



**WMSC Commissioner Brief: W-0221 – Evacuation for Life Safety Reasons – Woodley Park Station – January 21, 2023**

*Prepared for Washington Metrorail Safety Commission meeting on May 16, 2023*

**Safety event summary:**

Following a series of smoke and fire events over the course of the afternoon, and reports of smoke in the station, Woodley Park-Zoo/Adams Morgan Station was evacuated just before 5 p.m. on January 21, 2023.

Red Line trains were single tracking through the station due to weekend track work. At 12:46 p.m., a track worker reported a fire on the roadway on the active passenger track, Track 1. Ventilation fans for the station were already active at the time. Service was stopped. A Metrorail Emergency Response Team identified that debris had collected on an insulator, causing arcing that had then ended. Metrorail did not evacuate the station or de-energize power. A Rail Operations Information Center Information Controller called for a D.C. Fire and EMS response. Metrorail's Emergency Response Team determined the insulator did not need to be removed or replaced. Service was restored at 1:09 p.m.

At 4:06 p.m., an Emergency Response Team member informed the Rail Operations Control Center that several riders were reporting smoke in the area of the platform, and that they themselves saw some smoke. Despite the Emergency Response Team member being present and reporting smoke, the Rail Operations Information Center instructed the Station Manager to check for smoke. The Station Manager stated they did not see any issues.

The Radio Rail Traffic Controller requested the Maintenance Operations Center activate ventilation fans.

At 4:24 p.m., an Emergency Response Team that had been granted Foul Time to inspect the roadway reported that nothing was found and that they would stand by to observe trains passing through to see if there were any additional signs of arcing.

At 4:33 p.m., a Metro Transit Police Department officer stated that the fire was extinguished and service was continuing.

Train 105 departed the station at 4:41 p.m., initiating arcing again on Track 1 that was observed by Metro Transit Police Department and Emergency Response Team personnel and reported to the Rail Operations Control Center by a Rail Supervisor on scene.

At that point, Metrorail stopped train traffic. The Emergency Response Team individual then radioed in that it was an arcing stud bolt not an arcing insulator. The Radio Rail Traffic Controller designated the Emergency Response Team individual as the on-scene commander, even though Metro Transit Police Department personnel (should have been on-scene commander) and a Rail Supervisor (should have been forward liaison) were present. Further, the Metro Transit Police Department personnel did not have situational awareness due to a lack of incident command, as further demonstrated by a request to the Mission Assurance Coordinator for details on the situation.

The Rail Operations Control Center Assistant Operations Manager called for a D.C. Fire and EMS response at 4:46 p.m. (A previous conversation between the Operations Manager and Rail Traffic Controller at 4:23 p.m. indicated that the fire department would not be responding due to Metrorail reporting this to be a maintenance issue.)



The Station Manager evacuated Woodley Park Station for the safety of riders at around 4:48 p.m. A Rail Supervisor confirmed that the station platform was evacuated at 4:56 p.m. and that the station gates had been closed at 5:08 p.m., more than an hour after the initial report of smoke.

At 4:50 p.m., the Radio Rail Traffic Controller directed the Train Operator of Train 107 approaching Woodley Park Station to reverse ends and move the train back to Dupont Circle Station.

Power was de-energized at 4:52 p.m., which stopped the arcing. The Emergency Response Team determined this arcing to be related to a bolt and fastener. Both were replaced.

Power was restored at 5:35 p.m. to allow for a test train.

During this event, Metrorail did not coordinate and communicate with all necessary personnel, including the Fire Liaison in the Rail Operations Control Center. This led to the Fire Liaison not being made aware of initial reports of smoke and not being aware that Metrorail had eventually contacted D.C. Fire and EMS.

**Probable Cause:**

The probable cause of this event was Metrorail's insufficient maintenance and cleaning practices.

**Corrective Actions:**

Examples of related open CAPs

- C-0162 addresses the finding 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. WMATA committed to developing and implementing the Incident Management Framework that aligns with the National Incident Management System/Incident Command System (NIMS/ICS) and provide safety promotion and training on it. (Expected date of completion January 2025)
- C-0052 addresses the finding that there is no consistent, clear, concise, immediate and reliable Metrorail communication process for safety-critical information between Metrorail personnel and fire liaison. (Expected date of completion August 2024)

**WMSC staff observations:**

Metrorail did not sufficiently investigate when trained personnel reported smoke in the station to take immediate steps to prevent recurrence.



