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Office: 202-384-1520 • Website: www.wmsc.gov

WMSC Commissioner Brief: W-0103 - Improper Door Operation - Court House Station - March 14, 2021

Prepared for Washington Metrorail Safety Commission meeting on August 3, 2021

Safety event summary:

A Train Operator opened the doors of an outbound Silver Line train on the opposite side from the Court House Station platform. The Train Operator properly reported the event, conducted a required ground walk-around and offloaded the train.

Prior to opening the doors on the incorrect side, the Train Operator did not look out the window of the train as required by Metrorail procedures to verify the platform side and to observe any activity in front of the doors.

CCTV video shows the doors were open on the incorrect side (right side) of the train for approximately 20 seconds. The Train Operator then opened the doors on the correct side of the train. The Vehicle Monitoring and Diagnostic System recorded the right-side doors open, with the left side (correct side) doors opened after the right-side doors were closed.

In an interview, the Train Operator stated that they were mentally distracted by personal issues at the time of this event, which led to a loss of focus and situational awareness. Inward-facing camera video demonstrates that the Train Operator looked toward the wall on the non-platform side of the station but did not recognize at that time that the doors were open on the incorrect side.

**Probable Cause:** 

The probable cause of this event was Metrorail's lack of fitness for duty evaluations and lack of non-punitive self-reporting processes for safety sensitive personnel such as train operators.

**Corrective Actions:** 

Rail Transportation is promoting WMATA's Employee Assistance Program (EAP) by adding signage and other communications to assist personnel with stress-related issues.

Rail Transportation also distributed a lessons learned document related to door operation procedures focused on reminding train operators to follow the five second rule of looking out the platform-side window with hands down for five seconds prior to opening the train doors.

WMSC staff observations:

The WMSC's Fitness for Duty Audit is being finalized.

Staff recommendation: Adopt final report.



# Washington Metro Area Transit Authority Department of Safety and Environmental Management (SAFE)

# **FINAL REPORT OF INVESTIGATION A&I E21109**

Date of Event:	03/14/2021	
Type of Event:	Improper Door Operation	
Incident Time:	09:04 hours	
Location:	Court House Station, Track 2	
Time and How received by SAFE:	09:10 hours, SAFE On-Call Phone	
WMSC Notification Time:	10:21 hours	
Rail Vehicle:	Train ID 608	
	L7006-7007.7005-7004.7034-7035.7131-7130T	
Injuries:	None	
Damage:	None	
SMS I/A Incident Number:	20210314#92286	

# **Court House Station – Improper Door Operation**

# March 14, 2021

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Rev.1 Approved By: SAFE 70 - 07/22/2021

#### **Abbreviations and Acronyms**

ADU Aspect Display Unit

ARS Audio Recording System

ATC Automatic Train Control

**CAP** Corrective Action Plan

**CCTV** Closed-Circuit Television

**CMNT** Office of Car Maintenance

**CMOR** Office of Chief Mechanical Officer

I/A Incidents/Accidents

IIT Incident Investigation Team

MC Master Controller

MSRPH Metrorail Safety Rules and Procedures Handbook

NOAA National Oceanic and Atmospheric Administration

RTRA Office of Rail Transportation

ROCC Rail Operations Control Center

SAFE Department of Safety and Environmental Management

SMS Safety Measurement System

VMDS Vehicle Monitoring and Diagnostic System

WMATA Washington Metropolitan Area Transit Authority

WMSC Washington Metrorail Safety Commission

# **Executive Summary**

On Sunday, March 14, 2021, at approximately 09:04 hours, the Train Operator of outbound Silver Line Train ID 608 [L7006-7007.7005-7004.7034-7035.7131-7130T] operating in Wiehle-Reston East Station's direction opened train doors on the opposite side of the platform at Court House Station, Track 2. The Train Operator of Train ID 608 contacted the Rail Operations Control Center (ROCC) to report the incident at approximately 09:07 hours. ROCC instructed the Train Operator of Train ID 608 to perform a ground walk-around inspection and to offload the customers. ROCC dispatched an Office of Rail Transportation (RTRA) Supervisor to assist and notified the Office of Car Maintenance (CMNT) for post-incident inspection. No injuries or damage were reported as a result of this incident.

