750 First St. NE • Ste. 900 • Washington, D.C. 20002 Office: 202-384-1520 • Website: www.wmsc.gov

Evacuation for Life Safety Reasons

At or Near L'Enfant Plaza Station, Foggy Bottom Station,

Eisenhower Avenue Headquarters and Benning Road Station

April 1, 2024, May 18, 2024, July 2, 2024 and July 22, 2024

Document Purpose

This WMSC written report on WMATA Metrorail's safety event investigation and review of Metrorail's findings in accordance with the WMSC Program Standard, in conjunction with the attached Metrorail investigation report that has undergone WMSC staff review, feedback, and Metrorail revision, describes the investigation activities, identifies factors causing or contributing to the accident, and sets forth ongoing, additional, or upcoming corrective actions and further oversight work (such as inspections and audits) as necessary or appropriate. The WMSC's ongoing oversight during the investigative process, including safety event reporting and verification, participation in investigative interviews, data review, consistent communication with the Metrorail investigations team, and feedback on Metrorail's reports leads to further improvements prior to consideration of the reports by WMSC Commissioners for adoption. The WMSC's safety event investigation oversight assures the sufficiency and thoroughness of Metrorail's investigations. The WMSC Commissioners are considering these documents (the WMSC review and Metrorail's investigation report) as a unified item for adoption at the Washington Metrorail Safety Commission meeting on March 4, 2025

WMSC staff recommend adoption of this investigation.

The WMSC's audit of Metrorail's Emergency Management and Life safety programs, issued on January 29, 2025, demonstrates that Metrorail has made systemic improvements such as familiarization training with jurisdictional partners, station manager emergency preparedness training and updated fire maps. The audit also identified critical areas where Metrorail is not following its procedures and requirements, is not addressing equipment issues and is not properly identifying and inspecting its life safety equipment. During the audit WMSC personnel identified 58 items that required immediate mitigation and communicated to Metrorail. These items included code violations related to fire extinguishers, emergency egress and Emergency Trip Stations (ETS). The audit also found deficiencies related to hazard identification and communication. For example, Finding 1, determined that Metrorail does not have a reliable communications system for operation or during emergencies. Metrorail is developing and the WMSC will review proposed corrective action plans created in accordance with the Program Standard to address the six findings of the Audit of Emergency Management and Life Safety Programs.

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

- A stud bolt contacting rebar, introducing stray current to the running rails as trains departed (W-0361)
- Inadequate maintenance and inspection to prevent the accumulation of debris near the energized third rail (W-0362)
- Inadequate fan configuration due to restrictive procedures outlined in the Fan Emergency Playbook that do not align with operational needs during real-world emergencies
- Ineffective communication
    - Poor radio transmission quality

    - Miscommunication between internal Metrorail departments, as well as between partnering agencies and Metrorail personnel
- A lack of supervisory oversight regarding:
    - Maintenance and inspection of the roadway
    - Maintenance, inspection and testing of fire life safety equipment, specifically fire alarms
    - Power restoration
- Failure to follow written policies and procedures, including those related to:
    - Timely reporting of safety events
    - Operating roadway maintenance vehicle in required mode while traveling
    - Power restoration
    - Hot sticking procedures
- Inadequate Rail Traffic Controller staffing

Investigations W-0361, W-3062, W-3063 and W-0364 being considered at the March 4, 2025, led to specific corrective actions including:

- Metrorail conducted a Safety Standdown with all train operators regarding safe operations
- A Lessons Learned was distributed to all Control Center personnel regarding the event
- The Rail Traffic Controller received refresher training regarding customer safety and SOPs regarding rail vehicle movement during smoke/fire events
- Updates were made to the Power Energization Verification form completion process
- The Emergency Fan Desk Hotline phone number was programmed into all Rail Traffic Controller console phones
- Six month of compliance checks completed of Rail Traffic Controller Emergency Tunnel Operation Forms for smoke/fire events
- Metrorail is revising its Incident Management Framework for reporting and communication protocols to address response and communication issue

Metrorail is in the process of implementing related corrective action plans (CAPs) including:

- C-0056 addresses the finding that Metrorail's ROCC recruitment and retention approach is failing (Scheduled completion date August 2025)
- C-0170 addresses the finding that Metrorail does not routinely conduct hazard assessments to evaluate and prioritize fire and life safety and emergency management issues (Scheduled completion date June 2025).
- C-0293 addresses a finding from the January 2025 Emergency Management and Life Safety Audit that Metrorail does not have a reliable communication system for operations or emergencies (In development).

Safety event summaries:

W-0361 – L'Enfant Plaza Station – April 17, 2024 (E24305)

L'Enfant Plaza Station was partially evacuated due to the report of smoke and fire on track 1 on the upper level of the station. L'Enfant Plaza is a transfer station, with Green and Yellow Line trains servicing the station on the upper level, while Orange, Blue and Silver Line trains service the station's lower level. The investigation identified miscommunication regarding the location of the fire and issues with the fan configuration change request process.

An investigative review of closed-circuit television (CCTV) footage showed arcing began on track 1 just outside the station's platform limits at 4:31 p.m. as Train 529 departed the station. A Train Operator, who was aboard, but not operating Train 531 on track 2, notified a Rail Traffic Controller in the Control Center of smoke and fire on track 1. The Rail Traffic Controller instructed other trains in the vicinity to stop, and third rail power was de-energized.

The Assistant Operations Manager requested emergency assistance from D.C. Fire and Emergency Medical Services (DCFEMS), notifying the dispatcher that the fire was on track 1. Emergency tunnel fans activated at 4:36 p.m. Metro Transit Police Department (MTPD) Officers, who were already on the scene, attempted to extinguish the fire from a tunnel safety walk using a fire extinguisher. Due to the fire being electrical in nature, they we unable to extinguish it.

DCFEMS mistakenly dispatched personnel to track 2, however, the Fire Liaison in the Control Center notified the Battalion Fire Chief that the fire was actually on track 1. The Battalion Chief ordered the station be evacuated, but shortly thereafter determined the arcing and smoke to be a maintenance issue. The scene was turned over to MTPD. Train service was suspended on the upper level. On the lower level, the Control Center directed trains to travel through the station with the train environmental systems turned off, without servicing the station (stop for boarding and alighting). At 5:06 p.m., Office of Track and Structure and Emergency Response Team (ERT) personnel requested and were granted permission to enter the roadway. The stud bolt, which they determined was the cause of the arcing, was removed. Stud bolts are used to fasten the running rail to the roadway.

At 5:26 p.m., ERT personnel contacted the Maintenace Operations Center (MOC) to request fans be set to exhaust and were advised that configuration changes required approval from Rail 3. ERT was then transferred to Rail 1. Rail 1 called the Ops 3 Buttons Controller and directed them to request fan reconfiguration with MOC. Three minutes later, after two additional authorization attempts, Rail 2 granted permission for fan reconfiguration. Metrorail requires fan configuration change requests be made by a member of rail management.

An out of service test train performed a track inspection to confirm arcing would not reignite. Thereafter, normal service resumed.

Track personnel determined the smoke and fire was due to a stud bolt contacting rebar in concrete due to rock drilling, an old installation method. The stud bolt contacting rebar introduced stray current to the running rails as trains departed the station. Metrorail currently uses a method called core drilling. Rebar in the direct area of a stud bolt is removed during core drilling to prevent arcing events such as this.

W-0362 – Foggy Bottom Station – May 18, 2024 (E24388)

On Saturday, May 18, 2024, Foggy Bottom-GWU Station was evacuated for life safety reasons due to the report of fire on the track caused by accumulated debris near the energized third rail located close to an interlocking between Farragut West and Foggy Bottom - GWU stations. At the onset of the event, the Buttons Rail Traffic Controller in the

Control Center was working alone, as their partner was on a personal break. During the event, the emergency fire alarm did not activate in the station.

At 12:25 p.m., the Train Operator of Train 402 contacted the Control Center as their train was departing Foggy Bottom-GWU Station on track 2 toward Rosslyn Station to report a fire on the track between Farragut West and Foggy Bottom-GWU Stations on track 2. At the same time, the Operator of Train 401, on track 1 at Foggy Bottom-GWU Station reported the smell of smoke. The Train Operator of Train 401 asked the Rail Traffic Controller if they wanted them to perform a track inspection. The Radio Rail Traffic Controller instructed Train 401's Train Operator to shut off their environmental ventilation system. The Rail Traffic Controller then began instructing other trains in the vicinity to hold their locations and incorrectly reported the incident location to the Assistant Operations Manager to be between Rosslyn and Foggy Bottom-GWU stations. At 12:27 p.m., the Assistant Operations Manager requested an emergency response from D.C Fire and Emergency Medical Services (DCFEMS) to the correct stations. DCFEMS units were dispatched to both Foggy Bottom-GWU and Farragut West Stations.

At approximately 12:28 p.m., Metro Transit Police Department (MTPD) personnel at Foggy Bottom-GWU Station instructed the Station Manager and security personnel to evacuate the station. After determining the smoke was coming from track 2 only, the On Scene Commander instructed the Train Operator of passenger-occupied Train 401 on track 1 to perform a track inspection between Foggy Bottom-GWU and Farragut West stations.

At 12:28 p.m., the Buttons Rail Traffic Controller contacted the MOC Desk to request fan activation, incorrectly stating the fire location to be between Foggy Bottom-GWU and Rosslyn stations. The MOC Desk personnel requested the chain markers for the location, and the Rail Traffic Controller stated they did not have the chain markers and again repeated the incorrect location. The Buttons Controller stated they were trying to get confirmation of the fire's location and the MOC Desk personnel stated they would activate the fans when they received the chain markers, or they could only ventilate the station. The Emergency Fan Playbook requires a chain marker for tunnel fan activation. If a chain marker cannot be provided the playbook only allows for the activation of platform fans at the station. At 12:29 p.m., the Rail Traffic Controller instructed the Train Operator of Train 401 to close their doors and continue. The Train Operator notified the Rail Traffic Controller that the train was being held on the platform by MTPD.

At 12:34 p.m., DCFEMS personnel arrived at Foggy Bottom-GWU Station, and incident command was established at 12:39 p.m. The Fire Liaison Officer in the Control Center requested permission from the DCFEMS Incident Commander to send a test train through the area on track 1. The request was granted at 12:42 p.m.

At 12:48 p.m. MTPD personnel at Farragut West Station observed light smoke in the tunnel and began to evacuate the station. A short time later DCFEMS personnel investigated and determined that the station was safe and could reopen.

At 12:55 p.m., an Emergency Response Team (ERT) Supervisor coordinated having third rail power restored on track 2 at Foggy Bottom Station so that a test train could be sent through the tunnel to help identify the source of fire. At 12:56, following the riding track inspection, trains began single tracking on track 1, bypassing Foggy Bottom-GWU Station.

The request for third rail power restoration on track 2 by ERT was relayed to the DCFEMS Incident Commander and permission was granted to restore power at 12:58 p.m.

At 1:04 p.m., the Rail Traffic Controller contacted the Power Desk Assistant Superintendent to restore power. Simultaneously the ERT Supervisor requested and was granted Foul Time to conduct a track walk. ERT personnel entered the roadway. Upon hearing announcements for power restoration, the DCFEMS Incident Commander instructed a halt to power restoration. Due to ineffective communication and coordination, the DCFEMS Incident Commander was unaware that ERT wanted power to be restored to find the cause of the smoke.

ERT personnel determined the cause of the fire was debris that made contact with energized third rail that was located near the interlocking. ERT conducted initial removal of the debris and returned to the platform at 1:08 p.m. During an investigative interview the ERT Supervisor stated they placed a Warning Strobes and Alarm Device (WASAD), but did not use a hot stick to confirm power was de-energized.

After determining the cause of the smoke was a maintenance issue and that there was no active fire, the DCFEMS Incident Commander transferred command to MTPD. ERT personnel completed the debris removal and power was restored.

There were no injuries as a result of this event.

W-0363 – Eisenhower Avenue Headquarters – July 2, 2024 (E24506)

WMATA's Eisenhower Avenue Headquarters was evacuated due to a fire on an exterior patio, caused by personnel smoking in an area that was not designated for smoking. Metrorail's Eisenhower Avenue Headquarters is designated as a smoke-free workplace.

An investigative review of closed-circuit television (CCTV) footage shows that on Tuesday, July 2, 2024 at 12:42 a.m., two Washington Metropolitan Area Transit Authority (WMATA) employees, later identified as a Power Operations Center Power Desk Assistant Superintendent and a Power Desk Controller, accessed an outdoor patio area on the penthouse floor of the building and lit what was later confirmed by the employees as cigars. There were "No Smoking" signs visible on the door leading to the patio. The two employees spent approximately 50 minutes on the outdoor patio, leaving their workstations unattended. At 2:54 a.m., the two employees reentered the building and got on an elevator.

