



WMSM Commissioner Brief: W-0202 – Evacuation for Life Safety Reasons – Friendship Heights Station – September 25, 2022

Prepared for Washington Metrorail Safety Commission meeting on March 7, 2023

Safety event summary:

Friendship Heights Station was evacuated and a train carrying passengers that was approaching the station was properly moved away from smoke back to Bethesda Station after the Train Operator observed and reported electrical arcing and smoke coming from the area of a third-rail insulator near the interlocking outside of Friendship Heights Station on September 25, 2022 at 9:57 p.m.

Metrorail's Rail Operations Control Center Assistant Operations Manager called the District of Columbia Office of Unified Communications for a D.C. Fire and Emergency Medical Services response and called Montgomery County Fire and Rescue Services to request a response to the station on the D.C.-Montgomery County border. D.C. Fire and Emergency Medical Services responded. The Station Manager reported smoke in the Friendship Heights Station at 10:01 p.m. Third rail power was de-energized on the track with the arcing insulator at 10:06 p.m. after the train had been moved back toward Bethesda.

However, Metrorail allowed another train headed in the opposite direction, toward Shady Grove, to continue to the reported smoke at Friendship Heights Station. The Train Operator of that train reported seeing and smelling smoke upon reaching the platform at 10:03 p.m. The Radio Rail Traffic Controller then instructed the operator to reverse ends back to Tenleytown Station.

Metrorail's fan desk did not activate ventilation fans upon request of the Buttons Rail Traffic Controller. The Buttons Rail Traffic Controller had provided the necessary information regarding the location of the electrical arcing and the location of the train. The Rail Operations Information Center made a subsequent request to activate fans approximately 3 minutes later following the Station Manager's report of smoke. Fans were activated at 10:06 p.m., approximately 3 minutes after that second request.

After first responders arrived, the Friendship Heights Station Manager was instructed at 10:13 p.m. to evacuate riders from the station.

Metrorail's Emergency Response Team replaced the insulator damaged by this arcing event and rail service resumed. Metrorail scheduled and then completed work to replace other corroded and missing insulators at this location approximately 3 weeks later, on October 14-15, 2022.

Probable Cause:

The probable cause of this event was Metrorail's insufficient maintenance and inspection practices to ensure that insulators are proactively maintained in a state of good repair, which allowed progressive deterioration of insulators in this area to a point of failure.

Corrective Actions:

Related open CAPs include:



- C-0162 addressing that Metrorail does not consistently follow the incident command system (ICS) structure and has procedures that do not comply with National Incident Management System (NIMS)/ICS requirements such as the use of plain language. Further, Metrorail's training requirements are insufficient to prepare personnel to respond to and/or manage emergencies within the NIMS/ICS framework. These deficiencies have contributed to ineffective and improper emergency response and emergency management. (Scheduled completion date January 2025)
- C-0225 addressing that Metrorail's organizational structure prevents Metrorail from effectively ensuring that its track is maintained in a state of good repair as specified by Metrorail policies, procedures, and standards (in development).

WMSC staff observations:

The timely and proper activation of emergency ventilation fans is critical to safety in an emergency. Metrorail recently created a fan desk to carry out such duties, which did not function as intended in this event. Metrorail should consider whether further improvements in Rail Operations Control Center processes are necessary.

Metrorail allowed a train carrying passengers that could have been stopped prior to reaching the smoke location to continue to Friendship Heights Station.

The condition of (and absence of) multiple third rail insulators in this area indicates that Metrorail had the opportunity to proactively identify and address these safety issues prior to this safety event occurring. Metrorail should evaluate opportunities for systemic safety improvements to reduce risk of recurrence.



Washington Metropolitan Area Transit Authority
Department of Safety (SAFE)
Office of Safety Investigations (OSI)
FINAL REPORT OF INVESTIGATION A&I E22631

Date of Event:	September 25, 2022
Type of Event:	Evacuation for Life Safety Reasons – (Fire/Smoke)
Incident Time:	21:57 Hours
Location:	Friendship Heights Station, track 1 – A1 308+00
Time and How received by SAFE:	21:58 Hours – SAFE/MAC
WMSC Notification Time:	23:25 Hours
Responding Safety Officers:	WMATA: OEP WMSC: N/A Other: N/A
Rail Vehicle:	Train ID 102 L7072-7073.7145-7144.7380-7381.7363-7362T
Injuries:	None
Damage:	Third Rail Insulator - Replaced
Emergency Responders:	Metro Transit Police Department (MTPD), District of Columbia Fire Department and EMS (DCFEMS)
SMS I/A Incident Number:	20220925#103120MX

Friendship Heights Station – Evacuation for Life Safety

September 25, 2022

Table of Contents

Abbreviations and Acronyms-----	3
Executive Summary -----	4
Incident Site -----	5
Field Sketch/Schematics -----	5
Purpose and Scope -----	5
Investigative Methods-----	5
Investigation -----	6
Office of Rail Transportation (RTRA) -----	11
Weather -----	11
Related Rules and Procedures -----	11
Probable Cause Statement-----	12
Recommended Corrective Actions -----	12
Appendices -----	13
Appendix A – MOC Emergency Tunnel Fan Operation Form -----	13
Appendix B – MTPD Event Report -----	14
Appendix C – Permanent Order T-21-24 -----	18
Appendix D – Maximo Work Orders-----	19
Appendix E – Root Cause Analysis -----	21