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

**FINAL REPORT OF INVESTIGATION A&I E23046**

<b>Date of Event:</b>	January 21, 2023
<b>Type of Event:</b>	Evacuation for Life Safety Reasons – Fire/Smoke
<b>Incident Time:</b>	16:41 Hours
<b>Location:</b>	Woodley Park Station, track 1 – CM A1 133+00
<b>Time and How received by SAFE:</b>	16:45 Hours
<b>WMSC Notification Time:</b>	18:22 Hours
<b>Responding Safety Officers:</b>	WMATA: OEP WMSC: None Other: None
<b>Rail Vehicle:</b>	N/A
<b>Injuries:</b>	None
<b>Damage:</b>	Fasteners
<b>Emergency Responders:</b>	Metro Transit Police Department (MTPD), District of Columbia Fire Department and EMS (DCFEMS)
<b>SMS I/A Incident Number:</b>	20230121#105662MX (20230121#105659MX)

# Woodley Park Station – Evacuation for Life Safety Reasons

January 21, 2023

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## **Abbreviations and Acronyms**

<b>AIMS</b>	Advanced Information Management System
<b>ARS</b>	Audio Recording System
<b>CAP</b>	Corrective Action Plan
<b>CCTV</b>	Closed-Circuit Television
<b>CM</b>	Chain Marker
<b>DEFEMS</b>	District of Columbia Fire and Emergency Services
<b>ERT</b>	Emergency Response Team
<b>MOC</b>	Maintenance Operations Center
<b>MSRPH</b>	Metrorail Safety Rules and Procedures Handbook
<b>MTPD</b>	Metro Transit Police Department
<b>NOAA</b>	National Oceanic and Atmospheric Administration
<b>RTC</b>	Rail Traffic Controller
<b>RTRA</b>	Office of Rail Transportation
<b>ROCC</b>	Rail Operations Control Center
<b>ROIC</b>	Rail Operations Information Center
<b>SAFE</b>	Department of Safety
<b>SMS</b>	Safety Measurement System
<b>WMATA</b>	Washington Metropolitan Area Transit Authority
<b>WMSC</b>	Washington Metrorail Safety Commission

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

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**Executive Summary**

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

On Saturday, January 21, 2023, at 12:46 hours a track worker reported a fire in the roadway within Woodley Park Station's platform limits on track 1 at Chain Marker (CM) A1 133+00. At the time, the station was single-tracking due to scheduled maintenance on track 2. Emergency Response Team (ERT) workers responded and identified debris collected on an insulator was the cause. The station was not evacuated as a result of this event. Service was restored at 13:09 hours with no injuries or damage reported.

At 16:06 hours, an ERT unit contacted the Rail Operations Control Center (ROCC) and advised that several customers were complaining of smoke in the area of the platform. The ERT unit also reported observing some smoke. At 16:08 hours, the Rail Operations Information Center (ROIC) asked for the Station Manager to check for smoke in the roadway around the platform area. The Station Manager advised that they did not observe any issues. At 16:11 hours, the Radio Rail Traffic Controller (RTC) requested that the Maintenance Operations Center (MOC) Controller activate fans and requested the Metro Transit Police Department's (MTPD) assistance with smoke on the roadway on track 1. Service was then suspended. At 16:33 hours, the Radio RTC advised all clear and track 1 was returned to revenue service. ERT and MTPD remained on the scene and advised that service resumed at 16:37 hours.

At 16:41 hours, Train 105 departed the station while MTPD and ERT were still on the platform when arcing started again on track 1. All train traffic was halted at that time. ROCC personnel notified DCFEMS at 16:46 hours. Train 107 was stopped prior to entering the station and was directed to return to Dupont Circle Station at 16:50 hours. Plans were announced to de-energize track 1's third rail power after Train 107 arrived back at Dupont Circle Station.