Based on Audio Recording System (ARS) playback [radio and landline], after the Train Operator of Train ID 608 performed door operations on the opposite side of the platform at Court House Station, Track 2, they contacted ROCC at approximately 09:07 hours to report the incident. ROCC confirmed the report and instructed the Train Operator to perform a ground walk-around inspection and to offload the customers. ROCC instructed the Train Operator to make good announcements to the customers and wait for the RTRA Supervisor to arrive. The Train Operator was removed from service by RTRA Management.

The primary probable cause of the incident was the lack of a thorough fitness for duty evaluation by supervisory personnel while distributing daily manifests. Contributing to the incident was human performance difficulty as the Train Operator lost focus while operating the train and resulted in a failure to follow proper door operation procedures. The Train Operator depressed the doors open button on the non-platform side without placing their head out of the cab window to first look and identify the platform.

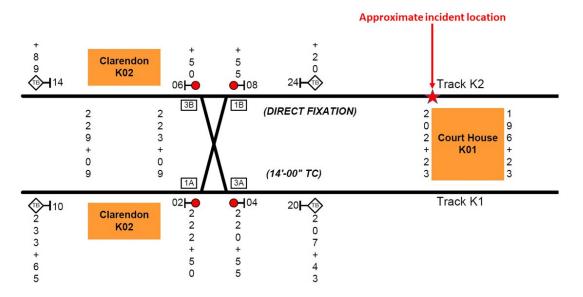
An analysis was conducted of data collected, submitted documentation and formal interviews with staff. Based on a review of the Metro Safety Rules and Procedures Handbook (MSRPH), the Train Operator was not in compliance with the following Operating Rules:

- Section 3 Operating Rule 3.18 "Employees shall not operate any vehicle in a reckless or unsafe manner."
- SOP #40 Door Operations / Station Servicing Procedures 40.5.1.5.2 "Verify the platform side of the train by placing your head out of the cab window and first look and identify the platform. Then look at the doors on the platform side of the train to observe any activity in front of the doors, with your hands to your side for five (5) seconds, before reaching up to touch the manual door opening button and then.."
- SOP #40 Door Operations / Station Servicing Procedures 40.5.1.5.3 "Depress Open Doors button on the platform side of the train."

#### **Incident Site**

Court House Station, Track 2

#### Field Sketch/Schematics



## **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:

- Physical Site Assessment
- 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
- Documentation Review Collection of relevant work history information and process documentation contained in WMATA systems of record. These records include:
  - Train Operator Training Records
  - Train Operator Certifications
  - Train Operator 30-Day work history review
  - Metrorail Safety Rules and Procedures Handbook (MSRPH)
  - National Oceanic Atmospheric Administration (NOAA)
  - Rail Operations Control Center (ROCC) Incident Report
  - Maximo Data
- System Data Recording Review Collection of information contained in Metro Data Recording Systems. This data includes:
  - ARS (Audio Recording System) playback [Radio and Landline Communications]

- The Office of Chief Mechanical Officer (CMOR) Incident Investigation Team (IIT)
   Vehicle Monitoring and Diagnostic System (VMDS)
- Closed-Circuit Television (CCTV)

# <u>Investigation</u>

Based on findings, at approximately 09:04 hours, a New Carrollton Division Train Operator operating Train ID 608 [L7006-7007.7005-7004.7034-7035.7131-7130T] opened train doors on the opposite side of the platform at Court House Station, Track 2. According to CCTV, after bringing the train to a complete stop, the Train Operator opened the right-side doors for approximately 20 seconds. The platform side was the left side of the train. The Train Operator of Train ID 608 subsequently contacted ROCC to report the incident. ROCC instructed the Train Operator to make good announcements to the customers and perform a ground walk-around inspection to ensure no one had fallen onto the roadway. The Train Operator performed the ground walk-around inspection and reported a good track inspection. An RTRA Supervisor was dispatched to the scene and reported to ROCC the train was clear of customers. ROCC instructed RTRA Supervisor to take over operations and to change the Train ID to 708 in non-revenue service to West Falls Church Yard. ROCC instructed Train ID 609 to service the incident customers at Court House Station, Track 2.