Abbreviations and Acronyms

AIMS	Advanced Information Management System
AOM	Assistant Operations Manager
ARS	Audio Recording System
CAP	Corrective Action Plan
CCTV	Closed-Circuit Television
DCFEMS	District of Columbia Fire and Emergency Medical Services
ERT	Emergency Response Team
MCFRS	Montgomery County Fire and Rescue Service
MOC	Maintenance Operations Center
MSRPH	Metrorail Safety Rules and Procedures Handbook
MTPD	Metro Transit Police Department
NOAA	National Oceanic and Atmospheric Administration
ROCC	Rail Operations Control Center
ROIC	Rail Operations Information Center
RTC	Rail Traffic Controller
RTRA	Office of Rail Transportation
SAFE	Department of Safety
SMS	Safety Measurement System
TRST	Office of Track and Structures
WMATA	Washington Metropolitan Area Transit Authority
WMSC	Washington Metrorail Safety Commission

Executive Summary

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

On Sunday, September 25, 2022, at 21:57 hours, an Office of Rail Transportation (RTRA) Train Operator, operating Train ID 102, between Bethesda Station and Friendship Heights Station, track 1 reported observing an arcing insulator at Chain Marker (CM) A1 308+00 to the Rail Operations Control Center (ROCC). The Radio Rail Traffic Controller (RTC) instructed the Train Operator to key down, reverse ends, and turn off Environmental (EV) system.

At 21:58 hours, the Buttons RTC notified the Rail Operations Information Center (ROIC), Metro Transit Police Department (MTPD) and the Maintenance Operations Center (MOC), requesting fan activation. At 21:59 hours, the ROCC Assistant Operations Manager (AOM) contacted District of Columbia Fire and Emergency Medical Services (DCFEMS) and Montgomery County Fire and Rescue Service (MCFRS) for assistance at Friendship Heights Station. At 22:02 hours, Train ID 102 reported to Radio RTC that they had reversed ends and the Radio RTC gave Train ID 102 an absolute block to Bethesda Station. Train ID 102 departed Friendship Heights at 22:06 hours.

At 22:06 hours, third rail power was de-energized and train service was suspended on track 1. At 22:10 hours, the Incident Command Post was established. At 22:13 hours, the Station Manager was instructed to evacuate Friendship Heights Station.

Train ID 103, was instructed to offload at Medical Center Station, track 2 to prepare for a track inspection. At 22:35 hours, the Train Operator of Train ID 103, with an RTRA Rail Supervisor aboard, reported no signs of smoke or an arcing insulator, then advised of a good track inspection on track 2. Trains were instructed to single track utilizing track 2.

The Emergency Response Team (ERT) arrived at 22:50 hours and began a further inspection of the area. DCFEMS turned the scene over to RTRA. At 23:00 hours, ERT advised that the defective insulator was removed on track 1, and rail service could resume.

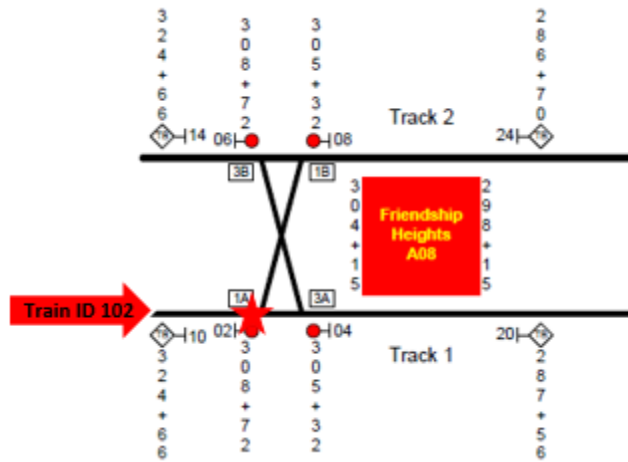
At 23:04 hours, third rail power was re-energized. At 23:11 hours, normal rail service resumed with Train ID 105 servicing Friendship Heights Station, track 1. There were no injuries as a result of this event.

The probable cause of the Evacuation for Life Safety Reasons at Friendship Heights Station was a defective insulator that failed, resulting in smoke conditions.

Incident Site

Friendship Heights Station, track 1 – A1 308+00

Field Sketch/Schematics



- Advanced Information Management System (AIMS)
- Closed-Circuit Television (CCTV)

Investigation

On Sunday, September 25, 2022, at 21:57 hours, as they were approaching the station platform, an RTRA Train Operator, operating Train ID 102, between Bethesda Station and Friendship Heights Station, track 1 reported observing an arcing insulator within the platform area at CM A1 308+00 to the ROCC. The Radio RTC instructed the Train Operator to key down, reverse ends and turn off the EV system. At 22:02 hours, Train ID 102 reported to the Radio RTC they had reversed ends and the Radio RTC gave Train ID 102 an absolute block to Bethesda Station. Train ID 102 departed Friendship Heights at 22:06 hours.

