT IN THIS SPACE:

Attachment 1: RTRA Investigation Report pg.1 of 4

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

Investigation Report Continuation Sheet

3. Based on the above investigation you violated the following Metrorail Operating Rules:

MOR 1.1.5- If any doubt exists regarding the exact meaning of any rule, regulation, special order, procedure, written or verbal instruction or radio transmission, employees shall immediately secure additional information or clarification from their supervisor.

MOR 1.2.1- Employees involved in, witnessing, or informed of an accident or incident, to include near misses, on the Metrorail system shall inform their supervisor, Metro Transit Police Department, Rail Operations Control Center and/or other appropriate authority as soon as possible, and shall file a written report.

MOR 1.6.1- All employees of WMATA, regardless of rank or title, shall be knowledgeable of and abide by the rules set forth in this manual as well as rules and procedures contained in documents pertaining to their specific work assignments while working on or traveling within the Metrorail system whether on or off duty.

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

MOR 1.16.7- No employee shall knowingly make any false statement or falsify any official report; or knowingly enter, or cause to be entered, any inaccurate, false, or improper information on the books, reports, logs, or records of WMATA.

MOR 8.18.2- In revenue service, Train 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 Rail Traffic Controller.

MOR 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.

MOR 8.18.4- In the event train doors are opened outside the platform limits or on the off side of the platform. The 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.

4. An investigation into this incident was conducted by Glenmont Division Managers. The investigation included your incident report, the MICC's incident report, the incident report provided by an employee who witnessed the event, an interview conducted with you, an interview conducted with the witness, platform video of the incident, cab video of the incident, audio recordings from the NICE system, VMS and TWC Data Reports from the train, and an interview with Safety personnel. Combined, these data points revealed the following.

Train Operator [redacted] was operating train ID 124 at Rhode Island Avenue Station, Track #2, lead car 7094 on February 17, 2024. Once the train properly berthed at the 8-car marker at 12:53pm, the left side doors opened correctly in accordance with the ADO procedure, cab video shows [redacted] depressing the Train Berth button once the train was stopped. At 12:54pm the train's VMS data and wayside SPOTS report indicates the left-side doors were closed manually in accordance with the door closing procedures. At 12:54:46 pm VMS data indicates the train's right-side doors were opened by the pressing of the door open push button on the Auxiliary Door Control Panel. This is also shown in the overhead cab video. At 12:55:05pm the right-side doors are closed by depressing the door close button on the Auxiliary Door Control Panel. This resulted in the doors being opened for approximately 11 seconds on the off-platform side. The train then departed Rhode Island Ave. at 12:55:21pm without notification to the MICC.

Attachment 1: RTRA Investigation Report pg.2 of 4

The doors opening on the opposite side of the platform were witnessed by a WMATA employee who boarded the train at Rhode Island Avenue. The witness stated in his report that he boarded the train and requested a southbound platform stop at Brentwood Yard. The witness stated that he informed the operator that the doors had opened on the alternate side of the platform. He also stated that he could hear "audible chatter with central but couldn't make out what was said" after the doors had opened offside.

Review of the NICE audio recordings indicates there were two conversations between [redacted] and the Control Center. The first consisted of the request for the southbound platform stop at Brentwood Yard, consistent with the witness' statement. The second conversation was of Central Control verifying the train's destination of Dupont Circle (there were short trips in effect due to track work). The overhead cab camera confirms the first conversation taking place prior to the right-side doors being opened off platform. The second conversation is recorded as taking place after the train has already begun to move, departing Rhode Island Ave. Station. At no time is the door off platform incident reported to the Control Center.

When interviewed by Superintendent [redacted] stated that he did not open the doors on the opposite side of the platform. In a second interview with Assistant Superintendent [redacted] and Supervisor [redacted] stated that he was not aware that the doors opened on the off-platform side. In the interview with SAFE, [redacted] stated that he saw the doors open but was unaware of what to do because it had never happened to him before (if true, a violation in that [redacted] did not ask for further guidance). The statements made by [redacted] are contradicted by the witness' statement of the events, by the camera footage, and by the audio recordings. The evidence shows that [redacted] knowingly and intentionally made false statements, both in his written statement and in interviews, to management concerning the doors being opened on the off side of the platform at Rhode Island Avenue station.

Lead Car 7094 Incident Time Event Table #1

Time	Event
02/17/24 12:53:45.49	lead Car 7094 came to a complete stop on Track-2 at Rhode Island Ave (B04)
02/17/24 12:53:50.18	Left Door open Train line command goes high, ALL Door closed and locked signal goes low indicating Door opened left side.
02/17/24 12:54:18.12	Left Door close push button is depressed, and ALL Door closed and locked signal goes high indicating Door closed Left hand side, the correct side oof Platform
02/17/24 12:54:46.06	Right Door open push button depressed, Right Door open Train line command goes high, All Door closed and locked signal goes low indication Door also opened on the Right as seen in the NVR Video
02/17/24 12:54:53.55	Right Door Close push button is depressed, and ALL Door closed and locked signal goes high indicating All Door closed and locked on both sides and the Train began moving to the next station (Noma-Gallaudet on Track-2)
02/17/24 12:55:21.45	Master Controller in P1-P4 and the Train began moving to the next Station (B35) Noma-Gallaudet on Track-2