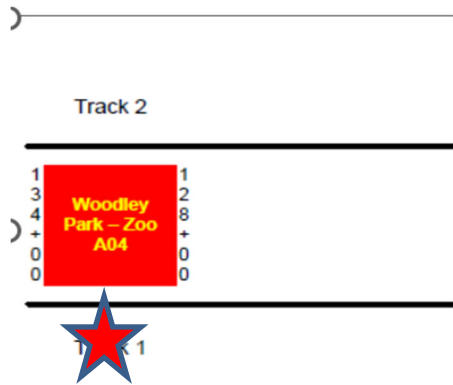
A Bus Bridge request was initiated by MTPD. The Radio RTC made an announcement for each train operator to make announcements to their customers regarding the suspension of service between Dupont Circle and Friendship Heights Stations. Power was de-energized at 16:52 hours, which addressed the arcing and smoke generation. DCFEMS dispatched units at 16:54 hours. After assessing the scene, DCFEMS reported observing no fire or smoke and departed at 17:10 hours. ERT assessed the source of the arcing and determined it to be a bolt and fastener and replaced both. Power was restored to track 1 at 17:35 hours. Train 713 ran a successful non-revenue test at normal speed and the ERT determined track 1 to be safe for revenue service.

The probable cause of the Evacuation for Life Safety Reasons at Woodley Park Station was a defective fastener that grounded, resulting in arcing and smoke conditions. There were no significant findings related to the evacuation or incident response.

**Incident Site**

Woodley Park Station, track 1 – CM A1 133+00

## Field Sketch/Schematics



*\*Locations are approximate. Not to scale.*

## Purpose and Scope

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

## Investigative Methods

The investigative methodologies included the following:

- Site Assessment through video and document review.
- Informal Interviews – Collected through conversations with individuals during the investigation to provide background and supporting information. Written statements were reviewed from personnel present during the event.
- Documentation Review – Collection of relevant work history information and process documentation contained in WMATA systems of record. These records include:
  - Metrorail Safety Rules and Procedures Handbook (MSRPH)
  - Metrorail Stations Standard Operating Procedures Handbook
  - MOC Emergency Tunnel Fan Activation Form(s)
  - National Oceanic and Atmospheric Administration (NOAA)
  - MTPD Event Report
  - ROCC Incident Report
  - Maximo
- System Data Recording Review – 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)
  - Advanced Information Management Systems (AIMS)

## Investigation

On Saturday, January 21, 2023, at 12:46 hours a track worker reported a fire within Woodley Park Station's platform limits on track 1 at CM A1 133+00. The station was already single tracking due to scheduled maintenance on track 2. ERT personnel responded and identified a small trash fire on an insulator as the cause. The station was not evacuated as a result of this event. Service was restored at 13:09 hours with no injuries or damages reported.

At 16:06 hours, an ERT unit contacted the ROCC and advised that several customers were complaining of smoke in the area of the platform. The ERT unit reported observing some smoke. At 16:08 hours, the ROIC asked for the Station Manager to check for smoke in roadway around the platform area. The Station Manager advised that they did not observe any issues. At 16:11 hours, the Radio RTC requested that the MOC Controller activate fans and requested MTPD's assistance with smoke on the roadway on track 1.

	<b>MOC Emergency Tunnel Fan Operation Form</b>	110-ROCC-ALL-04-01
WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY		Approved: 3/3/2022
Call Time:	16:19	
<b>RAIL 2 [REDACTED] REPORTED SMOKE WITHIN THE STATION</b>		
Incident Description: <i>Arcing Insulator / Trash Fire / etc.</i>		
<hr/>		
<b>WOODLEY PARK(A04)</b>		
Nearest Station: <i>Metro Center A01</i>		
<hr/>		
<b>A1/2 131+00</b>		
Chainmarker: <i>xxx + xx</i>		
<hr/>		
<b>1&amp;2</b>		
Track #:		
<hr/>		
<b>N/A</b>		
Train ID:		
<hr/>		
<b>WOODLEY PARK(A04)</b>		
Proposed Evacuation Route: <i>(towards which station)</i>		
<hr/>		
<b>A-49</b>		
Playbook/Page Reference:		
<hr/>		
<b>STATION</b>		
Incident Zone(s):		
<hr/>		
<b>[REDACTED]</b>		<b>01-21-23 @ 16:23</b>
Name:		Date:
<hr/>		
<small>*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</small>		

Document 1 – MOC Emergency Tunnel Fan Operation Request Form



Service was suspended on track 1. At 16:33 hours, the Radio RTC advised all clear and track 1 was in revenue service. ERT and MTPD remained on the scene and advised revenue service resumed at 16:37 hours.