A review of CCTV footage showed that at 4:06 a.m., a flower box had begun smoldering in the area where the two employees had previously been smoking. Although another employee had entered the indoor employee kitchen area adjacent to the outdoor patio, they did not exit onto the outdoor patio area or notice the smoldering. At approximately 4:21 a.m., a Vertical Transportation Operations Center employee on the 9th floor of the building reported to the Security Operations Control Center that they smelled smoke and noticed flames while monitoring a CCTV camera. The Assistant Operations Manager and Fire Liaison Officer in the Control Center were notified and the Alexandria Fire Department was contacted for emergency assistance. Metro Transit Police Department personnel were dispatched to evacuate the building. At 4:37 a.m., the fire alarm was activated, and personnel began to evacuate the building. The Control Center remained operational during this time through the use of handheld radios. At 4:41 a.m., the Fire Liaison Officer began efforts to extinguish the fire using a trash receptacle. Fire department personnel arrived and extinguished the fire at 4:48 a.m. and deemed the building safe for employees to reenter at 5:09 a.m.

The investigation determined that the fire started due to embers from smoking materials that were improperly discarded in a flower box on the patio. During an investigative interview both employees stated that they placed their cigars in a cup and then discarded them in a bathroom toilet.

The Power Desk Assistant Superintendent and Power Desk Controller both underwent post-event toxicology testing. There were no injuries or significant damage as a result of this safety event.

W-0364 – Benning Road Station – July 22, 2204 (E24569)

On Monday, July 22, 2024, Benning Road Station and multiple trains were evacuated due to heavy smoke later determined to be caused by an arcing insulator. There were no reported injuries as a result of this event.

The investigation identified several deficiencies related to the response during this event, including those related to adherence to established policies and procedures, logistical collaboration, operational decisions, power de-energization and restoration, radio transmission quality, communication and fan configuration, which caused delays and hampered efforts to quickly resolve the event.

Safety Event Summary:

At 11:48 a.m., the Train Operator of Train 617, traveling on track 1 from Stadium-Armory Station toward Benning Road Station, reported smoke in the tunnel to a Rail Traffic Controller in the Control Center and advised they had zero visibility. During this time, the Rail Traffic Controller was working alone. The Rail Traffic Controller provided the train with a permissive block and instructed the Train Operator to continue to Benning Road Station to offload passengers. The Train Operator advised the Rail Traffic Controller that smoke was entering the consist after several passengers used the train's emergency intercom to notify them. The Rail Traffic Controller instructed the Train Operator to turn off the train's environmental system and continue to Benning Road Station.

Train 630 at Benning Road Station on track 2 advised that there was no smoke in the station and was instructed to evacuate passengers from their train. Train 617 arrived at the station and the Train Operator evacuated their train.

At 11:51 a.m., the Assistant Operations Manager in the Control Center requested fan activation at Benning Road Station and adjacent tunnels from the Maintenance Operations Center (MOC) Fan Desk but was unable to provide a chain marker. At 11:52 a.m., an emergency response from D.C. Fire and Emergecy Medical Services (DCFEMS), the Metro Transit Police Department (MTPD) and other internal departments was requested.

Trains in the vicinity were instructed to hold on platforms at various stations.

At 11:53 a.m., fans were activated using Emergency Ventilation play G10, which sets the Under Platform Exhaust (UPE) Fans to exhaust on the platform only and turns off the tunnel fans at both ends of the platform.

At 11:54 a.m., security personnel began evacuating the station and at 11:57 a.m., an MTPD Seargent arrived and became the WMATA Incident Commander.

DCFEMS arrived at approximately 12:00 p.m. During this time Train 630, which had previously offloaded, was instructed to reverse ends in the opposite direction to perform a track inspection. The Train Operator advised there was heavy

smoke in front of them and was instructed to again reverse ends, this time back towards Downtown Largo, away from the smoke.

The DCFEMS Incident Commander reported smoke coming from the direction of Stadium-Armory Station, and advised power was still energized and trains were occupying both platforms. Power was de-energized seconds later at 12:02 p.m. There was confusion regarding power de-energization due to power reconfiguration. Logs stating that breakers in the traction power substation were tied into another substation caused a delay in de-energizing third rail power. This caused train routing to be revised and delays in confirming power de-energization.

At 12:35 p.m., Emergency Response Team (ERT) personnel requested fans be set to exhaust but were advised that such requests were required to be made by RAIL 1. The request was made by RAIL 1 four minutes later at 12:39 p.m. This exchange, and others similar to it during the event delayed efforts to dissipate the smoke and identify its source. At 12:48 p.m., at the request of the DCFEMS Special Operations Commander, the Fire Liaison Officer in the Control Center contacted RAIL 1 and requested fans be set to exhaust. The request was communicated to the Fan Desk and the fans were set to exhaust.

Third rail power was confirmed de-energized by ERT personnel on track 1 at 12:58 p.m. and track 2 at 1:05 p.m. A walking tracking inspection began at 1:13 p.m. During this time MTPD reported experiencing radio transmission quality issues. MTPD personnel ultimately switched to phone communication as radio issues persisted and caused confusion and delays during the response.

The track inspection identified an arcing insulator, a maintenance issue, as the cause of the smoke and incident command was transferred from DCFEMS to MTPD. The arcing insulator was removed. Power was restored improperly without the required announcements or authorization. A test train confirmed track 1 was safe for passenger service, however ERT reported that no test train was necessary for track 2.

Emergency and Operational Response

Contributing to the deficiencies in the timeliness of the emergency response, were Metrorail's inadequate radio coverage, fan configuration processes, safety promotion regarding power reconfiguration, Control Center personnel staffing levels and communication regarding logistical and operational decisions, both internally and with partnering agencies.

- **Communication**
  - MTPD personnel reported radio transmission challenges several times throughout the safety event and resorted to the use of cellphones to communicate. During an investigative interview, the MTPD Seargent, who acted as the WMATA Incident Commander, noted that personnel lost all communication 300 feet into the tunnel. The MTPD Seargent also stated that this issue contributed to delays.
  - There was initial confusion between the Train Operator who reported smoke and the Rail Traffic Controller. During an investigative interview, the Rail Traffic Controller stated they were unsure which Train Operator reported the smoke and where they were located, but did not request the Train Operator to repeat their message for clarity. The Rail Traffic Controller also stated they did not inquire about a chain maker to ascertain the train's

location and to provide it to the Fan Desk for accuracy of fan configuration as required by Metrorail policy.

- **Power**
  - De-energization
    - Power was initially reported de-energized on track 1 at 12:02 p.m., however there was confusion regarding power reconfiguration that delayed confirmation that the power was de-energized and caused trains to be rerouted twice.
    - There have been several power reconfigurations at the D&G Junction. The configuration at the time of this event was to compensate for a tiebreaker that was offline for maintenance construction. It was initially thought that de-energizing power at Benning Road Station would also affect power at the D&G Junction. This resulted in delays to power de-energization to move trains and led to unnecessary operational decisions regarding train routing. It was later relayed to Metro 1 that due to the reconfiguration, each track had its own power supply and breakers, therefore there would be no impact to the D&G Junction.
    - Power was not confirmed down on both tracks until over an hour after the initial report of smoke.
  - Power Restoration
    - The required power restoration process was not followed due to inadequate training and safety promotion.
    - The Power Energization Form was only completed after power was restored on both tracks. Personnel interviewed were not aware of the requirement to complete the form each time power was restored, regardless of projected length of time or location on the mainline.
    - Power was restored prior to authorization from Rail 1 and Police 1. The procedure requiring this authorization had been in effect for approximately 4 months at the time of the event.
    - A shift change during the event may have contributed to confusion with power restoration.
    - The Power Desk Assistant Superintendent stated there was miscommunication and conflicting information provided by multiple sources that contributed to confusion during the event.
- **Fan Activation and Reconfiguration**
  - Multiple requests for fan reconfiguration were made during the event due to the ineffectiveness of the Emergency Fan Playbook.
  - During the event personnel from ERT and DCFEMS requested fan reconfiguration to more effectively manage heavy smoke.

- The Fan Desk Controller indicated the required Emergency Fan Hotline was not used. The investigation determined the phone numbers for the hotline and the Fan Desk were not programmed into phones at the Rail Traffic Controller consoles.

- **Rail Traffic Controller Staffing**
  - At the time the event began the Rail Traffic Controller who received the report of smoke was working alone. The Rail Traffic Controller console is to be staffed by two Rail Traffic Controllers, a Radio Rail Traffic Controller and a Buttons Rail Traffic Controller.
  - During an investigative interview the Rail Traffic Controller estimated they were alone for the first 5-10 minutes of the event before a Rail Traffic Controller responsible for another portion of the system came to assist.
  - Conducting the duties for both roles contributed to the Rail Traffic Controllers' initial confusion on the report, and delayed notifications, coordination and response.

Washington Metropolitan Area Transit Authority
Department of Safety (SAFE)
Office of Safety Investigations (OSI)
FINAL REPORT OF INVESTIGATION A&I E24305

Date of Event:	April 17, 2024
Type of Event:	Evacuation for Life Safety Reasons
Incident Time:	16:31 hours
Location:	L'Enfant Plaza Station
Time and How received by SAFE:	16:34 hours – SAFE/MAC
WMSC Notification Time:	19:04 hours
Responding Safety Officers:	WMATA: None WMSC: None Other: None
Rail Vehicle:	N/A
Injuries:	None
Damage:	Stud Bolt
Emergency Responders:	District of Columbia Fire Department and Emergency Medical Services (DCFEMS), Metro Transit Police Department (MTPD)
SMS I/A Number	20240417#116233MX

April 17, 2024

Table of Contents

Abbreviations and Acronyms

AOM	Assistant Operations Manager
CAP	Corrective Action Plan
CCTV	Closed-Circuit Television
DCFEMS	District of Columbia Fire Department
ERT	Emergency Response Team
MICC	Metro Integrated Command and Communications Center
MOR	Metrorail Operating Rulebook
MTPD	Metro Transit Police Department
NOAA	National Oceanic and Atmospheric Administration
RTC	Rail Traffic Controller
RTRA	Office of Rail Transportation
SAFE	Department of Safety
SDOC	Safety Director On Call
SIO	Safety Information Officer
SMS	Safety Measurement System
TRST	Department 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 Wednesday, April 17, 2024, at 16:31, there was an Evacuation for Life Safety Reasons event at L'Enfant Plaza Station on the Upper Level due to fire and smoke. A stud bolt used to fasten the running rail to the roadway located at chain marker (CM) F01 052+50 began arcing, causing fire and smoke as Train ID 529 exited the platform on track one.

At 16:32 hours, the Rail Section of the Metro Integrated Command and Communications Center (MICC), was notified by a Rail Vehicle Operator cushioning aboard Train ID 531 of the arcing incident on track one. The Radio Rail Traffic Controller (RTC) began communicating to trains in the surrounding area to stop at their locations.

At 16:34 hours, the Assistant Operations Manager (AOM) contacted the District of Columbia Emergency Dispatch Line and reported the stud bolt fire at L'Enfant Plaza Station.

Shortly after the initial report, Metro Transit Police Department (MTPD) personnel arrived on-scene and made several attempts to extinguish the stud bolt fire with an extinguisher provided by the Station Manager. The attempts were unsuccessful due to the nature of the fire and smoke event.

The District of Columbia Fire Department and Emergency Medical Services (DCFEMS) arrived on the scene, conducted an assessment, and determined the event to be a maintenance issue. The scene was turned over to MTPD. The Incident Commander granted permission to the Department of Track and Structures (TRST) Emergency Response Team (ERT) to enter the roadway and remove the arcing stud bolt.

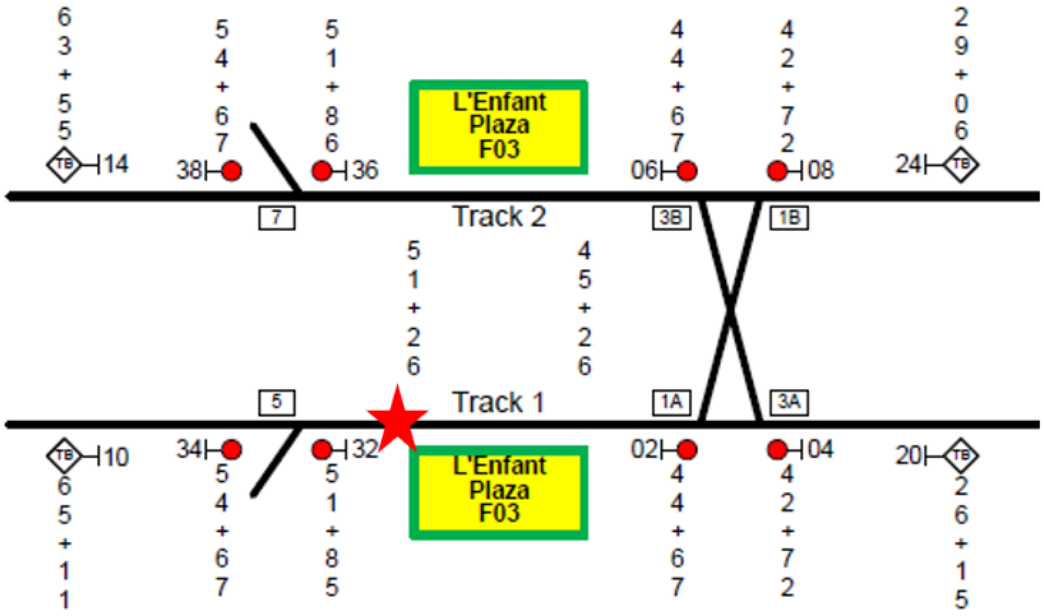
Once the stud bolt was removed and all personnel and equipment were verified clear of the roadway by ERT, a test train performed an inspection through L'Enfant Plaza Station's Upper Level to verify that the arcing did not reignite. After verifying a good track inspection, normal service was resumed on tracks one and two at L'Enfant Plaza Station at 18:27 hours.