At 21:58 hours, the Buttons RTC notified ROIC, MTPD and MOC, requesting fan activation. At 21:59 hours, the ROCC AOM contacted DCFEMS and MCFRS for assistance at Friendship Heights Station.

At 22:06 hours, third rail power was de-energized track 1 and train service was suspended on track 1. At 22:10 hours, MTPD advised that the Incident Command Post was established by DCFEMS at Western and Wisconsin Avenue.



Image 1 – DCFEMS arriving at Friendship Heights Station.

At 22:13 hours, the Station Manager was instructed to evacuate Friendship Heights Station. At 22:14 hours, the Radio RTC directed an RTRA Supervisor to respond to Friendship Heights Station from Gallery Place Station.

Train ID 103, was instructed to offload at Medical Center Station, track 2 to prepare for a track inspection. At 22:32 hours, the Train ID 103, was instructed to perform a track inspection with an

RTRA Rail Supervisor aboard. At 22:35 hours, the Rail Supervisor reported no signs of smoke or an arcing insulator, advised a good track inspection on track 2. Trains were instructed to single track utilizing track 2.

ERT arrived at 22:50 hours and began a further inspection of the area. DCFEMS then turned the scene over to RTRA and departed.



Image 2 – ERT arriving at Friendship Heights Station.



Image 3 – DCFEMS departing Friendship Heights Station.

At approximately 23:00 hours, ERT advised that the defective insulator was removed on track 1, and rail service could resume.

At 23:04 hours, third rail power was re-energized. At 23:11 hours, normal rail service resumed with Train ID 105 servicing Friendship Heights Station, track 1. There were no injuries as a result of this event.

On the nights of October 14 and 15, 2022, the Office of Track and Structures (TRST) replaced missing and corroded third rail insulators in the area of CM A1 308+00.

Chronological ARS Timeline

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

Time	Description
21:57:34 hours	Train ID 102: Reported an arcing insulator at A1 308+00. Radio RTC: Key down and reverse ends, turn off the EV System. Requested Rail Supervisor location. Rail Supervisor: Grosvenor. Radio RTC: Train ID 103 hold at Medical Center Station. [Radio]
21:58:07 hours	Buttons RTC notified the AOM. [Phone]
21:58:44 hours	Buttons RTC notified the ROIC. [Phone]
21:59:18 hours	Buttons RTC notified the MTPD. [Phone]
21:59:24 hours	AOM contacted DCFEMS to report the event. [Phone]
22:00:01 hours	Radio RTC: Rail Supervisor board the next train on track 1. Rail Supervisor: Acknowledged and repeated. Radio RTC: Train ID 107, track 2 stop the train, when you get to the platform off load. Train ID 107: Acknowledged and repeated [Radio]
22:00:42 hours	Buttons RTC notified the MOC for fan activation. [Phone]
22:01:08 hours	MTPD dispatched Units to Friendship Heights Station. [Radio]
22:01:48 hours	Station Manager: Reported smoke in the station. ROIC: Fans are activated. Station Manager: Smoke is dissipating. Radio]
22:02:14 hours	Train ID 102: Reported they reversed ends. Radio RTC: Absolute block to Bethesda, track 1. Radio]
22:03:08 hours	Train ID 107: Reported located at Friendship Heights Station, track 2 seeing and smelling smoke on the platform. Radio RTC: Key down and reverse ends, turn off the EV System. Train ID 107: Acknowledged and repeated. [Radio]
22:03:08 hours	ROIC requested fan activation. <i>Fans were not currently running prior to request.</i> [Phone]
22:04:36 hours	Radio RTC: Train ID 107, absolute block to Tenleytown Station. Train ID 107: Acknowledged and repeated. [Radio]
22:06:30 hours	Third rail power de-energized. [AIMS]
22:06:30 hours	Fans activated. [AIMS]
22:10:24 hours	MTPD advised the Incident Command Post was established by DCFEMS at Western and Wisconsin Avenue. [Radio]
22:12:33 hours	Station Manager reported DCFEMS on scene. [Radio]
22:14:15 hours	Radio RTC: Instructed Train 103 and the RTRA Supervisor to verify the train offloaded customers and prepare to operate as a test train. EV was