At 16:41 hours, Train 105 departed while Transit and ERT were still on the platform when arcing became visible on track 1. All train traffic was halted at that time. AOM notified DCFEMS at 16:46 hours. Train 107 was stopped prior to entering the station and was directed to return to Dupont Circle Station at 16:50 hours. Plans were announced to de-energize track 1's third rail power when Train 107 arrived at Dupont Circle Station.

A Bus Bridge request was initiated by MTPD. The Radio RTC made an announcement for each train operator to make announcements to their customers regarding the suspension of service between Dupont Circle and Friendship Heights Stations. Power was de-energized at 16:52 hours, which addressed the arcing and smoke generation. DCFEMS dispatched units at 16:54 hours. DCFEMS reported observing no fire or smoke and departed at 17:10 hours. ERT replaced the fastener. Power was restored to track 1 at 17:35 hours. Train 713 ran a successful non-revenue test at normal speed and the ERT declared track 1 revenue ready.

### Chronological Event Timeline

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

Time	Description
<b>Event #1</b>	
12:43:34 Hours	<u>Track Unit</u> : Contacted the Radio RTC to advise an arcing insulator in the roadway on track 1. Radio RTC stops Train ID 105 on track 1 on approach from Dupont Circle Station. [OPS 1]
12:45:51 Hours	<u>Radio RTC</u> : Instructed Train ID 105 at Dupont Circle, track 1 to reverse ends and stopped Train ID 106 at Dupont Circle, track 2. [OPS 1]
12:46:20 Hours	<u>Track Unit</u> : Advised Radio RTC that track appeared to be ok, no smoke or fire; advised to run test train to observe. [Phone]
12:47:31 Hours	<u>ROIC Controller</u> : Advised SOCC of the event and notified DCFEMS. [Phone]
12:49:13 Hours	<u>Train ID 105</u> : Reported they were keyed down and had reversed ends to return to Dupont Circle, track 1. [OPS 1]
12:49:13 Hours	Radio RTC instructed Train ID 106 to offload at Dupont Circle, track 2 and prepare for the test train to Woodley Park. [OPS 1]
12:50:46 Hours	SOCC requested MTPD dispatch to Woodley Park. [Phone]
12:52:09 Hours	DCFEMS 1st unit dispatched to Woodley Park. [Open MhZ]
12:52:48 Hours	<u>ROCC Fire Liaison</u> : Contacted Battalion 5 and advised status of track and Metro personnel, exhaust fans on with no fire or smoke. [OPS 1]
12:53:02 Hours	<u>MTPD Dispatch</u> : Requested a status update and was advised ERT and TRST would respond. Inquired if Power was energized. [Phone]
12:53:58 Hours	<u>MTPD Dispatch</u> : Dispatched Units to Woodley Park. [OPS 1]
12:54:28 Hours	<u>MTPD Dispatch</u> : Advised units the DCFEMS was enroute, no fire or smoke was observed on CCTV and requested to advise of the Incident Command location. [OPS 1]
12:55:10 Hours	DCFEMS Engine 21 arrived on scene. [OPS 1]
12:56:25 Hours	DCFEMS advised ROCC Fire Liaison that the trash fire on roadway was extinguished. [OPS 1]
12:56:39 Hours	<u>MTPD Units</u> : Arrived on scene. [OPS 1]