The probable cause of the Evacuation for Life Safety Reasons event on Wednesday, April 17, 2024, at L'Enfant Plaza Station was a stud bolt contacting rebar in the concrete due to an old installation method. This caused arcing and smoke as stray current (See Appendix A) was introduced through the running rails as the train departed the station.

Incident Site

L'Enfant Plaza station is an indoor station with dual levels. On the lower level, there is a center platform that services the Blue, Orange, and Silver lines. There are side platforms on the upper level, which services the Green and Yellow lines. This safety event occurred on the upper level on track number one.

Field Sketch/Schematics



The above depiction is not to scale. The red star indicates the approximate location of the arcing stud bolt.

Purpose and Scope

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

Investigative Methods

Upon receiving notification of the Evacuation for Life Safety Reasons event at the L'Enfant Plaza Station on April 17, 2024, Safety dispatched a cross-functional team to assess the scene and conduct the subsequent investigation. Safety team members worked with relevant WMATA subject matter experts to review the incident's facts and data.

The investigative methodologies included the following:

- Site assessment through document review.
- Informal Interviews – Written statements were reviewed from personnel present during the event.
    - Station Manager
- Documentation Review – A collection of relevant work history information and process documentation contained in Metro systems of record. These records include:
    - Metro Integrated Command and Communications Center Executive Summary
    - Emergency Tunnel Fan Operation Form
    - Maintenance Operations Control Report
    - Metrorail Operating Rulebook (MOR)
    - National Oceanic and Atmospheric Administration (NOAA)
    - Emergency Ventilation Playbook

- System Data Recording Review – A collection of information contained in Metro Data Recording Systems. This data includes:
    - Audio Recording System (ARS) playback, including OPS 3 Radio
    - Closed-Circuit Television (CCTV)
    - Advanced Information Management System (AIMS) Playback
    - Rail Performance Monitor (RPM)
    - System Performance On-Time Summary (SPOTS)
    - Safety Management System (SMS)

Investigation

On Wednesday, April 17, 2024, at 16:31 hours, there was an Evacuation for Life Safety Reasons event at the L'Enfant Plaza Station on the Upper Level due to fire and smoke. A stud bolt used to fasten the running rail to the roadway located at CM F01 052+50 began arcing, causing fire and smoke as Train ID 529 exited the platform on track one.

Figure 1 Arcing Stud Bolt at F03 Track 1

At 16:32 hours, a Rail Vehicle Operator cushioning aboard Train ID 531, reported to the Radio RTC that there was a small fire on the roadway at the entrance of the station platform on track one. The Radio RTC instructed Train ID 331 to stop the train and then requested the location of the Office of Rail Transportation (RTRA) Rail Operations Supervisors (ROS).

At 16:34 hours, the AOM, contacted the District of Columbia Emergency Dispatch Line and reported a fire in the roadway at L'Enfant Plaza Station. At the same time, MTPD Personnel were observed via Closed Circuit Television (CCTV) walking over to the incident area to assess the scene.

At 16:35 hours, third rail power was de-energized on track one at L'Enfant Plaza Station.

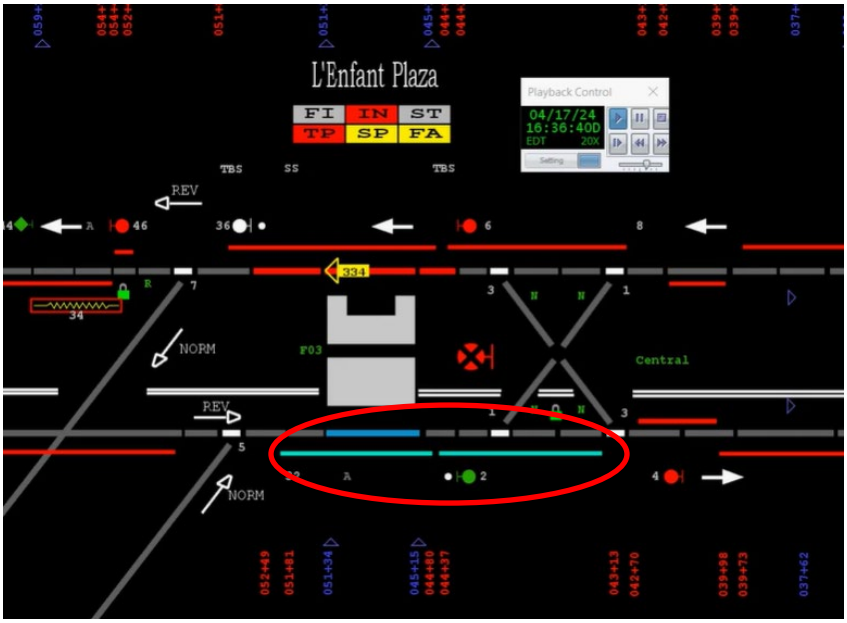


Figure 2 Depicts the third rail power de-energized at the incident location.

At 16:35 hours, the button RTC contacted MOC to report the smoke/fire incident at L'Enfant Plaza station and was informed that the Under Platform Exhaust (UPE) was already activated at the station due to a previous report at 15:29 hours of the station being hot.
At 16:36 hours, emergency tunnel fan operation was enacted.

At 16:40 hours, MTPD Personnel attempted to extinguish the fire from the safety walk. These attempts were unsuccessful due to the source of the fire being an electrical fire. The Fire Liaison Officer within the MICC, contacted the DC Fire Battalion Chief to report the conditions and the mitigations that were being put in place.


Figure 3 MTPD Personnel attempting to extinguish Arcing Stud Bolt at F03

At 16:40 hours, DCFEMS personnel were observed via CCTV arriving on the scene.

At 16:50 hours, the DC Fire Chief requested the station be evacuated. MTPD, along with the Rail Station Managers, began station evacuation.

At 16:51 hours, third rail power was de-energized on track two at L'Enfant Plaza Station's upper level and train service was suspended on both tracks.

At 16:53 hours, trains on the lower level were instructed to bypass L'Enfant Plaza Station and to shut down their environmental systems.

At 17:02 hours, ERT arrived on the scene to begin their assessment of the incident. Shortly after their arrival, they requested permission to enter the roadway to begin work to address the arcing stud bolt.

At 17:06 hours, Radio RTC granted Foul Time permission to ERT to enter the roadway to hot stick and confirm the third rail power was de-energized. ERT reported to the Radio RTC that third rail power was de-energized at chain marker F1 052+50. ERT also advised the Radio RTC that rail service could resume on track two.

At 17:25 hours, ERT was granted permission from the Radio RTC to begin work removing the arcing stud bolt from the roadway. The arcing stud bolt was installed using an old method known as rock drilling. Rock drilling leads to stud bolts making contact with the rebar causing arcing when a stray current is introduced. During the investigation, it was revealed that TRST installs stud bolts in a new manner known as core drilling. According to TRST, the core drilling method will prevent this from happening, as with this method, any rebar in the direct area of the stud bolt placement would be removed prior to the stud bolt installation.

At 17:26 hours, ERT contacted MOC and requested the fans be set to exhaust. They were informed that once activated Rail 3 must give approval to change the configuration. ERT was then transferred to Rail 1 and made the same request. Rail 1 contacted the Ops 3 Button RTC and instructed them to contact MOC to request the fan reconfiguration per ERT.

At 17:28 hours, the Button RTC contacted MOC to request the fans be reconfigured and was informed they were unable to change the configuration without permission from Rail 2.

At 17:29 hours, MOC contacted Rail 2 to inform them that ERT was requesting the fans be set to exhaust and Rail 2 gave them permission to change the configuration.

At 17:33 hours, the Radio RTC made a third rail power energization announcement for track two at L'Enfant Plaza Station and three minutes later, Train ID 534, operating in normal service on track two, was permitted to operate from Archives-Navy Memorial Station to Branch Avenue Station.

At 17:53 hours, Train ID 539, operating in the opposite direction on track two, was the first train to single track through L'Enfant Plaza Station.

At 18:06 hours, ERT personnel were observed via CCTV clearing the roadway on track one. ERT personnel then informed the Radio RTC that they were clear of the roadway via radio Ops 3. Three minutes later, the Radio RTC made a power energization announcement for L'Enfant Plaza Station on track one.

At 18:08 hours, the Radio RTC instructed Train ID 541 on track one to offload their train at Navy Yard Station and verify the train was clear of customers. Train ID 541 was changed to Train ID 741 and was instructed to pick up the ROS at Waterfront Station.

At 18:22 hours, the Radio RTC informed Train ID 741, that they would be the test train used at L'Enfant Plaza Station. The Radio RTC granted Train ID 741 a permissive block to the station and once properly berthed, ERT reported a good track test. The Radio RTC instructed Train ID 741 to place their train in service at L'Enfant Plaza Station track one, and normal service resumed.

The investigation also revealed that the DC Fire Chief requested the station be evacuated. As requested, MTPD along with Rail Station Managers began to evacuate the station. During the evacuation, the incident was determined to be a maintenance issue and turned over to MTPD. Shortly after being turned over to MTPD single tracking started and the station was reopened.

Chronological Event Timeline

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

Time	Description
16:32:33 hours	A Rail Vehicle Operator cushioning aboard Train ID 531 reported a small fire on the roadway at L'Enfant Plaza Station, track one, upon the platform's entry. [Radio/Ops 3]
16:33:01 hours	Radio RTC: Requested Train ID 331 to stop the train as they approached L'Enfant Plaza Station, track one. [Radio/Ops 3]
16:33:23 hours	Radio RTC: Requested the location of the Rail Supervisor. [Radio/Ops 3]
16:33:45 hours	Train ID 331: Reported they were stopped approaching L'Enfant Plaza Station and requested further instructions from the Radio RTC. [Radio/Ops 3]
16:33:52 hours	Train ID 532: Reported the fire was not coming from the insulator but was coming from the rail. [Radio/Ops 3]
16:34:16 hours	AOM: Contacted DC 911 to report roadway fire on track 1. [Phone/Rail 2]
16:34:26 hours	Radio RTC: Instructed trains to hold on various platforms that were on approach to L'Enfant Plaza Station. [Radio/Ops 3]
16:34:35 hours	MTPD Dispatch: Reported to Button RTC a fire at L'Enfant Plaza Station and that MTPD Officers were on the scene. [Phone]
16:35:10 hours	Button RTC: Contacted MOC to report fire/smoke incident and was informed UPE was already activated due to an earlier report of the station being hot. [Phone Ops 3]
16:35:35 hours	Train ID 334: Reported that they were holding on the platform at L'Enfant Plaza Station on track two and that MTPD was on the scene. [Radio/Ops 3]
16:36:00 hours	Emergency tunnel fans were activated per playbook.
16:36:29 hours	Button RTC: Reported to the MICC Communications Agents a fire on the roadway at L'Enfant Plaza Station and that power was de-energized on track 1. [Phone/ Ops 3]
16:37:43 hours	DCFEMS dispatched personnel to L'Enfant Plaza Station and noted the fire was on track two.
16:37:32 hours	Radio RTC: Requested Train ID 331 at L'Enfant Plaza Station on track one, to offload the customers and reverse operating ends. [Radio/Ops 3]
16:37:32 hours	Safety Information Officer (SIO): Notified Safety Director On-Call (SDOC) of the roadway fire. [Phone MAC]
16:38:07 hours	Radio RTC: Inquired if Train ID 334 could see or smell anything on track two. Train ID 334: Advised nothing on track two and that MTPD was attempting to extinguish the fire on track one. [Radio/Ops 3]