	confirmed as shut down. They were advised that their Train ID was 703 for the test. Acknowledged [Radio]
22:14:41 hours	Radio RTC: Inquired of the Friendship Heights Station Manager whether the station was evacuated of customers. Station Manager: "Evacuating now" [Radio]
22:14:51 hours	Radio RTC: RTRA Supervisor directed to respond to Friendship Heights Station. RTRA Supervisor: Acknowledged from Gallery Place Station. [Phone]
22:17:04 hours	ROIC requested shuttle bus service. [Radio]
22:20:06 hours	MTPD reported DCFEMS confirmed the station is clear of smoke. [Radio]
22:23:40 hours	Radio RTC: Instructed the Station Manager to re-open station. Station Manager: Acknowledged and repeated. [Radio - OPS -1]
22:32:47 hours	Train ID 703, non-revenue with RTRA Supervisor aboard, instructed to perform a track inspection restricted speed, between Friendship Heights and Bethesda, track 2. [Radio]
22:35:34 hours	Rail Supervisor aboard Train ID 103 reported a good track inspection on track 2, no signs of smoke. [Radio]
22:35:51 hours	Single Tracking commenced on track 2. [Radio]
22:50:01 hours	ERT arrived on scene. DCFEMS departed the scene, DCFEMS turned event scene over to RTRA. [Radio]
22:53:35 hours	Radio RTC granted foul time to ERT at Friendship Heights, track 1. [Radio]
23:00:25 hours	ERT advised that the insulator was removed and requested third rail power to be restored. [Radio]
23:00:52 hours	Radio RTC announced a power re-energization alert Friendship Heights to Tenleytown. [Radio]
23:04:10 hours	Third rail power was re-energized. [AIMS]
23:04:14 hours	Radio RTC advised ERT that third rail power was re-energized and to advise when track 1 was ready for service. [Radio]
23:09:27 hours	ERT contacted the Radio RTC and reported back on the platform, inspection completed, track 1 was good for service and relinquished foul time. [Radio]
23:11:00 hours	Normal service resumed; Train ID 105 was the first train to service track 1. [Radio]

***Note: Times above may vary from other system's timelines based on clock settings and reporting source.*

Advanced Information Management System (AIMS)

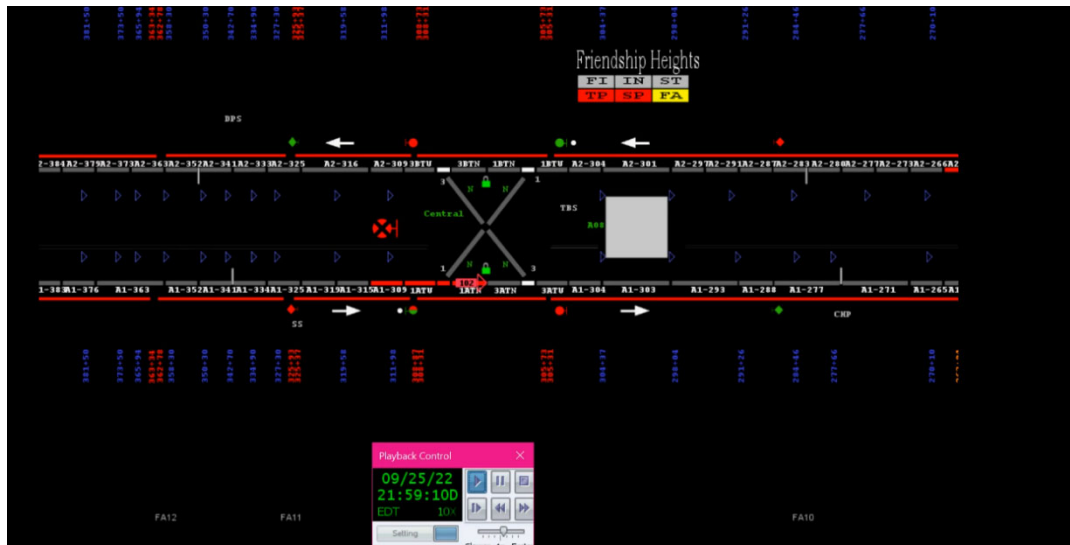


Figure 1 – Train ID 102 located at CM A1 308+00, outside Friendship Heights Station.