# **Chronological Event Timeline**

ARS playback revealed the Train Operator of Train ID 608 contacted ROCC to report they opened doors opposite of the platform side at Court House Station, Track 2. ROCC acknowledged the Train Operator and asked, "What's your ID and location?" After ROCC verified The Train Operator's information, they instructed the Train Operator to exit the train, conduct a radio check and perform a ground walk-around inspection to ensure the roadway is clear. ROCC dispatched an RTRA Supervisor to the scene to assist. After the ground walk-around was complete, ROCC instructed the Train Operator to make good announcements to customers and clear the train. Once on scene, ROCC informed the RTRA Supervisor to verify the train was clear and change Train ID to 708. RTRA Supervisor operated Train ID 708 to West Falls Church Yard.

Time	Description
09:06:17 hrs.	<u>Train Operator</u> : "Central Control, 608." [Radio]
09:06:24 hrs.	ROCC: "Repeat over." [Radio]
09:06:29 hrs.	Train Operator: "Central Control, I think I, I believed I opened up the doors on
	the wrong side." [Radio]
09:06:38 hrs.	ROCC: "What's your ID and location, over?" [Radio]
09:06:42 hrs.	<u>Train Operator</u> : "608, Track 2, Court House." [Radio]
09:06:47 hrs.	ROCC: "Affirm, 608, Track 2, Court House. Are your doors open on the platform
	side at this time, over?" [Radio]
09:06:54 hrs.	<u>Train Operator</u> : "That's affirmed Control. My doors are open on the platform
	side at this time." [Radio]
09:07:08 hrs.	ROCC: "608, go ahead and key down, give Central a radio check. We have you
	do a ground walk around, over." [Radio]
09:07:20 hrs.	<u>Train Operator</u> : "Key down, give you a radio check, ground walk around."
	[Radio]

Incident Date: 03/14/2021 Time: 09:04 hours Final Report Rev.1 – Improper Door Operation E21109

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Rev.1 Approved By: SAFE 70 – 07/22/2021

09:07:25 hrs.	ROCC: "Affirm, Central's out. Unit 32 location over?" [Radio]
09:07:36 hrs.	RTRA Supervisor: "32, Foggy Bottom." [Radio]
09:07:39 hrs.	ROCC: "Affirm. You can go ahead and head towards Court House, over." [Radio]
09:07:50 hrs.	RTRA Supervisor: "Affirm. Head towards Court House." [Radio]
09:07:55 hrs.	ROCC: "Thank you, Central's out." [Radio]
09:08:05 hrs.	<u>Train Operator</u> : "608, radio check." [Radio]
09:08:07 hrs.	ROCC: "Central copies you loud and clear 608. Advise Central if you see anything or if you see anybody that exited the train, over." [Radio]
09:08:20 hrs.	<u>Train Operator</u> : "Roger, let you know if I see anything." [Radio]
09:10:57 hrs.	ROCC: Notified SAFE that Train Operator of Train ID 608 opened doors opposite side of the platform at Court House Station. The Train Operator conducted a ground walk around. [Landline]
09:11:55 hrs.	<u>Train Operator</u> : "Central Control, 608, I'm out of the roadway." [Radio]
09:12:01 hrs.	ROCC: "Affirm 608, when you return to your lead car, make good announcements to your customers on the train, over." [Radio]
09:12:09 hrs.	Train Operator: "Train Operator acknowledged ROCC instructions." [Radio]
09:13:55 hrs.	ROCC: Instructed RTRA Supervisor once they verify the train was clear and change Train ID to 708 to West Falls Church. [Radio]
09:14:07 hrs.	RTRA Supervisor: "Affirm. I'm arriving at Court House at this time. I'm going to board the trailing car; the operator can go ahead and close the doors and standby in the lead car. I'll take over operations, over." [Radio]
09:14:20 hrs.	ROCC: "Affirm, Central's out." [Radio]
09:14:23 hrs.	ROCC: "608 Operator, what was your lead car, over." [Radio]
09:14:28 hrs.	<u>Train Operator</u> : "Lead car 7006." [Radio]
09:14:23 hrs.	ROCC: "Repeat that." [Radio]
09:14:28 hrs.	<u>Train Operator</u> : "Lead car 7006." [Radio]
09:15:16 hrs.	RTRA Supervisor: "Central, 34. Have we confirmed a good, a clear walk around, over?" [Radio]
09:15:22 hrs.	ROCC: "Affirm. We did complete a ground walk around. Nothing found, over." [Radio]
09:15:27 hrs.	RTRA Supervisor: "Affirm. We'll be moving in about 30 seconds." [Radio]
09:15:31 hrs.	ROCC: "Affirm. Thank you for your help. Central's out." [Radio]
09:20:25 hrs.	ROCC: Informed RTRA Management of improper door operation incident at Court House Station. [Landline]