Time	Description
16:40:04 hours	MICC Fire Liaison: Contacted the Fire Battalion Chief and reported a stud bolt fire on track one. A fire extinguisher was used, a haze was on the platform, and the evacuation process started. Battalion Chief: Asked if the train was still in the station. MICC Fire Liaison: Confirmed that the train was still on the platform. [Open Mhz]
16:40:32 hours	DCFEMS arrived on the scene. [CCTV]
16:47:55 hours	Button RTC: Confirmed with the Communications Section that DCFEMS was contacted. [Phone]
16:49:28 hours	Radio RTC: Announced that Green Line trains would operate between Shaw Howard Station to Greenbelt Station. [Radio/Ops 3]
16:51:20 hours	Third rail power was de-energized on track two. [AIMS Playback]
16:53:49 hours	Metro 1: Informed Ops 2 Button RTC to bypass L'Enfant Plaza Station on the lower level and have the trains shut down the EV. [Phone]
16:57:44 hours	Button RTC: Requested fan activation at L'Enfant Plaza Station. [Phone]
17:02:13 hours	ERT: Arrived on the scene. [Radio/Ops 3]
17:04:58 hours	ERT: Requested to enter L'Enfant Plaza Station on track one, for a track inspection. [Radio/Ops 3]
17:05:36 hours	Radio RTC: Reported to ERT personnel that third rail power was de-energized. [Radio/Ops 3]
17:06:05 hours	Radio RTC 3: Granted ERT Foul Time and requested hot stick third rail de-energization confirmation. [Radio/Ops 3]
17:10:52 hours	ERT: Reported locating the stud bolt at CM F1 052+50, requested fan activation, and confirmed third rail de-energization hot stick at CM F1 052+50. Requested to establish rail service on track two after the activation of the station fans. [Radio/Ops 3]
17:11:19 hours	ERT: Advised that third rail power was de-energized at CM F1 052+50. [Radio/Ops3]
17:11:41 hours	ERT: Advised that they found the arcing stud bolt and were ready to remove it. [Radio/Ops 3]
17:15:31 hours	ERT: Advised that service can resume on track two while they work on track one. [Radio/Ops 3]
17:25:14 hours	ERT: Inquired if they had permission to start their work. Radio RTC: Informed ERT they had permission to begin their work. [Radio/Ops3]
17:30:46 hours	Radio RTC: Inquired from ERT if they could restore third rail power on track two. ERT: Advised that all personnel and equipment were clear, and third rail power could be restored on track two. [Radio/Ops 3]
17:31:00 hours	Emergency Tunnel Fans were reconfigured at the request of ERT per playbook.
17:33:06 hours	Radio RTC: Third rail re-energization announcement was made for track two. [Radio/Ops 3]
17:36:16 hours	Radio RTC: Inquired from ERT if there was a need for an inspection train on track two. ERT: Advised there was no need for an inspection train on track two. [Radio/Ops 3]
17:36:39 hours	Radio RTC: Instructed Train ID 534 to go in service from Archives to Branch Ave. Station. [Radio/Ops 3]

Time	Description
17:53:34 hours	Radio RTC: Informed Train ID 539, they're the first train through the single tracking area. [Radio/Ops 3]
17:56:36 hours	AOM: Advised ERT to get in contact with MTPD to take over the incident scene and broadcast it over the radio. [Phone/Rail 2]
18:00:01 hours	ERT: Advised they were taking over command of the incident area. [Radio/Ops 3]
18:06:42 hours	ERT cleared the roadway on track one after making repairs. [CCTV]
18:07:13 hours	ERT: Advised they were clear of the roadway on track one and requested a test train. Radio/Ops 3]
18:09:27 hours	Radio RTC: Third rail re-energization announcement was made for track one. [Radio/Ops 3]
18:22:01 hours	Radio RTC: Informed Train ID 741 they were the test train and gave them a permissive block to L'Enfant Plaza Station track one. [Radio/Ops 3]
18:27:09 hours	ERT: Advised that it was a good track test with the test train. Radio RTC: Acknowledged ERTs report and instructed Train ID 741 to go in service at L'Enfant Plaza Station on track one. [Radio/Ops 3]

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

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

"At approximately 4:34 pm, the Station Manager stated, the MICC informed them there was a fire in the tunnel on track #2 upper level at L'Enfant Plaza Station. Upon their investigation, they saw a Transit Officer extinguishing the fire on the roadway. DCFD Engine #2, 3, and 7 arrived to assist. When the third rail was de-energized, the fire sparkles stopped. Metro's ERT Department stated the fire came from debris from a rail bolt under the running rails. No injuries were reported, and the station was reopened."

Maintenance Section of Metro Integrated Command and Communications Center
Adopted from MOC Report:

See Appendix B

Weather

On April 17, 2024, at the time of the incident, NOAA recorded the temperature as 73°F, with mostly cloudy skies, winds 6 mph, and 59% humidity. The weather was not a contributing factor in this incident (Weather source: NOAA) – Location: Washington, DC.

Related Rules and Procedures

SOP 678 Procedure for Managing Fire and Smoke on the Metrorail System
Metrorail Operating Rulebook rules:

- 1.2.2 Employees shall submit a written report of all fires to the Department of Safety.
- 1.19.1 Indications of fire observed on vehicles or WMATA property must be reported immediately to the Rail Vehicle Operator, the nearest supervisor, or the Rail Section of the MICC.
- 1.19.3 The use of any fire extinguisher must be reported to the employee's supervisor and documented on the appropriate form.
- 17.28.1 Emergency Maintenance Procedures are invoked to address conditions occurring during revenue hours that can result in harm to individuals, fire/smoke events; damage to

equipment or property causing a significant service disruption; are significantly impairing a safety critical system, or any combination of these circumstances. These events are of a short duration (typically, 30-minutes or less) and are of a nature that emergency repairs can be accomplished without the use of a Roadway Maintenance Machine.

Findings

- A Rail Vehicle Operator on track two made the initial report to the Radio RTC of fire/smoke on track one.
- The Radio RTC never instructed the Rail Vehicle Operators to shut down their environmental systems on the upper level of L'Enfant Plaza Station.
- The arcing stud bolt was installed using rock drilling.
- TRST changed their stud bolt installation from rock drilling to core drilling.
- The stud bolt began arcing as the train departed the station on track one.
- MTPD attempted to extinguish the fire with a fire extinguisher.
- DCFEMS initially requested the station be evacuated but deemed it a maintenance issue before the station was completely evacuated.

Immediate Mitigation to Prevent Recurrence

- Train service was suspended on both tracks.
- Third rail power was de-energized.
- The emergency fans were activated.
- The arcing stud bolt was removed.
- A test train was operated through the incident area to ensure a good track.

Probable Cause Statement

The probable cause of the Evacuation for Life Safety Reasons event on Wednesday, April 17, 2024, at L'Enfant Plaza Station was a stud bolt coming into contact with rebar in the concrete due to an old method of installation. This caused arcing and smoke as a stray current was introduced through the running rails as the train departed the station

Appendices

Appendix A – Power 1000: Maintenance & Inspection Manual

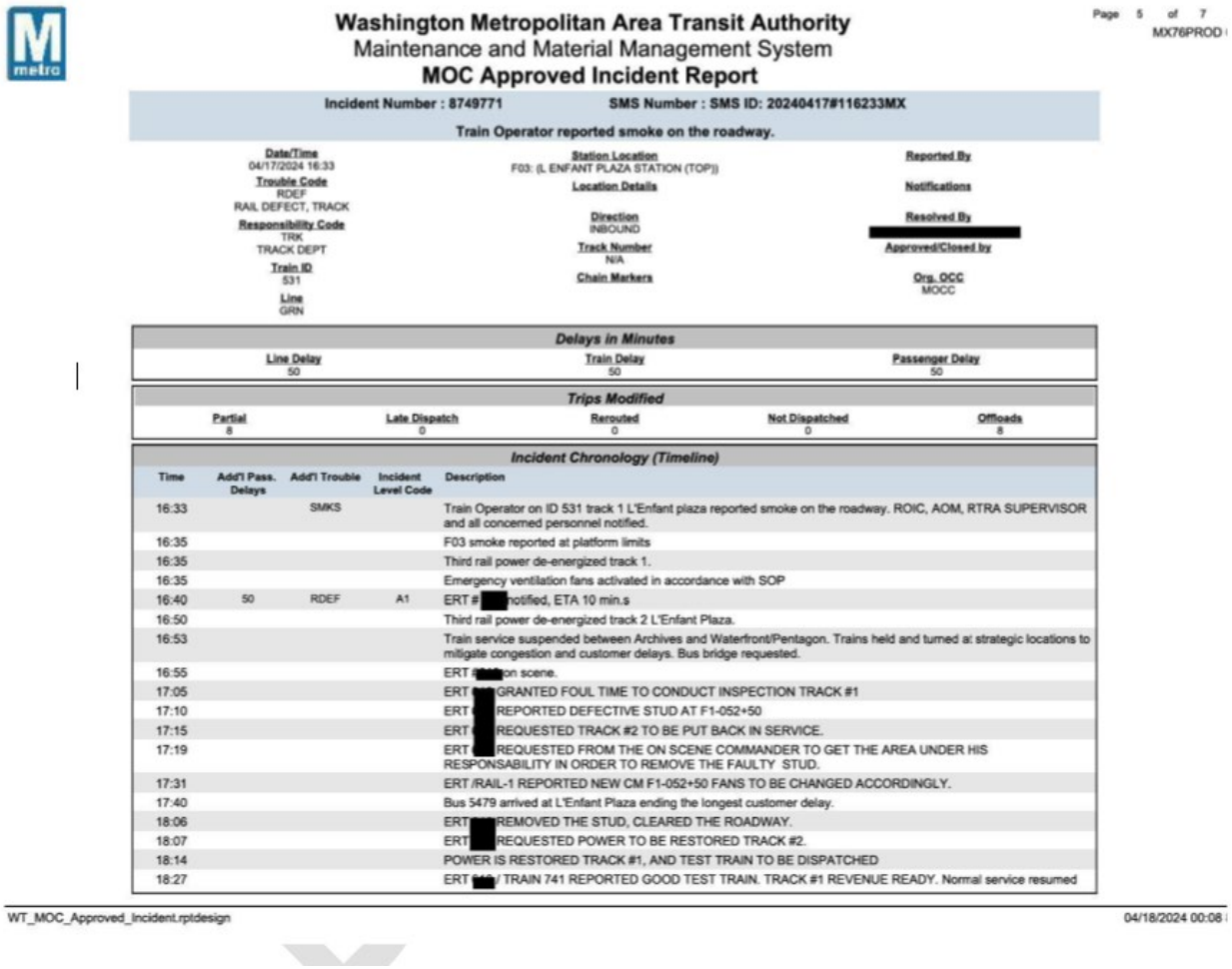
19 Stray Current/Corrosion Control Inspection and Maintenance

19.1 Train propulsion current travels from the positive terminal of the substation rectifier, through the DC circuit breakers and feeder cables to the third rail where it passes through train motors. The current then flows through the train car wheels to the running rails and passes through high current impedance bonds to negative return cables where it flows to the negative terminal of the substation rectifier.

19.2 Stray current, also known as electrolysis, is the passage of the current from its intended path off the rails or other equipment to surrounding materials or equipment and flows back to its source at the substation. Where the current flows off a metallic structure such as the rails or cables, a destructive effect occurs. Current flowing from a metallic structure removes material from that structure eventually corroding it to destruction. This is seen as a green powder around cables or as extreme corrosion on track rails. Stray currents can also attach to utility structures such as water pipes, gas pipes, or tunnel reinforcing bars, and erodes the metal until it fails. During all other inspections, any observation of stray current activity should be noted, and the observer's supervisor informed so that appropriate action can be taken.

Attachment 1 Stray Current Definition

Appendix B - MOC Incident Report



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

Page 5 of 7
MX76PROD

Incident Number : 8749771 SMS Number : SMS ID: 20240417#116233MX

Train Operator reported smoke on the roadway.