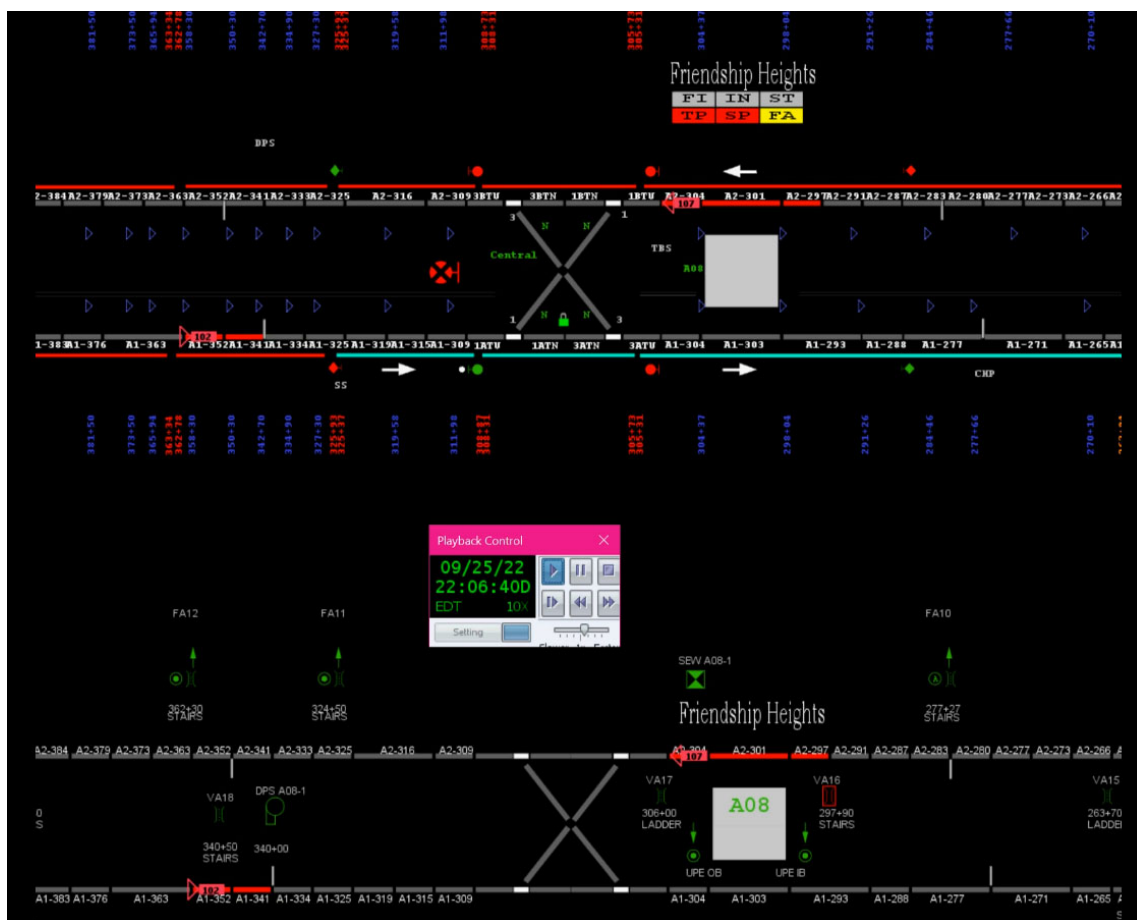


Figure 2 – Fan activation and power de-energized on track 1. Train 102 returning to Medical Center Station

Office of Rail Transportation (RTRA)

The Train Operator that reported this event is on extended leave due to an unrelated event and was not formally interviewed.

Weather

On September 25, 2022, at the time of the incident, NOAA recorded the temperature as 68° F, and some sky cover with an average of 61% humidity and an average windspeed of 7.8 MPH. This event occurred within a tunneled section of the rail system. Weather was not a contributing factor in this event (Weather source: NOAA – Location: Washington, DC).

Related Rules and Procedures

- MSRPH SOP #1A – Command Control and Coordination of Emergencies on the Rail System
- MSRPH SOP # 6, 7, 8 – Procedures for Managing Smoke and Fire on the Metrorail System

Human Factors

Fatigue Risk

The biomathematical fatigue modeling application (SAFTE-FAST Web SFC) was not applied for this event.

Post-Incident Toxicology Testing

Post-Incident Toxicology Testing was not conducted for this event.

Findings

- Train Operator of ID 102 identified and reported the arcing third rail insulator on approach to Friendship Heights Station, track 1.
- RTC instructed Train ID 102 to reverse ends and return to the previous station.
- Responding WMATA personnel verified a smoky odor and observed visual presence of smoke.
- Tunnel ventilation fans were successful in dissipating the smoke.
- Third rail power was de-energized on track 1 between CM 319+00 to 265+00, which stopped the arcing.
- Responding personnel implemented evacuation procedures per SOP 1A.

Immediate Mitigation to Prevent Recurrence

- Train ID 103 was off-loaded before performing a track inspection with a Rail Supervisor aboard.
- DCFEMS were dispatched in response to the incident, assessed the conditions and cleared from the scene.
- Between October 14 and 15, 2022, TRST replaced missing and corroded third rail insulators at CM A1 308+00.

Probable Cause Statement

The probable cause of the Evacuation for Life Safety Reasons at Friendship Heights Station was a defective insulator that failed, resulting in smoke conditions.

Recommended Corrective Actions

There were no significant findings related to the emergency response. Corrective maintenance was performed in the area to replace insulators approaching the end of their useful life. There are no recommended corrective actions.

Appendices

Appendix A – MOC Emergency Tunnel Fan Operation Form

M MOC Emergency Tunnel Fan Operation Form	110-ROCC-ALL-04-01
metro WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY	Approved: 3/3/2022

Call Time: _____
22:00

Incident Description: Arcing Insulator / Trash Fire / etc.