<b>Time</b>	<b>Description</b>
12:58:16 Hours	<u>DCFEMS</u> : Battalion Chief arrived on scene assumed Unified Command. [OPS 1]
12:59:24 Hours	<u>DCFEMS</u> : Engine 21 departed Woodley Park, Engine 21 remained. [OPS 1]
13:01:01 Hours	<u>DCFEMS</u> : Battalion Chief cleared Engine 21, canceled Command and cleared. [OPS 1]
13:02:53 Hours	<u>Power Desk</u> : Dispatched 2 units to Woodley Park. [Phone]
13:02:53 Hours	<u>MTPD Unit</u> : Advised that the Battalion Chief advised that the trash fire was extinguished and to send a test train. [OPS 1]
13:04:24 Hours	MAC advised MTPD that the station would re-open with service on track 1, after test train results. [Phone]
13:05:17 Hours	<u>Radio RTC</u> : Instructed Shady Grove and Glenmont Terminals to begin dispatching trains. [Phone]
13:09:29 Hours	MTPD Unit reported that TRST advised that track 1 could be placed back in service. [OPS 1]
<b>Event #2</b>	
16:06:21 hours	ERT unit contacted ROCC and advised that several customers were complaining of smoke on the platform. [OPS 1]
16:11:42 hours	Button RTC contacted MOC Controller and requested fan activation. [OPS 1]
16:30:09 Hours	<u>Power Desk</u> : Advised personnel were "all clear" from the second report of smoke. [Phone]
16:33:54 Hours	<u>MTPD Dispatch</u> : Requested an update from the Unit on-scene. [OPS 1]
16:33:59 Hours	<u>MTPD Unit</u> : Advised the fire was extinguished prior to their arrival, and reported service was resumed. [OPS 1]
16:39:03 Hours	<u>RTRA Supervisor</u> : Arrived on scene at Woodley Park. [OPS 1]
16:44:41 Hours	<u>MTPD Unit</u> : Reported observing sparking. [OPS 1]
16:44:36 Hours	<u>ROIC Controller</u> : Notified MOC and requested the status of tunnel fans. MOC Reported that fans were activated. [Phone]
16:45:23 Hours	<u>RTRA Supervisor</u> : Reported to Radio RTC that the arcing insulator was flaring back up at Woodley Park, track 1. [OPS 1]
16:45:31 Hours	<u>Radio RTC</u> : Train ID 107, approaching Woodley Park stop your train. <u>Train ID 107</u> : Acknowledged. <u>Radio RTC</u> : Key down and reverse ends. <u>Train ID 107</u> : Acknowledged and repeated. <u>Radio RTC</u> : Make announcements and return Dupont Circle. [OPS 1]
16:46:16 Hours	<u>ERT Unit</u> : It is not an arcing insulator, it's an arcing stud bolt. <u>Radio RTC</u> : For safety, service is shut down on track 1. You are the On Scene Commander, trying to get that train out of there so we can drop power and you can fix it. <u>ERT Unit</u> : Acknowledged and repeated. [OPS 1]
16:46:46 Hours	<u>ROCC</u> : Contacts DCFEMS. [Phone]
16:46:56 Hours	<u>Train ID 107</u> : I'm in the lead car, do you want me to return to Dupont Circle? <u>Radio RTC</u> : Yes, you have absolute block back to Dupont Circle. <u>Train ID 107</u> : Acknowledged and repeated. [OPS 1]
16:48:08 Hours	<u>Radio RTC</u> : Train ID 104, hold at Twinbrook. [OPS 1]