Date/Time: 04/17/2024 16:33	Station Location: F03: (L ENFANT PLAZA STATION (TOP))	Reported By:
Trouble Code: RDEF, RAIL DEFECT, TRACK	Location Details:	Notifications:
Responsibility Code: TRK, TRACK DEPT	Direction: INBOUND	Resolved By: [redacted]
Train ID: 531	Track Number: N/A	Approved/Closed by:
Line: GRN	Chain Markers:	Org. OCC: MOCC

Delays in Minutes

Line Delay	Train Delay	Passenger Delay
50	50	50

Trips Modified

Partial	Late Dispatch	Rerouted	Not Dispatched	Offloads
8	0	0	0	8

Incident Chronology (Timeline)

Time	Add'l Pass. Delays	Add'l Trouble	Incident Level Code	Description
16:33		SMKS		Train Operator on ID 531 track 1 L'Enfant plaza reported smoke on the roadway. ROIC, AOM, RTRA SUPERVISOR and all concerned personnel notified.
16:35				F03 smoke reported at platform limits
16:35				Third rail power de-energized track 1.
16:35				Emergency ventilation fans activated in accordance with SOP
16:40	50	RDEF	A1	ERT # [redacted] notified, ETA 10 min.s
16:50				Third rail power de-energized track 2 L'Enfant Plaza.
16:53				Train service suspended between Archives and Waterfront/Pentagon. Trains held and turned at strategic locations to mitigate congestion and customer delays. Bus bridge requested.
16:55				ERT [redacted] on scene.
17:05				ERT [redacted] GRANTED FOUL TIME TO CONDUCT INSPECTION TRACK #1
17:10				ERT [redacted] REPORTED DEFECTIVE STUD AT F1-052+50
17:15				ERT [redacted] REQUESTED TRACK #2 TO BE PUT BACK IN SERVICE.
17:19				ERT [redacted] REQUESTED FROM THE ON SCENE COMMANDER TO GET THE AREA UNDER HIS RESPONSABILITY IN ORDER TO REMOVE THE FAULTY STUD.
17:31				ERT /RAIL-1 REPORTED NEW CM F1-052+50 FANS TO BE CHANGED ACCORDINGLY.
17:40				Bus 5479 arrived at L'Enfant Plaza ending the longest customer delay.
18:06				ERT [redacted] REMOVED THE STUD, CLEARED THE ROADWAY.
18:07				ERT [redacted] REQUESTED POWER TO BE RESTORED TRACK #2.
18:14				POWER IS RESTORED TRACK #1, AND TEST TRAIN TO BE DISPATCHED
18:27				ERT [redacted] / TRAIN 741 REPORTED GOOD TEST TRAIN. TRACK #1 REVENUE READY. Normal service resumed

WT_MOC_Approved_Incident.rptdesign 04/18/2024 00:08

Attachment 2 MOC Incident Report Page 1 of 1

Appendix C – Emergency Tunnel Fan Form

8749771

Maintenance Section Emergency Tunnel Fan Operation Form

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

MOC-FRM-0001-R00.0

Approved: 1/24/2024

Call Time:	Incident Description: *(Arcing Insulator / Trash Fire / etc.)*		
16:36	OPS 3 Reported Fire Track 1 Platform Limit		
Nearest Station: *(Metro Center A01)*	**Chainmarker:** *(xxx-xx)*	**Track #:**	**Train ID:**
F03	Platform Limit	1	
Proposed Evacuation Route: *(towards which station)*	**Playbook/Page Reference:**	**Incident Zone(s):**	
Take Stairs towards Surface	F26	Platform Limit	
Fan Controller Name:	**Date:**	**MAINT 1 Name:**	**Date:**
[redacted]	04/17/24	[redacted]	4/17/24

Remote Legacy Fan Configuration

Station	Fan Name	Configuration (E/S/OFF)
F03	F03-IB/OB	E
F04	FF3	OFF
F03	FL1	OFF
F04	F04-IB/OB	OFF

Station	Fan Name	Configuration (E/S/OFF)
F05	FF4	OFF
F05	F05-IB/OB	OFF
F03	FF2	OFF
F02	F02-IB/OB	OFF

Manually-Operated UPE Fan Configuration

Station[1]	Manual Fan (IB/OB)	Location	Room Sequence	Config. (E/S/OFF)	X[2]
A01	UPE-A	North Mezzanine Level	#N200, #N200A, #300N		
	UPE-B	East Mezzanine Level	#E202		
A02	UPE-IB	Behind End Gate on Track 2	#301		
	UPE-OB	Behind End Gate on Track 2	#108		
A03	UPE-IB	Upper Mezzanine Level	#201, #219		
	UPE-OB	Upper Mezzanine Level	#201, #222		
B01	UPE-IB	East Mezzanine Level	#E222		
	UPE-OB	West Mezzanine Level	#W200, #W202		
B02	UPE-IB	Mezzanine Level	#200, #204		
	UPE-OB	Mezzanine Level	#201, #205		
B03	UPE-IB	Behind End Gate on Track 2	#113		
	UPE-OB	Behind End Gate on Track 2	#108		

[1]Incidents occurring at stations with manual UPE fans may require remote operation of fans at adjacent stations (ex. A04 and A05)

[2]Mark "X" in the right-hand box for all fans that needed to be configured

F01 | FF1 | OFF

F01 | F01-IB/OB | OFF

MAINT 1 shall scan and save this form in the "R" Shared Network Drive.

Attachment 3 Emergency Tunnel Fan Operation Form Page 1 of 2

8749771

Maintenance Section Emergency Tunnel Fan Operation Form

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

MOC-FRM-0001-R00.0

Approved: 1/24/2024

Call Time:	Incident Description: *(Arcing Insulator / Trash Fire / etc.)*		
17:31	Bad Stud		
Nearest Station: *(Metro Center A01)*	**Chainmarker:** *(xxx-xx)*	**Track #:**	**Train ID:**
F03	052+50	1	
Proposed Evacuation Route: *(towards which station)*	**Playbook/Page Reference:**	**Incident Zone(s):**	
customer Evacuated at Station F03	F32	D	
Fan Controller Name:	**Date:**	**MAINT 1 Name:**	**Date:**
[redacted]	04/17/24	[redacted]	4/17/24

Remote Legacy Fan Configuration

Station	Fan Name	Configuration (E/S/OFF)
F03	FL1	E
F04	FF3	S
F03	F03-IB/OB	S
F03	FF2	S

Station	Fan Name	Configuration (E/S/OFF)
F02	F02-IB/OB	S
F04	F04-IB/OB	S
F05	FF4	S
F05	F05-IB/OB	S

Manually-Operated UPE Fan Configuration

Station[1]	Manual Fan (IB/OB)	Location	Room Sequence	Config. (E/S/OFF)	X[2]
A01	UPE-A	North Mezzanine Level	#N200, #N200A, #300N		
	UPE-B	East Mezzanine Level	#E202		
A02	UPE-IB	Behind End Gate on Track 2	#301		
	UPE-OB	Behind End Gate on Track 2	#108		
A03	UPE-IB	Upper Mezzanine Level	#201, #219		
	UPE-OB	Upper Mezzanine Level	#201, #222		
B01	UPE-IB	East Mezzanine Level	#E222		
	UPE-OB	West Mezzanine Level	#W200, #W202		
B02	UPE-IB	Mezzanine Level	#200, #204		
	UPE-OB	Mezzanine Level	#201, #205		
B03	UPE-IB	Behind End Gate on Track 2	#113		
	UPE-OB	Behind End Gate on Track 2	#108		

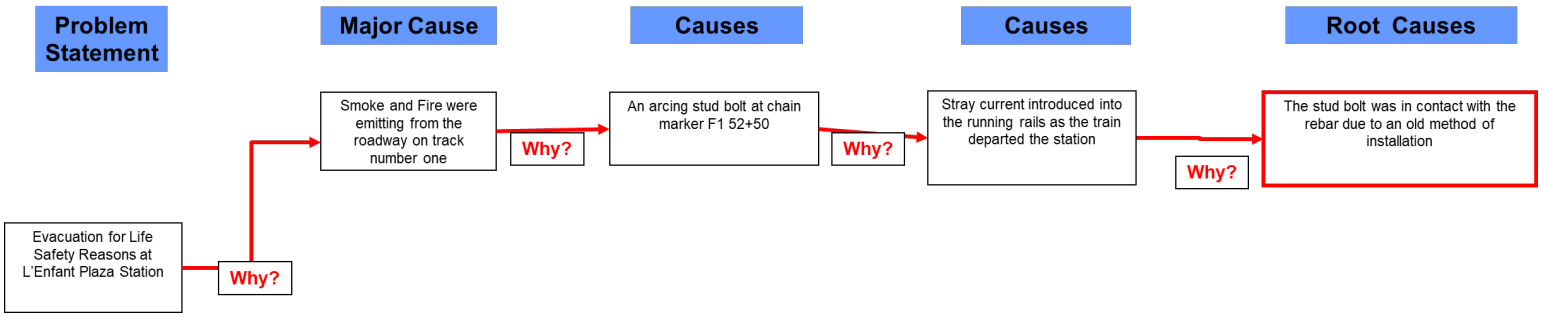
[1]Incidents occurring at stations with manual UPE fans may require remote operation of fans at adjacent stations (ex. A04 and A05)

[2]Mark "X" in the right-hand box for all fans that needed to be configured

MAINT 1 shall scan and save this form in the "R" Shared Network Drive.

Attachment 4 Emergency Tunnel Fan Operation Form Page 2 of 2

Appendix D – Why Tree Analysis



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

FINAL REPORT OF INVESTIGATION A&I E24388

Date of Event:	May 18, 2024
Type of Event:	A-4: Evacuation for Life Safety Reasons
Incident Time:	12:28 hours
Location:	Foggy Bottom – George Washington University (GWU) Station near Chain Marker (CM) C2 65+00
Time and How received by SAFE:	12:28 hours / SIO Notification
WMSC Notification Time:	13:25 hours
Responding Safety Officers:	None
Rail Vehicle:	None
Injuries:	None
Damage:	Minor
Emergency Responders:	District of Columbia Fire and Emergency Medical Services (DCFEMS), Metropolitan Transit Police Department (MTPD), Emergency Response Team (ERT)
SMS I/A Incident Number:	20240518#116996MX

May 18, 2024
Table of Contents

Abbreviations and Acronyms

AIMS	Advanced Information Management System
AOM	Assistant Operations Manager
ARS	Audio Recording System
BTRA	Office of Bus Transportation
CAP	Corrective Action Plan
CCTV	Closed-Circuit Television
CM	Chain Marker
CMNT	Office of Car Maintenance
CMOR	Office of the Chief Mechanical Officer
DCFEMS	District of Columbia Fire and Emergency Medical Services
ERT	Emergency Response Team
ESR	Event Scene Release
ETS	Emergency Trip Switch
EV	Environmental System
EVP	Emergency Ventilation Playbook
FLO	Fire Liaison Officer
GOTRS	General Orders and Track Rights System
IIT	Incident Investigation Team
MAC	Mission Assurance Coordinator
MICC	Metro Integrated Command and Communications Center
MOC	Maintenance Operations Center
MOR	Metrorail Operating Rulebook
MTPD	Metro Transit Police Department
NOAA	National Oceanic and Atmospheric Administration
OM	Operations Manager
OSI	Office of Safety Investigations
PASS	Positive Alarm Sequence System
PLNT	Office of Plant Maintenance
POC	Power Operations Center
ROIC	Rail Operations Information Center
RTC	Rail Traffic Controller
RTRA	Office of Rail Transportation
SAFE	Department of Safety
SMS	Safety Measurement System
SOP	Standard Operating Procedure
SPO	Special Police Officer
SPOTS	System Performance On-Time Summary
TRST	Office of Track and Structures
UPE	Under-Platform Exhaust
WMATA	Washington Metropolitan Area Transit Authority
WMSC	Washington Metrorail Safety Commission
WSAD	Warning Strobes and Alarm Device

Executive Summary

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

On Saturday, May 18, 2024, at 12:25 hours, Train ID 402 reported a track fire between Farragut West Station and Foggy Bottom - GWU Station. The Train Operator of Train ID 402, traveling outbound on track 2 towards Rosslyn Station, contacted the Metro Integrated Command and Communications Center (MICC) via two-way radio to report the incident. Simultaneously, Train ID 401, stopped at Foggy Bottom - GWU Station on track 1, reported a burning odor. The Radio Rail Traffic Controller (RTC) instructed Train ID 401 to shut off its Environmental System (EV) and proceed to Farragut West Station while redirecting all other rail traffic in the immediate vicinity.

Initial Response

At 12:27 hours, the MICC Assistant Operations Manager (AOM) reported the incident to the District of Columbia Fire and Emergency Medical Services (DCFEMS) Dispatcher, who promptly dispatched multiple units to Foggy Bottom-GWU and Farragut West Stations. A Metro Transit Police Department (MTPD) Officer at Foggy Bottom - GWU Station observed smoke in the tunnel approximately 100 yards from the platform limits on track 2. The MTPD Officer assumed the role of On Scene Commander (OSC) and reported no smoke within the platform limits. Another MTPD Officer was dispatched to Farragut West Station to assess the situation. The Button RTC contacted the Maintenance Operations Center (MOC) Desk to request fan activation and the Power Desk Assistant Superintendent (PDAS) to de-energize the third rail power on track 2 between Foggy Bottom - GWU Station and Farragut West Station.

Station Evacuation

At 12:28 hours, the Foggy Bottom - GWU Station Manager was directed to investigate the situation on the platform and subsequently contacted the MICC via the Emergency Trip Switch (ETS) Box. Following instructions from the MTPD Officer, the Station Manager began evacuating the station with the assistance of two Special Police Officers (SPO). Notably, the emergency fire alarm did not activate.