Arcing Ins

Friendship Hgts A08

Nearest Station: Metro Center A01

A08

Chainmarker: xxx + xx

308 + 00

Track #: _____

A1

Train ID: _____

102

Proposed Evacuation Route: (towards which station)

Back towards A08

Playbook/Page Reference:

A97

Incident Zone(s):

BDF

9.25.22

*Maintenance Lead shall scan and save this form in the "R" Shared Network Drive per the ROCC Record Retention Process, 700-ROCC-ALL-04-XX. 51.931

MOC Emergency Tunnel Fan Operation Form, Page 1 of 1

Incident Date: 09/25/2022 Time: 21:57 hours
Final Report – Evacuation for Life Safety Reasons
E22631

Drafted By: SAFE 709 – 11/23/2022
Reviewed By: SAFE 71 – 11/25/2022
Approved By: SAFE 71 – 11/25/2022

Page 13

Appendix B – MTPD Event Report

96



Event Report			
Metro Transit Police Department			
Type of Report	MTPD CCN	Local Jurisdiction	Local CCN
Closed	2022-05520	District of Columbia	

Event Location					
Street	Station Acronym	City, State	County	MTP District	Local District
5250 Wisconsin Ave NW (Jennifer St Elevator)		WASHINGTON, DC 20015			
Date and Time of Event			Date and Time Reported		
From To			9/25/2022 10:00:07 PM		
9/25/2022 10:00:00 AM					
Category					
Rail Station, Line or Right-of-Way		On Bus		Property	
				Other	
Specific Location (Foot Bridge, Kiosk, Platform, Tracks, Etc.)			For Burglary or B&E Only		
			If Hotel Rule Applies, #Premises or Facilities Entered:		
Location Description					

Event Information			
If Incident Use This Block	Offense #		
Incident Classification	Offense Classification		
Incident Description	Description		
	Weapon/Force Type of Activity		
Entry Type:		Number Premises Entered:	
Hate Crime Motivation:			
Bias Motivation			
Offender Suspected of Using:		Modus Operandi (MO):	
Case Status Information		If Case Cleared Exceptionally,	
Case Status (Completed by the Official who signs this report):		Clearance Date	
Reporting Officer (Print)	Badge #	Second Officer (Print)	Badge #
Supervisor's Name (Electronically Approved)		Teletype	Investigator Notified ID#
		#	

MTPD CCN:
ORI-DCMTP0000

Event Report Page 1 of 4

MTPD Event Report, Page 1 of 4

Incident Date: 09/25/2022 Time: 21:57 hours
Final Report – Evacuation for Life Safety Reasons
E22631

Drafted By: SAFE 709 – 11/23/2022
Reviewed By: SAFE 71 – 11/25/2022
Approved By: SAFE 71 – 11/25/2022

Page 14

Victim Information				
Victim Sequence #:		Victim Assistance Provided:		
Last Name, First MI				DOS
Address Type	Address (Street) City, State Zip			
Type Phone	Phone Number			
Work/School Address – Addl. Contact Info				
Email				
Age of Victim	Sex	Race	Ethnicity	Resident Status
Classification of Victim		Type of Victim	This Victim is Related to Which Offense	
Is suspect information available at the time of this report:				
Relationship:				
Injury Type	Responding Ambulance:		Taken Where	
Aggravated Assault/Homicide Information				
Aggravated Assault/Homicide Circumstances			Additional Justifiable Homicide Circumstances	

MTPD CCN:
ORI-DCMTP0000

Event Report Page 2 of 4

MTPD Event Report, Page 2 of 4

Incident Date: 09/25/2022 Time: 21:57 hours
Final Report – Evacuation for Life Safety Reasons
E22631

Drafted By: SAFE 709 – 11/23/2022
Reviewed By: SAFE 71 – 11/25/2022
Approved By: SAFE 71 – 11/25/2022

Page 15

Has a DVR been requested?

Narrative Information

Interruption to rail service given an arching insulator. DC Fire and MTPD units arrived on scene rail determined the incident was no longer occurring. DC Fire cleared and the scene was handed over from MTPD to rail who had ERT arrive to the scene. TSOC

If second CCN is available, insert here:

Additional Narrative on Supplemental Report

MTPD CCN:
ORI-DCMTP0000

Event Report Page 3 of 4

MTPD Event Report, Page 3 of 4

Incident Date: 09/25/2022 Time: 21:57 hours
Final Report – Evacuation for Life Safety Reasons
E22631

Drafted By: SAFE 709 – 11/23/2022
Reviewed By: SAFE 71 – 11/25/2022
Approved By: SAFE 71 – 11/25/2022

Page 16

Additional Narrative

Rail Operator observed an insulator spark. At that time he notified rail and placed the train out of service. While this was occurring due to smoke, rail evacuated the station. DC Fire and MTPD units responded and observed no more smoke or arching insulator issue. Rail ran a two test trains on track 2 and deemed things safe to single track around the observed arching insulator on track 1. MTPD units agreed and reopened the station. ERT arrived on scene and the scene was turned over to rail as a maintenance issue. No bus bridge was ever set up. [REDACTED] conducted a hot wash and cleared the scene. TSOC [REDACTED] notified by SGT [REDACTED] on 09.29.2022 at 1757 hours reference TSA-09-32178-22.