<b>Time</b>	<b>Description</b>
16:48:21 Hours	<u>Radio RTC</u> : Train ID 114, hold at NOMA. [OPS 1]
16:48:49 Hours	<u>MTPD Unit</u> : The Station Manager is closing Woodley Park. [MTPS 1X]
16:48:51 Hours	<u>Radio RTC</u> : Train ID 102, key down make announcement to customers, reverse ends. <u>Train ID 102</u> : Acknowledged and repeated. [OPS 1]
16:48:53 Hours	<u>ERT Unit</u> : Advised MOC that they will need to remove the fastener. [Phone]
16:48:58 Hours	<u>MTPD Dispatch</u> : MTPD Units and MAC advised that Woodley Park Station was closed. <u>MAC</u> : Affirmative, fire is on the way. As soon as Train 107 is off the tracks they will drop power. [MTPD 1X]
16:49:52 Hours	<u>Radio RTC</u> : Train ID 107, are you moving? [OPS 1]
16:50:23 Hours	<u>ROCC Fire Liaison</u> : Suggested contacting DCFEMS. [Phone]
16:51:10 Hours	<u>ERT Unit</u> : Requested third rail power deenergized, so that they could remove the fastener. <u>Radio RTC</u> : Confirmed power would be de-energized when Train ID 107 reaches Dupont Circle. [OPS 1]
16:51:55 Hours	<u>MTPD Unit</u> : Requested a bus bridge. [MTPD 1X]
16:51:59 Hours	<u>MTPD Unit</u> : ROCC advised that service was suspended from Dupont Circle to Friendship Heights and bus bridge was being arranged. [Phone]
16:52:00 Hours	<u>Radio RTC</u> : Announcement to Train Operators that service was suspended between Dupont Circle to Friendship Heights and to make announcements to customers. [OPS 1]
16:52:20 Hours	<u>ERT Unit</u> : Work under AMF or FT? <u>Radio ROCC</u> : Foul Time. [Phone]
16:52:40 Hours	Third rail power was de-energized on track 1. [AIMS]
16:53:01 Hours	<u>Radio RTC</u> : Advised that power was de-energized and granted foul time, blue blocks were in place, advise when clear. <u>ERT Unit</u> : Acknowledged and repeated. [OPS 1]
16:54:00 Hours	<u>DCFEMS Dispatch</u> : Fire Units dispatched to Woodley Park. [Open Mhz]
16:55:33 Hours	<u>ERT Unit</u> : Advised that power was de-energized at CM A1 134+00. <u>Radio RTC</u> : Confirmed and inquired if test train will be needed later. <u>ERT Unit</u> : Yes, test train needed. [OPS 1]
16:56:06 Hours	<u>RTRA Supervisor</u> : Advised Radio RTC that Woodley Park was closed and no customers on the platform. [OPS 1]
16:56:57 Hours	<u>ROCC Fire Liaison</u> : DCFEMS assessed for remaining smoke, reported no fire present. [MTPD 1X]
16:56:57 Hours	<u>MTPD Unit</u> : Service was suspended between Friendship Heights and Dupont Circle. [MTPD 1X]
16:57:48 Hours	<u>Radio RTC</u> : Announcement to Operators that service was suspended and bus bridge requested. [OPS 1]
17:08:58 Hours	<u>Station Manager</u> : Advised ROIC that all station gates closed. [Phone]
17:09:13 Hours	<u>MTPD Unit</u> : Request that the MAC advise on the situation update. <u>MAC</u> : Responded to anticipate that service would resume soon. <u>MTPD Unit</u> : Advised that DCFEMS departing. [Phone]

<b>Time</b>	<b>Description</b>
17:10:14 Hours	DCFEMS advised that there was no smoke or fire, no services needed. [Open Mhz]
17:12:29 Hours	Power Desk briefed the Director of Rail Operations. [Phone]
17:33:35 Hours	<u>Button RTC</u> : Advised ROIC that power would be restored on track 1 between Cleveland Park and Dupont Circle. <u>Button RTC</u> : Advised MTPD that power would be restored on track 1 between Cleveland Park and Dupont Circle. [Phone]
17:34:27 Hours	<u>Radio RTC</u> : Contacted the Power Desk and requested power restoration track 1 only Dupont Circle to Cleveland Park. [Phone]
17:35:49 Hours	<u>Power Desk</u> : Reported Power Restoration on track 1 only Dupont Circle to Cleveland Park. <u>MOC</u> : Requested Power Desk to restore power. Restoration was complete on track 1 only Dupont Circle to Cleveland Park. [Phone]
17:37:16 Hours	<u>Radio RTC</u> : Advised that Train ID 713 at Dupont Circle Station, track 1 what speed for test train? Stop or continue by station. <u>ERT Unit</u> : Normal speed, then continue by station. <u>Train ID 713</u> : Acknowledged and repeated. <u>Radio RTC</u> : Train ID 713 in service as Train ID 113 at Cleveland Park. <u>Train ID 713</u> : Acknowledged and repeated. [OPS 1]
17:41:28 Hours	<u>ERT Unit</u> : Reported that the Test Train was cleared on track 1 and revenue ready. <u>Radio RTC</u> : Acknowledged and repeated. [OPS 1]
17:41:42 Hours	<u>Radio RTC</u> : Announcement to resume normal service on track 1. [OPS 1]

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

## **Weather**

On January 21, 2023, at the time of the incident, NOAA recorded the temperature as 43° F, with overcast skies, winds at 6 mph and 53% humidity. The event occurred within a tunneled section of the rail system. Weather was not a contributing factor in this incident (Weather source: NOAA – Location: Washington, DC).