Fire Department Arrival and Actions

By 12:39 hours, DCFEMS units arrived at Foggy Bottom - GWU Station, established an Incident Command Post (ICP) at the station entrance, and proceeded to the platform. DCFEMS personnel, after consulting with the MTPD Officer, reported no active fire upon inspection. The MICC Rail Section requested the Incident Commander's approval for a test train to perform a track inspection on track 1, which was granted.

Further Developments

At 12:48 hours, MTPD personnel arrived at Farragut West Station, observed light smoke in the tunnel, and began evacuating the station as a precaution. Concurrently, a Track and Structures (TRST) Emergency Response Team (ERT) arrived at the ICP and requested foul time to enter the roadway with third rail power restored on track 2. The RTC granted foul time and requested PDAS to restore power. The Incident Commander halted power restoration due to ERT personnel entering the roadway. ERT located the source of the localized track fire near the interlocking and began clearing the debris.

Incident Command and Investigation

DCFEMS established Incident Command at the entrance of Foggy Bottom - GWU Station. A Recon team confirmed the absence of an active fire but observed the location where the smoke originated. A coordinated effort ensured that all necessary safety protocols were followed, including verifying power de-energization and fan activation. At approximately 12:58 hours, the Incident Commander approved the restoration of third rail power on track 2 and authorized a test train to identify the source of the fire and smoke. ERT and DCFEMS personnel, through coordinated efforts, determined there was no active fire, and the smoke had dissipated.

The probable cause of the incident was a localized track fire between Foggy Bottom - GWU Station and Farragut West Station, likely originating near the interlocking on track 2. The fire produced smoke that entered the tunnel, prompting evacuation and extensive safety measures. The cause of the fire was determined to be debris that accumulated near the energized third rail. The incident was effectively managed by de-energizing the third rail, ventilating the tunnel, and coordinating a comprehensive response from multiple agencies. No active fire was observed during the inspection, and rail services were resumed with precautions.

Incident Site

Foggy Bottom – GWU Station, Track 2 at CM C2 65+00

Field Sketch/Schematics

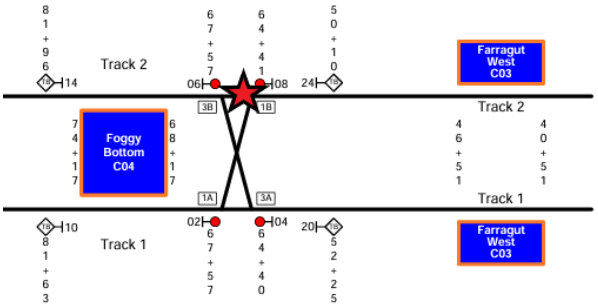


Figure 1 - depicts the location of the debris fire at Foggy Bottom - GWU Station, Track 2 near CM 65+00

The above depiction is not to scale.

Purpose and Scope

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

Investigative Methods

The investigative methodologies included the following:

- Site Assessment through video and document review

- Formal Interviews – SAFE interviewed six (6) individuals as part of this investigation. Interviews included persons present at, during, and after the incident, those directly

involved in the response process, and representatives from the Washington Metrorail Safety Commission (WMSC). SAFE interviewed the following individuals:

- Station Manager
- ERT Supervisor
- Power Desk Assistant Superintendent (PDAS)
- Fire Liaison Office (FLO)
- Button RTC
- Operations Manager (OM) / Rail-1

- 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 Operating Rulebook (MOR)
  - National Oceanic and Atmospheric Administration (NOAA)
  - Rail Operations Control Center (ROCC) Incident Report
  - Maximo Data
  - Fan Activation Playbook
  - Advanced Information Management System (AIMS) Logs
  - System Performance On-Time Summary (SPOTS) Report

- 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]
  - Closed-Circuit Television (CCTV)

Investigation

On Saturday, May 18, 2024, at 12:25 hours, Train ID 402 Train Operator, traveling outbound on track 2, leaving Foggy Bottom - GWU Station headed towards Rosslyn Station, contacted the MICC via their two-way radio. The Train Operator reported a track fire on track 2 between Farragut West Station and Foggy Bottom - GWU Station. Train ID 401 Train Operator, who was stopped at Foggy Bottom - GWU Station on track 1 platform limits, also reported smelling a burning odor. The Radio RTC instructed Train ID 401 to shut off their EV and continue towards Farragut West Station. All other rail traffic in the immediate area was being turned back. Train ID 401 informed the RTC that they were being held by local police officer in the station.

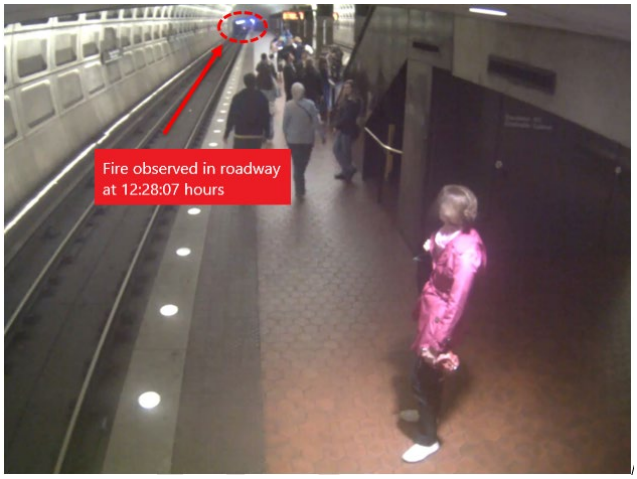


Figure 2 - depicts flames emanating from inside of the tunnel on track 2 towards Farragut West Station.

At 12:27 hours, the MICC AOM reported the incident to the DCFEMS Dispatcher, who dispatched multiple units to Foggy Bottom-GWU Station and Farragut West Station. A Metropolitan Transit Police Department (MTPD) Officer located at Foggy Bottom - GWU Station platform observed the smoke in the tunnel approximately 100 yards outside of the platform limits on track 2, between Farragut West Station and Foggy Bottom – GWU Station, near the interlocking. The MTPD Officer reported no smoke was in the platform limits. The MTPD Officer assumed the role of the On Scene Commander (OSC). The OSC informed MTPD-1 of a train on track 1 and requested the train be sent out of the station towards Farragut West. MTPD Dispatcher sent another MTPD Officer to Farragut West Station to see if there was any fire or smoke at that location. The Button RTC de-energized third rail power on track 2 between Foggy Bottom – GWU and Farragut West Stations, and contacted the Maintenance Operations Center (MOC) Desk to request fan activation.

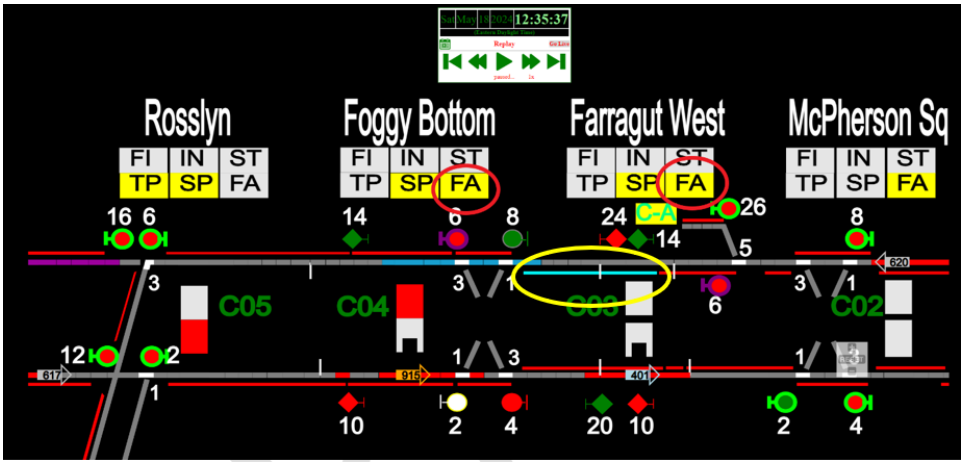


Figure 3 - AIMS Playback shows Fan Activation (FA) and third rail de-energization on track 2 between Foggy Bottom - GWU Station and Farragut West Station.

At 12:28 hours, the Foggy Bottom – GWU Station Manager was instructed to go from the mezzanine to the platform and investigate. Upon arriving at the track 2 tunnel entrance, the Station Manager contacted the MICC via the Emergency Trip Switch (ETS) Box and informed the Operations Manager (OM) that MTPD instructed them to evacuate the station. The OM informed the Station Manager to comply with the instructions given by the MTPD Officer. The Station Manager and two (2) Special Police Officers located on the platform began to clear customers from the station. It should be noted that the emergency fire alarm did not activate. At 12:32 hours, Train ID 401 departed Foggy Bottom-GWU Station towards Farragut West Station.

At 12:39 hours, DCFEMS units arrived at Foggy Bottom – GWU Station, established an Incident Command Post (ICP) at the entrance to Foggy Bottom – GWU Station, and made their way to the station platform. After arriving on the platform and walking to the end of the platform, the DCFEMS spoke with the MTPD Officer, who provided the location where they observed the fire emanating from. Station Closed Circuit Television (CCTV) footage showed several DCFEMS personnel passing the track 2 end gate. According to the Fire Department communication, the DCFEMS personnel remained within the confines of the continuous railing and did not enter the roadway. The DCFEMS personnel reported no signs of an active fire.

Figure 4 – depicts DCFEMS entering Foggy Bottom - GWU Station as the station was being evacuated.

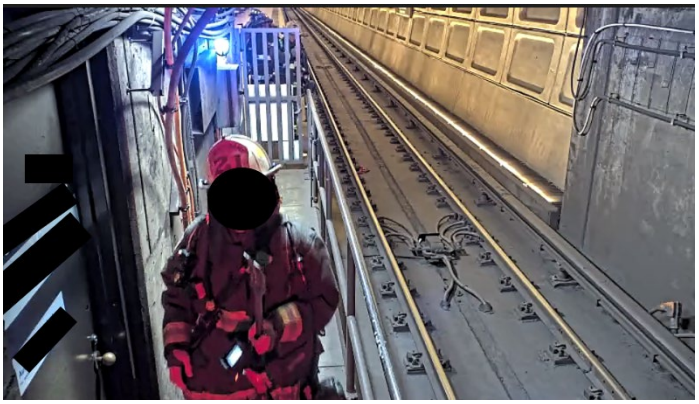


Figure 5 The image depicts DCFEMS personnel passing the end gate at Foggy Bottom—GWU Station on track 2 and remained within the confines of the continuous railing.

At 12:42 hours, the MICC Rail Section requested that the Fire Liaison Officer (FLO) contact the Incident Commander to inquire if a test train could perform a track inspection on track 1. The Incident Commander instructed DCFEMS personnel past the end gate to return to the platform and approved the request. At 12:48 hours, MTPD personnel arrived at Farragut West Station. They observed light smoke in the tunnel heading towards Foggy Bottom - GWU Station and a burning odor. The MTPD personnel began evacuating the station as a precautionary measure.

At 12:48 hours, MTPD personnel arrived at Farragut West Station. They observed light smoke within the confines of the tunnel on track 2 heading towards Foggy Bottom - GWU Station and a burning odor. There was no reported smoke in the station. The MTPD personnel began evacuating the station as a precautionary measure. Shortly thereafter DCFEMS inspected the station, determined there was no hazard, and the station was reopened.

At 12:55 hours, an ERT crew checked in at the ICP and was escorted to the Foggy Bottom – GWU Station platform by the MTPD Forward Liaison. Upon arriving at the platform, the ERT Supervisor spoke with the DCFEMS Recon Officer and suggested restoring third rail power on track 2 and having an inspection train sent through the location to attempt to identify the area of concern. The DCFEMS Recon Officer notified the Incident Commander, and the FLO relayed the request to the OM. Simultaneously, the ERT Supervisor contacted the Radio RTC, requested foul time to enter the roadway for a track inspection, and for third rail power to be restored on track 2. The Radio RTC granted the foul time. At 13:01 hours, an MTPD unit arrived at Foggy Bottom – GWU Station with an RTRA Supervisor.

At 13:04 hours, the Button RTC contacted the PDAS to restore third rail power on track 2 between Foggy Bottom. At this time, three (3) ERT crew personnel began a walking track inspection on track 2 towards Farragut West Station. Shortly after, MTPD-1 announced Rail was restoring power on track 2 from Foggy Bottom-GWU Station to Farragut West Station. Upon hearing this information, the FD Recon Officer announced that ERT personnel was in the roadway on track 2 and suggested delaying power restoration. The Incident Commander instructed the MICC to delay restoring third rail power between Foggy Bottom-GWU Station and Farragut West Station. The PDAS informed the RTC that power would not be restored until all personnel were clear of the roadway.