Spots Report:

Spots Report 1 Spots Report 2 Spots Wild cards

ROCS SPOTS REPORT

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

Current date/time: Tue Mar 12 09:03:04 2024

Select Platform: B04-2 and/or Select ID: Leave blank to remove criteria

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

Select Date: Feb 17 2024 Select Times (0-24HRS): From 12:00 To 13:00

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
114	B04-2	2	12				12:08:31	12:08:48	17	12:07:56	12:09:12	7184-7185 7153-7152 7048-7049 7171-7170	-
142	B04-2	8	12				12:18:41	12:19:05	24	12:18:09	12:19:31	7124-7125 7087-7086 7150-7151 7389-7388	10:10
118	B04-2	8	12				12:25:35	12:25:56	21	12:25:07	12:26:22	7096-7097 7157-7156 7036-7037 7133-7132	6:54
120	B04-2	8	12				12:35:14	12:35:33	19	12:34:47	12:35:57	7008-7009 7235-7234 7080-7081 7191-7190	9:39
132	B04-2	8	12				12:44:52	12:45:10	18	12:44:22	12:45:34	7030-7031 7019-7018 7148-7149 7135-7134	9:38
124	B04-2	8	12	12:54:54	12:55:06	12	12:53:58	12:54:29	31	12:53:28	12:55:55	7094-7095 7003-7002 7454-7455 7083-7082	9:06

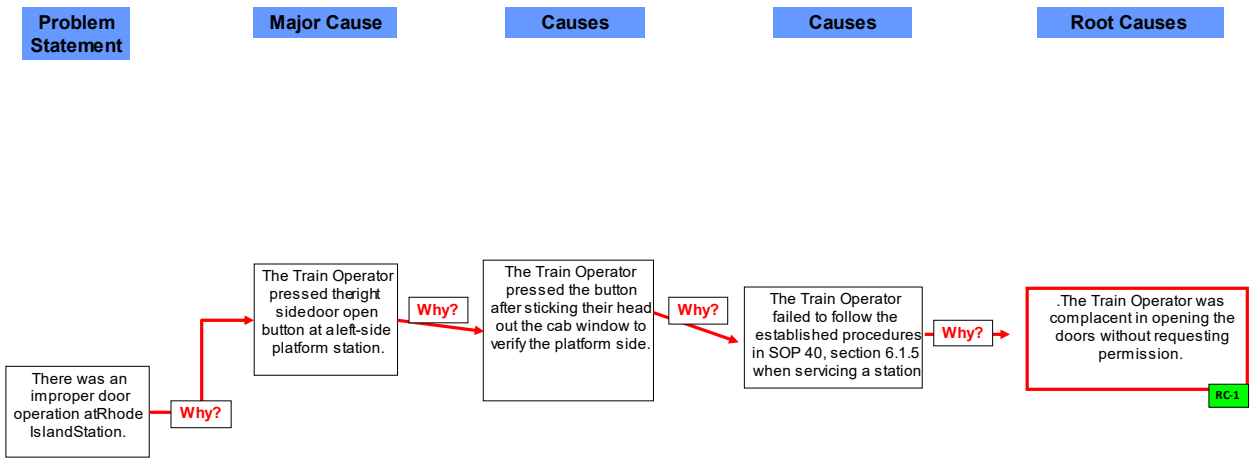
5. [redacted], in determining the appropriate disciplinary penalty for your actions, Glenmont Division Management considered many factors. The records of WMATA indicate you have been an employee since January 6, 2020, and a Train Operator since October 27, 2023. You have no previous safety violations on file. Having reviewed the circumstances of this violation, the Authority does not find any mitigating factors to consider that would impact the final action to be taken. In multiple interviews, you continued to deny knowledge of the doors being opened offside, despite a witness statement and camera evidence showing otherwise. **Considering the severe nature of this safety violation to include the doors being opened off side at an aerial station with a large drop, the failure to perform a ground walkaround inspection, the failure to inform the MICC of the incident, and the multiple demonstrably false statements denying the occurrence to management, you will be suspended for a total of 30 working days (10 days for opening the doors off platform and 20 days for failure to report the incident/ no ground walkaround performed) in accordance with all arbitration agreements governing violations of this nature. This suspension will begin today, March 18, 2024, and will include the following dates March 19,20,21,22,25,26,27,28,29, April 1,2,3,4,5,8,9,10,11,12,15,16,17,18,19,22,23,24,25, and 26th. You will report to training upon your return from suspension on April 29, 2024. [redacted], be advised, that progressive disciplinary action, to include termination from the Washington Metro Area Transit Authority, will be applied to any further violations.**

[redacted] may, in accordance with the CBA: "...elect to utilize earned vacation to protect earning levels to the extent possible, however, such voluntary election will preclude the employee from filing a grievance pursuant to Section 104(a & b) as it relates to the violation finding and disciplinary action taken."

[redacted] chooses to use vacation: Yes or No Number of days of vacation requested to be applied _____ Initialed _____

Attachment 1: RTRA Investigation Report pg.4 of 4

Appendix E – Why-Tree Analysis



Root Cause Analysis