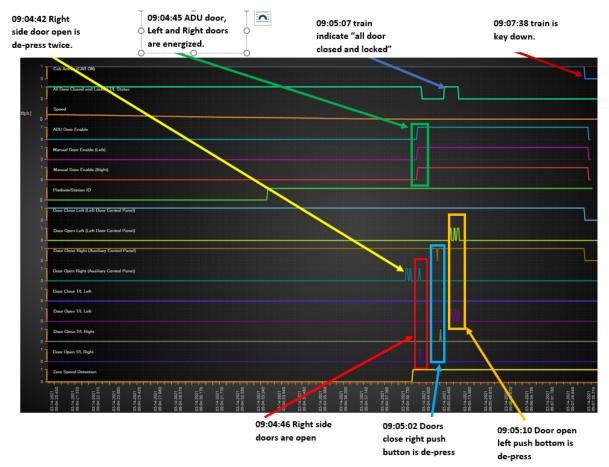
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# The Office of Chief Mechanical Officer (CMOR) / Vehicle Monitoring and Diagnostic System

# (VMDS) Timeline

IIT CMOR analysis of the VMS data from Car 7006 verified the Train Operator of Train ID 608 depressed the door open right side button two times at 09:04:42 hours. The right-side doors were opened at 09:04:46 hours, and the door open right-side button was depressed again at 09:05:02 hours to close doors. The door open left side button was depressed at 09:05:10, and the Train Operator keyed down the train at 09:07:38 hours. IIT found no failure with the train.

Time	Description
09:02:18 hrs.	Lead Car 7006 left Rosslyn Station, Track 2. Master Controller (MC) in the P1
09.02.101115.	position.
09:04:16 hrs.	Train ID 608 entered Court House Station platform limits. MC at B1-B3 Braking
	Mode. Train speed was 32.7 mph.
09:04:24 hrs.	The train reached the 4 <sup>th</sup> car marker with MC in B1-B3 Braking Mode. Train
	speed was 23.01 mph.
09:04:39 hrs.	The train stopped at the 8 <sup>th</sup> car marker—MC in B4.
09:04:42 hrs.	The door open right push button was depressed twice. Initiate door enable
	sequence at Automatic Train Control (ATC).
09:04:43 hrs.	The OK command on the door enable button was depressed by the Train
	Operator to enable the door to open.
09:04:45 hrs.	Aspect Display Unit (ADU) door enable was energized, manual right and left
	doors were also energized. Doors could now be opened.
09:04:46 hrs.	The door open right push button was depressed, doors were opened on the
	opposite side of the platform.
09:05:02 hrs.	The door close right push button was depressed, doors started to close.
09:05:07 hrs.	Train indicated "all doors closed and locked."
09:05:10 hrs.	The door open left push button was depressed, doors open on the platform
	side.
09:07:38 hrs.	The train was keyed down.



Graph #1 – IIT CMOR VMS analysis showing Train Operator's door actions.

# Office of Car Maintenance (CMNT)

CMNT personnel performed the necessary door operation checks and inspections as recommended by IIT CMOR. CMNT found no trouble with doors or any other defects. CMNT personnel determined operator error caused the improper door operation and released the train for service.

# **Closed-Circuit Television (CCTV)**



Photo #1 – Train ID 608 properly berthed at Court House Station, Track 2 at 09:04:39 hours.



Photo #2 – Train ID 608 right side doors begin to open on the non-platform side at Court House Station, Track 2 at 09:04:46 hours.