At 13:08 hours, ERT informed the MTPD Forward Liaison that they had identified the source of the fire and smoke on track 2 to be debris in contact with the third rail near the interlocking near signal 08. They reported no active fire at the time and did not request any assistance from DCFEMS. The ERT stated they would be cleaning up the debris and went to retrieve trash bags and shovels. At 13:21 hours, after being informed that the incident was a maintenance issue,

DCFEMS transferred Unified Command over to MTPD and began to exit Farragut West Station and Foggy Bottom – GWU Station. Shortly thereafter, MTPD transferred Incident Command to the RTRA Supervisor.

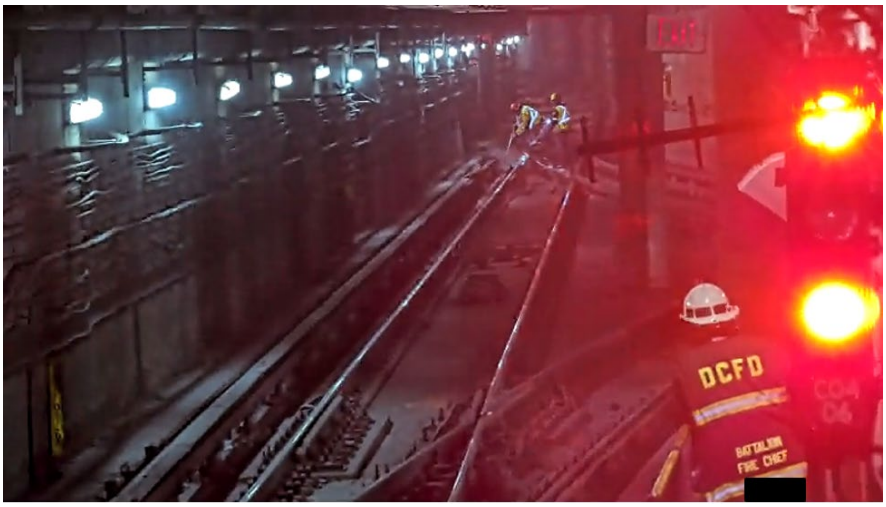


Figure 6 - depicts ERT clearing the debris from the roadway as DCFEMS remains within the confines of the continuous handrail.

Figure 7 - depicts ERT clearing the debris underneath the third rail from the roadway

At 13:40, ERT completed removing the debris and exited the roadway. ERT reported that no inspection train was needed. At 13:51, third rail power was restored on Foggy Bottom—GWU Station, track 2. At 13:58, normal service resumed with Train ID 930 servicing track 2.

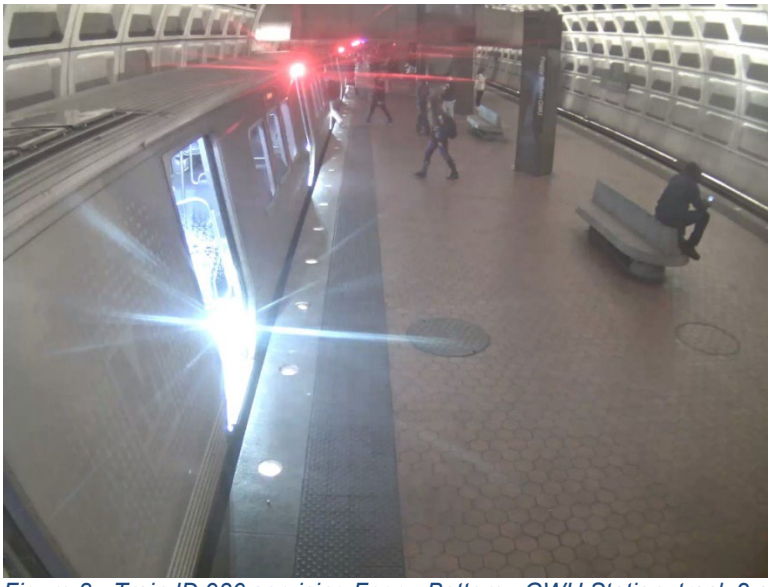


Figure 8 - Train ID 930 servicing Foggy Bottom - GWU Station, track 2 at 13:58 hours

Chronological Event Timeline

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

Time	Description
12:25:06 hours	Train ID 402: Reported a fire on track 2 between Foggy Bottom – GWU Station and Farragut West Station. Radio RTC: Asked for the Unit calling's location Train ID 402: Stated they had just left Foggy Bottom – GWU Station. They stated there was a fire as soon as you leave Foggy Bottom -GWU Station on track 2. Radio RTC: Asked for Train ID 402 to confirm the location of the fire. Train ID 402: Stated track 2 at Foggy Bottom – GWU Station. Radio RTC: Asked for Train ID 402 for a Chain Marker Train ID 402: Did not have a CM number. Radio RTC: Acknowledged the message and radioed for Train ID 401 on track 1 at Foggy Bottom – GWU Station. Train ID 401: Asked the Radio RTC if they wanted them to perform a track inspection. Radio RTC: Acknowledged the message and instructed the Train Operator to shut off the EV system. Train ID 401: Asked the Radio RTC to repeat the message. Radio RTC: Instructed Train ID 918 on track 2 at Metro Center Station to hold their location, Train ID 620 a permissive block to the 8-car marker on track 2 at McPherson Square. Train ID 918: Acknowledged message Train ID 620: Acknowledged message Train ID 401: Asked the Radio RTC if they wanted them to perform a track inspection. Radio RTC: Stated the smoke was showing on track 2 between Rosslyn Station and Foggy Bottom – GWU Station Train ID 401: Stated they could smell something burning at the station platform. Radio RTC: Acknowledged the message and dispatched an RTRA Supervisor to Foggy Bottom – GWU Station via track 1. [OPS 2 Radio]
12:26:09 hours	Button RTC: Reported the incident to the AOM [OR/BL Phone]
12:26:29 hours	Radio RTC: Reported the incident to the OM, stating the location was between Rosslyn and Foggy Bottom – GWU Stations [OR/BL Phone]
12:27:35 hours	AOM: Reported the incident to DCFEMS [Rail 2 Phone]

12:27:36 hours	MTPD-1: Radioed for MTPD-1 and advised them that RTRA was reporting a fire on the right of way, track 2 at Foggy Bottom – GWU Station MTPD Officer #1: Stated they were at Foggy Bottom – GWU Station on the platform. They were walking towards the front of the train platform to see if there was an active fire. They reported seeing smoke inside of the tunnel on track 2, between Foggy Bottom – GWU Station and Farragut West Station. MTPD Officer #2: Stated they were closing out an incident and was available to respond to either Foggy Bottom – GWU Station or Farragut West Station as needed. MTPD Officer #1: Confirmed seeing smoke in the tunnel between Foggy Bottom – GWU Station and Farragut West Station in the direction of Franconia-Springfield Station (track 2) MTPD Dispatch: Instructed MTPD Officer #2 to respond to the Farragut West Station MTPD Officer #1: Reported the smoke was approximately 100 yards into the tunnel on the track 2 side. They stated they would be the On Scene Commander until other personnel arrives. MTPD Cruiser #1: Acknowledged MTPD Officer #1 and asked MTPD-1 was RTRA sending a supervisor because it appeared to be a maintenance issue. MTPD-1: Stated at this time it has not been determined to be a maintenance issue. On Scene Commander: Cut into the FLO transmission and reported no smoke within the platform limits. The smoke appeared to be holding 100 yards outside of the platform limits at the interlocking. MTPD Cruiser #2: Acknowledged MTPD Officer #1 and stated they were enroute. MTPD Officer #2: Stated they were clear and responding to Farragut West Station. MTPD Supervisor #1: Stated they just arrived on location at Farragut West Station MTPD Cruiser #3: Asked the MTPD Supervisor #1 if single tracking was possible at Farragut West Station or would a Bus Bridge be requested. MTPD-1: Advised that no trains were entering Foggy Bottom – GWU Station. All service is being diverted. On Scene Commander: Reported Train ID 401 was stopped on track 1 at Foggy Bottom – GWU Station awaiting instructions. The Officer reported no smoke on the track 1 side. They recommended getting the train to leave the station towards Farragut West Station. MTPD Cruiser #3: Asked the On Scene Commander if single tracking could be performed or if a Bus Bridge would be needed. On Scene Commander: Advised that single tracking can be performed on track 1. The smoke was emanating from track 2. MTPD Cruiser #3: Acknowledged message regarding single tracking via track 1. On Scene Commander: Stated there was no smoke on track 1. They instructed the Train ID 401 Train Operator to perform a track inspection between Foggy Bottom -GWU Station and Farragut West Station. MTPD-1: Informed the On Scene Commander that Train ID 401 was leaving and Rail was not sending any other trains into Foggy Bottom – GWU Station on tracks 1 and 2. No trains will be servicing the station.

Time	Description
	On Scene Commander: Acknowledged Train ID 401 was leaving the station. They informed MTPD that there was another train entering the track 1 platform. MTPD-1: Informed the On Scene Commander that the train entering the platform on track 1 would be the last train to enter the station. [MTPD 1X Radio]
12:27:43 hours	OM: Asked the Radio RTC which Train ID reported the incident. Instructed that no other trains be sent into Foggy Bottom- GWU Station. Radio RTC: Stated they were attempting to cancel all routing to the station and call for fan activation. [OR/BL Phone]
12:28:13 hours	Buttons RTC: Contacted MOC Desk to report fire on track 2, leaving Foggy Bottom – GWU Station in the direction of Rosslyn Station / Vienna Station. MOC Desk: Asked for the nearest Chain Marker Buttons RTC: Advised that they did not have the nearest Chain Marker and stated the location was on track 2 between Foggy Bottom – GWU Station and Rosslyn Station. MOC Desk: Stated between C04 and C05 and asked the direction the train is being evacuated. Buttons RTC: Stated they were trying to get confirmation where the fire is located so that trains can be diverted. MOC Desk: Stated that they would activate fans once they received the Chain Marker where the fire was located. If not, then they could only ventilate the stations [Power Desk Phone]
12:28:33 hours	ROIC: Instructed the Station Manager at Foggy Bottom – GWU Station to go to the platform on track 2 because they were receiving reports of fire and smoke.
12:29:20 hours	Radio RTC: Instructed Train ID 401 to close their doors and continue Train ID 401: Informed the RTC that they were being held momentarily by police Radio RTC: Acknowledged the message and asked the Train Operator if they were being held by MTPD or Local Police Train ID 401: Informed the RTC that they were being held by local police [OPS 2 Radio]
12:30:27 hours	DCFEMS Dispatcher: Dispatched Battalion 1 to Foggy Bottom – GWU Station for the report of a fire in the roadway on track #2. To use TAC channel 03 [DCFEMS 101 Radio]
12:30:54 hours	DCFEMS Dispatcher: Dispatched Fire Engines 23, 1, 16, 5, and 9. Truck 2 Tower 3 Battalion Chief 1, Battalion Chief of Special Operations, Rescue Squad 1, EMS 6, Medic 5, Ambulance 9, and the Safety Officer Battalion Chief for a report of fire on track 2 on the Orange, Blue and Silver line. [DCFEMS 101 Radio]
12:31:35 hours	DCFEMS Dispatcher: Announced Engine 5 to respond to the entry control point at 890 2third Street, NW Washington DC. Fire Engines 1, 23, 16, 5, 9, Truck 2 Tower 3 Battalion Chief 1, Battalion Chief of Special Operations, Rescue Squad 1, EMS 6, Medic 5, Ambulance 9, and the Safety Officer Battalion Chief respond for a report of fire on track 2 [DCFEMS 101 Radio]
12:32:26 hours	DCFEMS Dispatcher: Announced Engine 5 to respond to the entry control point at 890 2third Street, NW Washington DC. Units on the Metro Station box with Battalion 1 operate on TAC channel 03 [DCFEMS 101 Radio]