MTPD CCN:
ORI-DCMTP0000

Event Report Page 4 of 4

MTPD Event Report, Page 4 of 4

Incident Date: 09/25/2022 Time: 21:57 hours
Final Report – Evacuation for Life Safety Reasons
E22631

Drafted By: SAFE 709 – 11/23/2022
Reviewed By: SAFE 71 – 11/25/2022
Approved By: SAFE 71 – 11/25/2022

Page 17



Washington Metropolitan Area Transit Authority

METRO RAIL SAFETY RULES AND PROCEDURES HANDBOOK

PERMANENT ORDER

NO. T-21-24	Approved Date: Wednesday, June 02, 2021
Affected Rule/SOP: SOP 6 – Fire and Smoke on the Roadway SOP 7 – Fire and Smoke on Railcars SOP 8 – Fire and Smoke in a Station	Effective Date: Wednesday, September 1, 2021

TO: All WMATA personnel

Scope:

Permanent Order T-21-24 removes Metrorail Safety and Procedures Handbook (MSRPH) Standard Operating Procedures (SOPs) 6, 7 and 8 including all appendices and replaces them with a new SOP: Procedures for Managing Smoke and Fire on the Metrorail System.

Purpose:

The purpose of Permanent Order T-21-24 is to detail a revised SOP which outlines Procedures for Managing Fire and Smoke on the Metrorail System.
This SOP forms part of the agreed actions to respond to Washington Metrorail Safety Commission (WMSC) Corrective Action Plan (CAP) WMSC-20-C0053.
The CAP requires Fire and Smoke procedures to be reviewed and updated to ensure all hazardous situations and responsibilities are adequately addressed in collaboration with OEM, SAFE, Fire Marshall, MTPD and the COG Fire Chiefs' Passenger Rail Safety Subcommittee

Appendix D – Maximo Work Orders



17362771
Type: CM

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



Page 1 of 2
MX76PROD

Status: CLOSE
09/29/2022 09:37

Work Description: A08 ARCING INSULATOR A1-308+00
Job Plan Description:

At A08 Trk 1 CM 308+00, personnel responded to an emergency arcing insulator and removed it from 3rd, Area has been added on the schedule for repairs.

Changed Asset from TA08 to TA1. 9/29/22, REPA

Work Information			
Asset: TA1	A-LINE, TRACK-1 EQUIPMENT PARENT	Owning Office: TRST	Parent:
Asset Tag:		Maintenance Office: TRST-TRAK	Create Date: 09/25/2022 22:31
Location: A	ORIM, A Line, Shady Grove	Labor Group: TRST-TRAK-ERT	Actual Start: 09/26/2022 07:45
Work Location:		Crew:	Actual Comp: 09/26/2022 07:45
Failure Class: TRSTTHRD TRST, THIRD RAIL		GL Account: WMATA-02-33640-50499360-042-*****OPR**	
Problem Code: D47 ARGING		Supervisor:	Target Start:
Requested By:		Requestor Phone:	Target Comp:
Chain Mark Start: 308		Chain Mark End: 308	Scheduled Start:

Related Records			
Failure Reporting			
Cause	Remedy	Supervisor	Remark Date

Remarks:

Log					
Date	Class	Created By	Subject	Description	Long Description
9/26/22	WORKORDER				<p><p class="xmsonormal" style="background:white"><u>K. Pearson: </u><o:p></o:p></p></p> <p><div>At A08 Trk 1 CM 308+00, personnel responded to an emergency arcing insulator and removed it from 3rd, Area has been added on the schedule for repairs.. </div></p>

Maximo Work Order 17362771, Page 1 of 1

Incident Date: 09/25/2022 Time: 21:57 hours
Final Report – Evacuation for Life Safety Reasons
E22631

Drafted By: SAFE 709 – 11/23/2022
Reviewed By: SAFE 71 – 11/25/2022
Approved By: SAFE 71 – 11/25/2022

Page 19



17389602
Type: PCM

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



Page 1 of 2
MX76PROD

Status: CLOSE
10/17/2022 10:34

Work Description: A08 Track #1, 3rd Rail Insulators Renewal.
Job Plan Description:

- Replace 2 Missing 3rd rail cover boards at A1 306+00
- Replace missing / corroded 3rd rail insulators between Cm A1 308+00 to 310+00
- A1 313+40 (1) missing insulator.
- A1 305+30 3A switch, replace 1 broken housetop bolt.

NOTE: Support Structure with 3rd rail insulator grout repairs.