Photo #3 – Train ID 608 right side doors on the non-platform side completely opened.



Photo #4 – Train ID 608 right side doors on the non-platform side begin to close at Court House Station, Track 2 at 09:05:02 hours.



Photo #5 – Train ID 608 right side doors on the non-platform side completely closed at Court House Station, Track 2 at 09:05:07 hours.



Photo #6 – Train Operator depressing Doors Open Button while observing the non-platform side of the train.



Photo #7 – Train Operator looking out of the window on the non-platform side of the train.

# **Interview Findings**

One formal interview was conducted with the Train Operator via Microsoft Teams, which included the investigation team and representatives from the WMSC. The interview conducted identified the following key findings associated with this event:

The Train Operator reported they were not focused at the time of the incident and were thinking about personal issues while operating the train. The Train Operator contacted ROCC after they opened doors on the non-platform side. Train Operator stated they conducted a ground walk around to ensure no customers had fallen to the roadway.

#### **Findings**

- Train ID 608 was in revenue service traveling in the direction of Wiehle-Reston Station.
- The Train Operator lost focus on their situational awareness and opened the doors on the non-platform side with customers onboard. This action was not in compliance with MSRPH Section 3 – Operating Rule 3.18 – "Employees shall not operate any vehicle in a reckless or unsafe manner."
- The Train Operator did not verify the platform side of the train before opening doors. This action was not in compliance with SOP #40 Door Operations / Station Servicing Procedures 40.5.1.5.2 "Verify the platform side of the train by placing your head out of the cab window and first look and identify the platform. Then look at the doors on the platform side of the train to observe any activity in front of the doors, with your hands to

- your side for five (5) seconds, before reaching up to touch the manual door opening button and then."
- The Train Operator depressed the Open Doors button on the non-platform side of the train. This action was not in compliance with SOP #40 – Door Operations / Station Servicing Procedures – 40.5.1.5.3 – "Depress Open Doors button on the platform side of the train."

#### **Weather**

At the time of the incident, NOAA recorded the temperature at 42° F, no wind, sunny with visibility of 10 miles. Based on findings, SAFE has concluded that weather was not a contributing factor in this incident (Weather source: NOAA – Location: Arlington, VA.)

#### **Human Factors**

#### <u>Fatigue</u>

#### Evidence of Fatigue

The incident data was evaluated for evidence of fatigue that may have been present at the time of the incident. Incident video was reviewed for signs of the Train Operator's fatigue. The Train Operator demonstrated possible signs of distraction and attention loss which may have been indirectly related to fatigue. Examples included standing in the cab while operating the train and staring out of the non-platform side window while attempting to service the station. The Train Operator reported feeling moderately alert at the time of the incident and reported experiencing no symptoms of fatigue in the time leading up to the incident.

#### Fatigue Risk

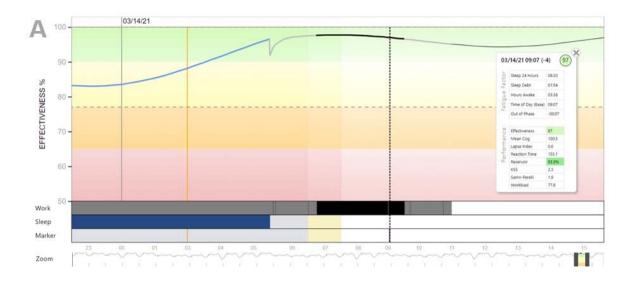
The incident data was evaluated for fatigue risk factors. No significant risk was identified. The incident time of day did not suggest an increased risk of fatigue-related impairment. The Train Operator reported keeping a regular sleep schedule in the days leading up to the incident. The Train Operator worked the day shift in the days leading up to the incident. The Train Operator was awake for approximately three and a half hours at the time of the incident. The off-duty period was 16 hours and 10 minutes, which provides an opportunity for 7-9 hours of sleep. The Train Operator reported eight hours of sleep in the 24 hours preceding the incident. This was a comparable amount to the Train Operator's usual workday sleep durations. The Train Operator reported no issues with sleep.