## **Human Factors**

### Fatigue

#### *Signs and Symptoms of Fatigue*

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

#### *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

- ERT and MTPD personnel on scene identified and reported the location of the arcing fastener and bolt.
- RTC instructed Train ID 107 to reverse ends and return to previous station.
- ERT identified maintenance issues requiring immediate replacement.
- Tunnel ventilation fans were already active from earlier report and assisted in successfully dissipating the smoke.
- Responding personnel implemented evacuation procedures, per SOP.

## Immediate Mitigation to Prevent Recurrence

- Train ID 107 was stopped prior to entering the station and returned to the previous station and other trains were appropriately directed.
- DCFEMS were dispatched in response to the incident, assessed the conditions and cleared the scene.
- Failed equipment was removed, and test train successfully traversed the area.

## Probable Cause Statement

The probable cause of the Evacuation for Life Safety Reasons at Woodley Park Station was a defective fastener that grounded, resulting in arcing and smoke conditions. There were no significant findings related to the evacuation or incident response.

## Recommended Corrective Actions

There are no recommended corrective actions.

## Appendices

### Appendix A – OEP Incident Response Report

Submitted by: Richard B. Shine Jr.



#### SAFE OEP Incident Response Report

##### Overview

<b>Incident Date/Time:</b> 2023-01-21 1617	<b>Responder 1:</b> [REDACTED] <b>MAC 1:</b> [REDACTED] <b>MAC 2:</b> N/A	<b>Additional Responders:</b> N/A <b>Incident Type:</b> Arcing Insulator
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##### Incident Metrics

<b>OPS Channel:</b> OPS 2	<b>On Scene Time:</b> 1722
<b>MTPD Channels:</b> ["MTPD 1x "]	<b>Disregard Time:</b> N/A
<b>Bus/Rail Yard Channel:</b> N/A	<b>Time of Recovery:</b> N/A
<b>Initial Incident Time:</b> 1617	<b>In-Service Time:</b> 1751
<b>Dispatch Time:</b> 1617	<b>Command Est. Time:</b> No command
<b>Response Time:</b> 1618	<b>Transfer of Command Time:</b> N/A

##### Incident Personnel

<b>Metro IC:</b> [REDACTED]	<b>Maintenance Lead (ERT):</b> ERT [REDACTED]
<b>Jurisdictional IC:</b> District of Columbia	<b>Investigations Lead (MTPD):</b> N/A
<b>Fire Liaison ROCC:</b> [REDACTED]	<b>Investigations Lead (Safety):</b> N/A
<b>Forward Liaison (RTRA Supervisor):</b> N/A	<b>Transportation Lead (Bus TFS):</b> N/A
<b>Forward Liaison (MTPD):</b> N/A	

Document 2 - OEP Incident Response Report, Page 1 of 2

Submitted by: [REDACTED]

### Incident Overview

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**Was Power removed:** Yes - Supervisory

**Red Tag (if applicable):**N/A

**Incident Narrative:**

Fire found on 3rd rail. Fire Dept dispatched. ERT on scene found an Arcing stud bolt. Third rail de-energized. Service stopped between Friendship Heights and Dupont. Bus bridge activated. ERT replaced the stud bolt. Test train came through with with negative results. Service restored back to normal.

**Incident Successes:**

N/A

**Opportunities for Improvement:**

N/A

Document 3 - OEP Incident Response Report, Page 2 of 2

# Appendix B – 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: 16:19

RAIL 2 [REDACTED] REPORTED SMOKE WITHIN THE STATION—  
Incident Description: *Arcing Insulator / Trash Fire / etc.*

WOODLEY PARK(A04)  
Nearest Station: *Metro Center A01*

A1/2 131+00  
Chainmarker: *xxx + xx*

1&2  
Track #:

N/A  
Train ID:

WOODLEY PARK(A04)  
Proposed Evacuation Route: *(towards which station)*

A-49  
Playbook/Page Reference:

STATION  
Incident Zone(s):

[REDACTED] 01-21-23 @ 16:23  
Name: Date:

\*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

Document 4 - MOC Emergency Tunnel Fan Operation Request Form



# Appendix C – Root Cause Analysis

Problem Statement	Major Cause	Causes	Causes	Root Causes
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