Work Information			
Asset: TA1	A-LINE, TRACK-1 EQUIPMENT PARENT	Owning Office: TRST	Parent:
Asset Tag:		Maintenance Office: TRST-TRAK	Create Date: 10/12/2022 00:00
Location: A	ORIM, A Line, Shady Grove	Labor Group: TRST-TRAK-SHCP	Actual Start: 10/15/2022 23:07
Work Location:		Crew:	Actual Comp: 10/17/2022 10:34
Failure Class: TRSTRAIL	TRST, RAIL	GL Account: WMATA-33-33620-50499180-042-CIP0024_33****-CAP****-2023****-***** EQUIP_MATL****-EQPT*-EQPT*-*****	
Problem Code: D11	DETERIORATING	Supervisor:	Target Start:
Requested By:		Requestor Phone:	Target Comp:
			Scheduled Start: 10/12/2022 00:00

Task IDs						
Task ID						
10 Third Rail Insulator Renewal Personnel installed 10 third rail insulators between CM: A1 313+00 and 313+90.						
Component: 200-C01 INSULATOR		Work Accompl: REPLACED NEW		Reason:	Status: CLOSE	Position: T
					Warranty?: N	
Start Marker: 313	Start Offset: 0	Quantity: 10	Linear Footage:	Square Footage:	Actual Start: 10/14/2022	
End Marker: 313	End Offset: 90					Actual Finish: 10/15/2022

Actual Labor										
Task ID	Labor	Start Date	End Date	Start Time	End Time	Regular Hours	Regular Line Cost	Premium Hours	Premium Line Cost	Total Line Cost
10		10/14/2022	10/15/2022	22:00	06:00	8.00	\$252.56	0.00	\$0.00	\$252.56
10		10/14/2022	10/15/2022	22:00	06:00	8.00	\$350.15	0.00	\$0.00	\$350.15
10		10/14/2022	10/15/2022	22:00	06:00	8.00	\$289.96	0.00	\$0.00	\$289.96
10		10/14/2022	10/15/2022	22:00	06:00	8.00	\$289.96	0.00	\$0.00	\$289.96
10		10/14/2022	10/15/2022	22:00	06:00	8.00	\$289.96	0.00	\$0.00	\$289.96
10		10/14/2022	10/15/2022	22:00	06:00	8.00	\$336.74	0.00	\$0.00	\$336.74

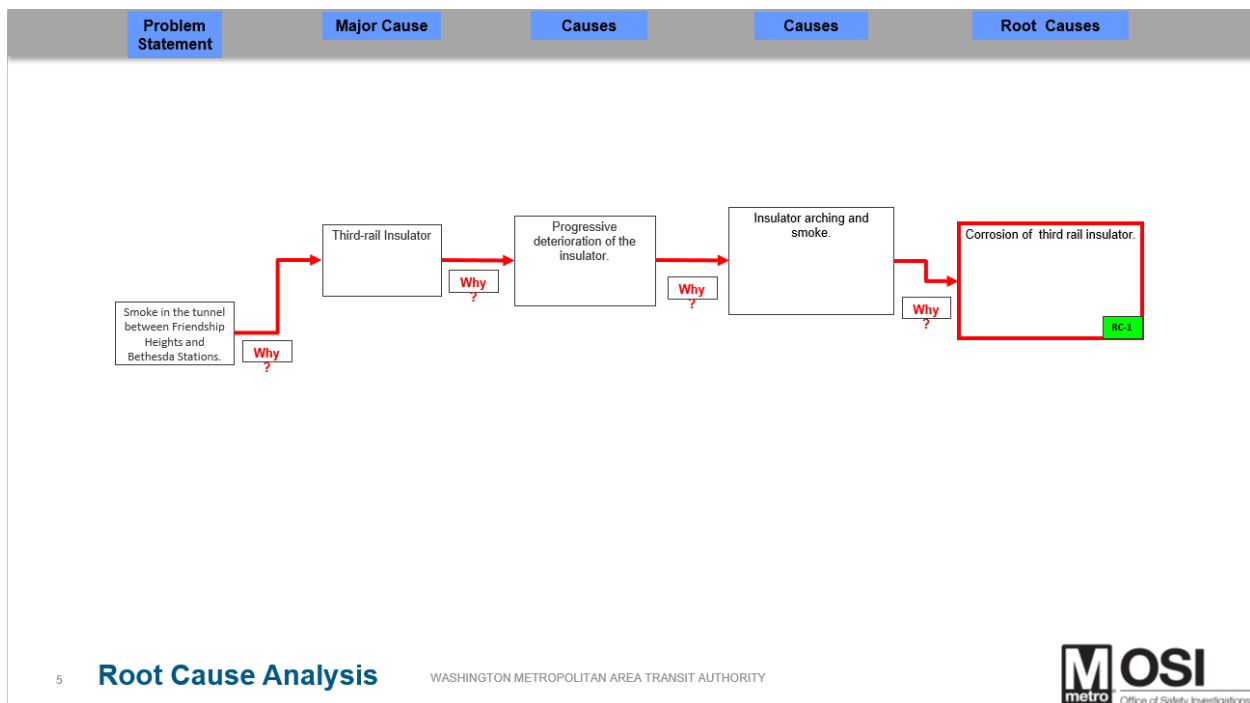
Maximo Work Order 17389602, Page 1 of 1

Incident Date: 09/25/2022 Time: 21:57 hours
Final Report – Evacuation for Life Safety Reasons
E22631

Drafted By: SAFE 709 – 11/23/2022
Reviewed By: SAFE 71 – 11/25/2022
Approved By: SAFE 71 – 11/25/2022

Page 20

Appendix E – Root Cause Analysis



5

Root Cause Analysis

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