A biomathematical fatigue modeling application (SAFTE-FAST WebSFC) was used to further evaluate fatigue risk factors that may have been present in the Train Operator's schedule. The analysis was based on the Train Operator's work schedule, bed and wake times from the day before the incident and reported habitual sleep durations. The estimated performance effectiveness at the time of the incident was 97%. The analysis identified no factors contributing to an increased risk of fatigue at the time of the incident.

Incident Date: 03/14/2021 Time: 09:04 hours Final Report Rev.1 – Improper Door Operation E21109

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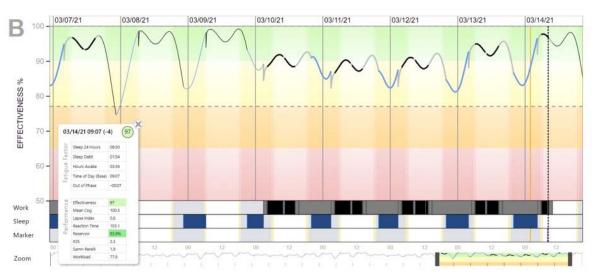


Figure 1 - Modeling analysis output shows estimated performance effectiveness during the incident work shift (A) and for the week leading up to the work shift (B) based on the employee work and reported sleep schedule. Estimates were based on the Train Operator's work schedule, bed and wake times from the day before the incident, and reported habitual sleep durations (8 hours a day). Bold portions of the modeled curve show work (in black) and sleep times (in blue). Effectiveness is shown on the vertical axis, with colored fields in the chart background signifying ranges of effectiveness scores, including high effectiveness (>90%) in green and low effectiveness (<65%) in red. Time is shown on the horizontal axis. Markers for work and sleep times are shown in the lanes above the time of day on the horizontal axis.

# Post-Incident Toxicology Testing

WMATA's Drug and Alcohol Program determined that the Train Operator was not in violation of the Drug and Alcohol Policy and Testing Program 7.7.3/6.

Rev.1 Reviewed By: SAFE 70 – 07/22/2021 Rev.1 Approved By: SAFE 70 – 07/22/2021

# **Probable Cause Statement**

The primary probable cause of the incident was the lack of a thorough fitness for duty evaluation by supervisory personnel while distributing daily manifests. Contributing to the incident was human performance difficulty as the Train Operator lost focus while operating the train and resulted in a failure to follow proper door operation procedures. The Train Operator depressed the doors open button on the non-platform side without placing their head out of the cab window to first look and identify the platform.

#### **SAFE Recommendations/Corrective Actions**

The following are the recommendations and corrective actions identified as a result of this investigation and associated root cause evaluation (Appendix F). These recommendations are tracked using WMATA's Safety Measurement System Incidents/Accidents (SMS I/A) Module and are verified by SAFE upon completion. The responsible department is identified in the corrective action code, and the respective departmental Safety Risk Coordinator (SRC) will manage the mitigation. Refer to the SMS I/A Module for additional information.

Corrective Action ID	Description	Responsible Party	Due Date
92286_SAFECAPS_ RTRA_001	(RC-1) RTRA Management to produce a Lessons Learned with the focus on following proper door operation procedures.	RTRA SRC	4/30/21
92286_SAFECAPS_ RTRA_002	(RC-1) RTRA Management to promote WMATA's Employee Assistance Program (EAP) through signage and other methods to assist RTRA personnel with stress-related issues.	RTRA SRC	8/15/21
92286_SAFECAPS_ RTRA_003	(RC-1) RTRA Management to ensure Supervisors are trained in evaluating employees for fitness for duty.	RTRA SRC	9/15/21

#### **Appendix A – Interview Summary**

#### **Train Operator**

This employee is a WMATA Train Operator with five years of experience as a Train Operator and two years of service as a Bus Operator. The Train Operator's last certification was on November 4, 2020, and they have no history of sleep issues to report.

Based on the SAFE interview, the Train Operator reported they serviced Rosslyn Station and were traveling towards Court House Station prior to the incident occurring. They stated they were familiar with the series of cars they were operating and had no mechanical issues. The Train Operator stated they lost focus and were distracted at the time the incident occurred. The Train Operator reported they were thinking about personal issues at the time and was "just not focused" while operating the train. They reported there was not anything they could have done to prevent this incident from occurring.

# Appendix B - Office of Car Maintenance (CMNT) Work Order #16215196

#### Page 1 of 2



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

Page 1 of 2 MX76PROD

Status: CLOSE 03/15/2021 11:31

Work Description: Door operation performed off platform. Ground walkaround performed. No injuries., 15/9, K01, RTR, IDOR, 608 Job Plan Description:

Work Information Owning Office: CMNT-CMNT-CMNT Asset: R7006 7006, RAIL CAR, KAWASAKI, 7000 AC, A Asset Tag: R7006 Maintenance Office: CMNT-NEWC-INSP Create Date: 03/14/2021 09:52 Asset S/N: 7006 Labor Group: CMNT Actual Start: 03/14/2021 09:53 D99, NEW CARROLLTON YARD Location: 1230 Crew: Actual Comp: 03/14/2021 13:23 Work Location: 2494 K99, WEST FALLS CHURCH YARD Lead: Item: K18050001 GL Account: WMATA-02-33393-50499160-041-\*\*\*\*\*\*\*\*\*\*\*-OPR\*\* Failure Class: CMNT014 DOOR Problem Code: 1650 DOOR OPENED WRONG SIDE Supervisor: Target Start: Requested By: Requestor Phone: Target Comp: Scheduled Start: Chain Mark Start: Chain Mark End: Create-Mileage: 318131.0 Complete-Mileage: 318131.0 Task ID 10 PERFORMED DOOR OPERATION CHECK, NO TROUBLE FOUND, OPERATOR ERROR 000-300-M00 SUBSYSTEM; DOOR CONTROL (SIDE Component: DOOR); 2K/3K/6K/7K Work Accomp: INSPECTED Reason: NO TROUBLE FOUND Status: CLOSE Position: Warranty?: N Perform video and data download request by ROCC. IIT has no hold on this consist. Component: 000-300-T00 SUBSYSTEM; CCTV; 6K/7K Work Accomp: DOWNLOADED Reason: NO FAILURE Status: CLOSE Position: Warranty?: N Actual Lab Regular Premium Task ID Start Date **End Date** Start Time End Time Approved? Line Cost 10 03/14/2021 03/14/2021 10:00 12:00 02:00 00:00 \$108.57 10 03/14/2021 03/14/2021 12:00 12:30 00:30 00:00 \$20.73 Total Actual Hour/Labor: 02:30 00:00 \$129.30 Related Incid Ticket Description Class Status Relationship Door operation performed off platform. Ground walkaround performed. No injuries., 15/9, K01, RTR, IDOR, 608 8528946 SR INPROG ORIGINATOR

WT\_plust\_woprint.rptdesign 03/15/2021 14:50

Page 1 of 2 - CMNT Maximo Work Order #16215196 detailing inspections conducted.

Incident Date: 03/14/2021 Time: 09:04 hours Final Report Rev.1 – Improper Door Operation E21109

Rev.1 Drafted By: SAFE 702 – 07/19/2021

Rev.1 Reviewed By: SAFE 70 – 07/22/2021 Rev.1 Approved By: SAFE 70 – 07/22/2021

# Appendix B - Office of Car Maintenance (CMNT) Work Order #16215196

# Page 2 of 2



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

Page 2 of 2 MX76PROD

Status: CLOSE 03/15/2021 11:31

Work Description: Door operation performed off platform. Ground walkaround performed. No injuries., 15/9, K01, RTR, IDOR, 608 Job Plan Description:

Cause		Remedy		Supervisor	Remark Date
2477	NO DEFECT; OPERATOR ERROR	3192	TESTED / INSPECTED		03/14/2021

WT\_plust\_woprint.rptdesign 03/15/2021 14:50

Page 2 of 2 – CMNT Maximo Work Order #16215196 stating no defects were found.

Incident Date: 03/14/2021 Time: 09:04 hours Final Report Rev.1 – Improper Door Operation E21109

Rev.1 Drafted By: SAFE 702 – 07/19/2021 Rev.1 Reviewed By: SAFE 70 – 07/22/2021 Rev.1 Approved By: SAFE 70 – 07/22/2021

#### Appendix C - Lessons Learned

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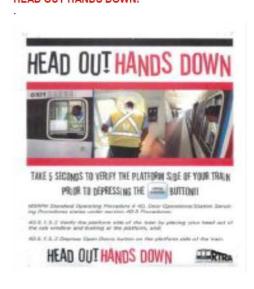
#### Failure to Follow Procedures Leads to Improper Door Operations

#### INCIDENT SUMMARY

On Sunday, March 14, 2021, at approximately 9:04am, a New Carrollton Train Operator operated Train ID 608 into Court House, track #2. After properly berthing the train on the platform, the Train Operator initiated the door open button causing the doors to open opposite the platform side. The Train Operator closed the doors on the opposite platform side then opened the doors on the platform side. The Train Operator contacted ROCC. A ground walk around was performed, no injuries were reported. The Train Operator was removed from service and transported for post-incident testing.

#### **ROOT CAUSES**

This incident's root cause was complacency and a failure to follow the proper door opening procedures outlined in SOP 40 and waiting five (5) seconds before initiating the door open button. It should be noted there were no reported discrepancies with the train that could have contributed to this occurrence. ALWAYS REMEMBER, HEAD OUT HANDS DOWN!



#### **LESSONS LEARNED**

What happened	What should have happened		
The Train Operator initiated the door open button prior to sticking his head out to verify the platform side.	Operators should never attempt to perform any actions opposite the platform side.		
The Train Operator failed to use SOP 40 as a guide to proper door operations.	Operators must place their head out of the window to confirm platform location and move their hands to their side away from the door control panel for five (5) seconds prior to opening the train doors.		

#### **MSRPH RULES**

- GR 1.46 Employees shall not permit unnecessary conversation, reading, lounging, or any other action or condition to divert their attention from the safe and efficient performance of duty.
- SOP 40.5.1.5 Verify the platform side of the train by placing your head out of the cab window and first look and identify the platform. Then look at the doors on the platform side of the train to observe any activity in front of the doors, with your hands to your side approximately five (5) seconds, before reaching up to touch the manual door opening button.

#### RECOMMENDATIONS

- Train Operators and all personnel must always be vigilant and aware of their surroundings.
- Emphasize that all operational personnel abide by SOP 40 when operating trains.
- Remind all operators to report to the authority (Supervisor, Interlocking Operator, or ROCC) any instructions or procedures that are not clear and await clarity before proceeding.

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Incident Date: 03/14/2021 Time: 09:04 hours Final Report Rev.1 – Improper Door Operation E21109

Rev.1 Drafted By: SAFE 702 – 07/19/2021

Rev.1 Reviewed By: SAFE 70 – 07/22/2021 Rev.1 Approved By: SAFE 70 – 07/22/2021

# RTRA Lessons Learned

Looking back, to effectively move forward



Office of Rail Transportation (RTRA)

Lessons Learned

Number: 2021-004

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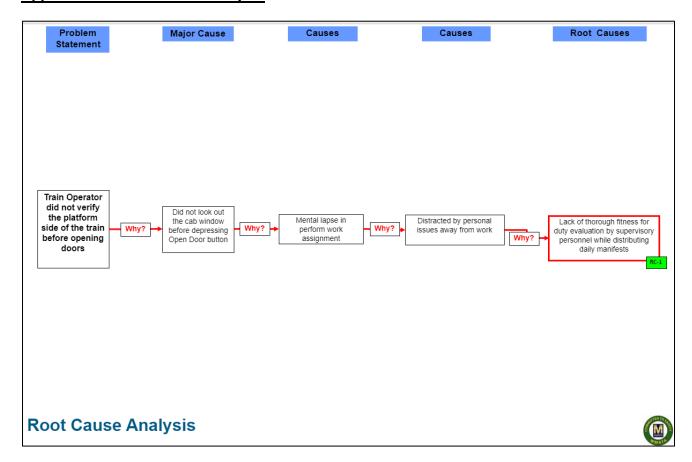
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# **Appendix D - Root Cause Analysis**



Incident Date: 03/14/2021 Time: 09:04 hours Final Report Rev.1 – Improper Door Operation E21109

Rev.1 Drafted By: SAFE 702 – 07/19/2021

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