Time	Description
12:32:49 hours	Battalion Chief of Special Operations: Radioed for the FLO to provide an update. FLO: Stated as per MTPD at Foggy Bottom – GWU Station there is a smoke condition on track 2 approximately 200 yards into the tunnel, in the direction of Farragut West Station. The FLO stated that they did not see much smoke form the Station CCTV cameras. They have confirmed with the OM that third rail power has been de-energized on track 2 only. Battalion Chief of Special Operations: Asked if the station was evacuated and if there were trains at the platform. FLO: Stated all trains have exited the station and that the CCTV shows no customers on the platform or in the station. [DCFEMS 101 Radio]
12:32:55 hours	Foggy Bottom Station FC3 Fans commanded Emergency Off. [AIMS]
12:33:06 hours	Farragut West Station UPE IB and UPE OB Fans commanded Emergency Off. [AIMS]
12:33:07 hours	Foggy Bottom Station UPE IB and UPE OB Fans commanded Emergency On. [AIMS]
12:33:15 hours	Button RTC: Contacted the MOC Desk to request fan activation at Foggy Bottom – GWU Station. [OR/BL Phone]
12:33:23 hours	Farragut West Station FC2 Fan commanded Emergency Off. [AIMS]
12:33:42 hours	Third rail power de-energized on track 2 between Foggy Bottom-GWU and Farragut West Stations [AIMS]
12:34:18 hours	Engine 1: Reported they were staged at 24th Street and I Street. They were connected to the fire hydrant, they had no entrance, and was standing by. [DCFEMS Radio]
12:34:55 hours	Station Manager: Informed the OM that MTPD wanted the Foggy Bottom – GWU Station evacuated and asked for further instructions. OM: Instructed the Station Manager that they are to follow MTPD's instructions [Metro 1 Phone]
12:34:46 hours	FLO: Informed the Battalion Chief of Special Operations that customers would be inside Foggy Bottom – GWU Station. A train was mistakenly allowed to service the station on track 1. [DCFEMS Radio]
12:35:08 hours	FLO: As reported from the CCTV camera footage there were no signs of customers rushing out of the station and a light haze of smoke was observed. [DCFEMS Radio]
12:35:51 hours	Farragut West Station OSC: Reported to MTPD-1 light smoke observed at Farragut West Station. Requested fan activation due to a burning smell in the station. Foggy Bottom – GWU Station OSC: Reported toMTPD-1 that the station is being evacuated. They will report back once the station is clear. The OSC also asked for confirmation that third rail power was de-energized and to confirm a Rail Supervisor and ERT were enroute. MTPD-1: Confirmed that power was down on track 2, however a Rail Supervisor with a hot stick needed to confirm. Also, ERT and a Rail Supervisor were enroute. Foggy Bottom – GWU Station OSC: Acknowledged the message and stated that they were standing by [MTPD-1X Radio]

Time	Description
12:35:57 hours	DCFEMS Truck 2: Stated they were on scene and would establish Incident Command. They reported customers were evacuating the station via the escalators. They were entering the station. Battalion Chief of Special Operations: Acknowledged the message and informed Truck 2 would have Recon. Engines 1 and 23 would be assisting. DCFEMS Truck 2: Acknowledged the message and informed Special Operations that Engine 16 was also on location. Engine 23: Reported they were connected to a hydrant at 2third Street and I Street and would be heading into the station with Truck 2 [DCFEMS Radio]
12:38:07 hours	FLO: Informed the Battalion Chief of Special Operations that it was confirmed that power on track 2 had been de-energized in the direction of Farragut West Station Battalion Chief of Special Operations: Acknowledged the message Battalion Chief of Special Operations: Asked the FLO to confirm the power was down from Foggy-Bottom – GWU Station to Farragut West Station. FLO: Confirmed power was down from Foggy Bottom – GWU Station to Farragut West on track 2 [DCFEMS Radio]
12:39:39 hours	Battalion Chief of Special Operations: Informed the FLO that Incident Command had been established outside of Foggy Bottom – GWU Station near the escalator. FLO: Acknowledged the message [DCFEMS Radio]
12:40:06 hours	DCFEMS Recon Officer: Informed the Incident Commander that the platform was clear of customers. They were making their way to the tunnel entrance towards Farragut West Station, and NTPD has evacuated the station. Incident Commander: Acknowledged message and asked the Recon Officer for an approximate distance into the tunnel where the fire or smoke was located. DCFEMS Recon Officer: Informed the Incident Commander that they did not have a location. They informed them that MTPD reported the location was approximately 2 ½ Chain Marker lengths into the tunnel. They were looking down the tunnel from the end of the platform and no smoke or fire was observed. [DCFEMS Radio]

Time	Description
12:40:38 hours	MTPD-1: Informed the Foggy Bottom – GWU Station OSC that DCFEMS had established Incident Command topside near the station entrance. Foggy Bottom – GWU Station OSC: Confirmed that all customers had exited the station. MTPD-1: Acknowledged the message and asked the OSC if they received the message that DCFEMS had established Incident Command topside near the station entrance. Foggy Bottom – GWU Station OSC: Acknowledged the message and stated they were enroute to the Incident Command Post and informed MTPD-1 that DCFEMS was entering the wayside, approximately 2 ½ CM. MTPD-1: Asked the Foggy Bottom – GWU Station OSC to repeat the message. Incident Commander: Stated be advised the Fire Department was going to the wayside. Foggy Bottom – GWU Station OSC: Stated the DCFEMS had not waited for a RTRA Supervisor to hot stick the third rail. MTPD Unit: Stated they were enroute to Courthouse Station to pick up an RTRA Supervisor. MTPD-1: Asked the OSC if DCFEMS would allow a test train to inspect track 1. Foggy Bottom – GWU Station OSC: Stated the DCFEMS was on track 2. Track 1 was clear for a test train. Foggy Bottom – GWU Station OSC: Informed the MTPD-1 that there was approximately 150 – 200 yards of visibility on track 1 towards Farragut West Station. MTPD-1: Asked if the smoke was 150 – 200 feet into the tunnel. Foggy Bottom – GWU Station OSC: Stated that the smoke was dissipating, and they were relocating to the ICP. [MTPD-1X Radio]
12:41:32 hours	DCFEMS Recon Officer: Informed the Incident Commander that it appears the incident location occurred near CM 64+00 [DCFEMS Radio]
12:41:54 hours	Engine 5: Informed the Incident Commander that they were on the platform at Farragut West Station. Incident Commander: Acknowledged message and asked for a status update. [DCFEMS Radio]
12:42:43 hours	FLO: Asked the Incident Commander if they would allow a test train to perform a track inspection on track 1. Incident Commander: Asked for the FLO to standby and radioed for the DCFEMS Recon Officer and asked if they were still on the platform. DCFEMS Recon Officer: Informed the Incident Commander that they were just inside of the tunnel; however, they were not in any of the track beds. They were in an area of refuge or a maintenance area off the end of the platform. The Recon Officer stated they did not see anything from their vantage point on track 2 and no one was on track 1. Engine 1: Informed the Incident Commander that they were on the platform at Foggy Bottom-GWU Station and asked if they needed some assistance. Incident Commander: Instructed the Recon Officer to return to the platform in order for Metro to run an inspection train. The Recon Officer was instructed to inform the Incident Commander once they were ack on the platform. DCFEMS Recon Officer: Acknowledged the message. [DCFEMS Radio]

Time	Description
12:47:14 hours	Foggy Bottom – GWU Station OSC: Informed MTPD-1 that they were topside at the ICP. MTPD-1: Informed the OSC that DCFEMS had authorized a test train on track 1. Foggy Bottom – GWU Station OSC: Acknowledged the message. MTPD Supervisor: Stated they were on scene at Foggy Bottom – GWU Station and would assume On Scene Command. MTPD-1: Asked that the radio channel be switched to Alternate channel 2X. Farragut West OSC: Acknowledged that the incident was switching to channel MTPD-2X. Foggy Bottom – GWU Station OSC: Acknowledged the message. [MTPD-1X Radio]
12:48:45 hours	MTPD-1: Requested a radio check on MTPD-2X channel. Foggy Bottom – GWU Station OSC: Acknowledged the message and stated the transmission came through load and clear. Farragut West Station OSC: Informed the Foggy Bottom-GWU Station OSC that they partially evacuated the station as a precaution. However, some patrons are entering due to the fact that Rail had service has not been suspended some customers were entering the station. They reported light smoke and a burning odor. Foggy Bottom – GWU Station OSC: Asked the Farragut West Station OSC if the smoke condition was affecting the station. Farragut West Station OSC: Informed the Foggy Bottom-GWU Station OSC that there was slightly diminished visibility in the tunnel and a burning odor at the platform limits. They cleared the station just as a precaution, and the Fire Department was on scene. MTPD-1: Informed the Foggy Bottom-GWU Station OSC that ERT was at their location. Foggy Bottom – GWU Station OSC: Acknowledged the message [MTPD-2X Radio]

Time	Description
12:51:22 hours	MTPD Unit: Stated they were enroute to Foggy Bottom – GWU Station with the RTRA Supervisor. Foggy Bottom – GWU Station OSC: Informed MTPD-1 that the FD Incident Commander stated that service should be suspended at Farragut West Station if there was smoke being reported. MTPD-1: Stated appropriate action should be taken if smoke was observed at Farragut West Station. Farragut West Station OSC: Stated they had tried to evacuate the station and asked that Rail inform the Station Manager at the 14th Street entrance to close the gates. Foggy Bottom – GWU Station OSC: Asked for the Farragut West Station OSC to repeat their message. Farragut West Station OSC: Stated that the station was now complete closed. MTPD-1: Asked the Foggy Bottom – GWU Station OSC to confirm with the Incident Commander if there is smoke at Farragut West due to conflicting reports from DCFEMS at Farragut West Station. Foggy Bottom – GWU Station OSC: Stated that Fire Department at Farragut West Station had confirmed there was no smoke in the station. MTPD-1: Asked the Foggy Bottom – GWU Station OSC to confirm with the Incident Commander if Farragut West Station could be reopened. Foggy Bottom – GWU Station OSC: Stated that Fire Department has confirmed that Farragut West Station could be reopened. They requested that customers not be allowed into the station until single tracking had begun in order that the station would not become overcrowded. [MTPD-2X Radio]
12:56:14 hours	MTPD Forward Liaison: Informed MTPD-1 that they were on the platform at Foggy Bottom – GWU Station with ERT
12:56:59 hours	MTPD-1: Informed the Foggy Bottom-GWU Station OSC that Rail conducted a good track inspection on track 1 and would begin single tracking, bypassing Foggy Bottom – GWU Station, with the permission of the Fire Department. Foggy Bottom – GWU Station OSC: Advised MTPD-1 that the FD Incident Commander concurred. [MTPD-2X Radio]
12:58:49 hours	Incident Commander: Informed the FLO that ERT was on scene with the FD Recon Officer and was requesting to restore third rail power on track 2 at Foggy Bottom – GWU Station and to have a test train brought in to identify where the fire/smoke originated from. FLO: Acknowledged the message, stated they observed them from the CCTV camera, would put the request in with Rail-1, and inform the Incident Commander when the test train would be arriving. [DCFEMS Radio]
12:59:32 hours	DCFEMS Recon Officer: Informed the Incident Commander that they observed where the smoke emanated from. There was no active fire. They would be standing by until power is restored. [DCFEMS Radio]
13:00:25 hours	ERT Supervisor: Requested Foul-Time to enter the roadway at Foggy Bottom – GWU Station to perform an inspection and requested third rail power be restored. Radio RTC: Acknowledged the request and asked if a safety briefing was conducted and hot spots identified. ERT Supervisor: Acknowledged that a safety briefing was conducted and hot spots had been identified and asked for the nearest CM. [OPS 2 Radio]

Time	Description
13:00:34 hours	FLO: Asked the Incident Commander to confirm that ERT was requesting a test train and third rail power to be restored on track 2. Incident Commander: Informed the FLO that ERT wanted to see the issue could be replicated and to run a test train. FLO: Acknowledged the message. [DCFEMS Radio]
13:01:42 hours	MTPD Unit: Stated they were at Foggy Bottom – GWU Station with the RTRA Supervisor. [MTPD-2X Radio]
13:02:14 hours	Radio RTC: Granted Foul Time to the ERT crew for track 2 only, informed them that third rail power would be restored shortly, and made the announcement to all personnel in the area. ERT Supervisor: Acknowledged that third rail power would be restored shortly, and they had permission to enter the roadway for an investigation from the platform to CM C2 65+00. [OPS 2 Radio]
13:03:44 hours	MTPD: Announced that Rail was restoring power on track 2 from Foggy Bottom – GWU Station to Farragut West Station. Foggy Bottom – GWU Station OSC: Direct MTPD Forward Liaison: Informed MTPD-1 that ERT was in the roadway walking towards the interlocking to perform an inspection. Foggy Bottom – GWU Station OSC: Instructed the unit to proceed with their message. MTPD Forward Liaison: Informed MTPD-1 that ERT was performing a track inspection of the interlocking on track 2. Foggy Bottom – GWU Station OSC: Acknowledge the message. [MTPD-2X Radio]
13:04:12 hours	RTC: Informed the PDAS that power has been requested to be restored on track 2, Foggy Bottom – GWU Station to Farragut West Station as per ERT. All personnel are standing by, standing clear. PDAS: Stated alright I have C03 Traction Power, Breaker 32, C04 Tie Breaker, 42, 44, and C04 Traction Power, 34. All personnel and equipment are standing by and clear at 13:04, power ready to be restored. [PDAS Phone]
13:04:20 hours	DCFEMS Recon Officer: Informed the Incident Commander that three (3) Metro employees were about to enter the roadway on track 2 and requested for third rail power restoration to be delayed. [DCFEMS Radio]
13:05:05 hours	Incident Commander: Informed the FLO that three Metro employees were in the roadway on track 2 FLO: Asked if they still wanted third rail power to be restored Incident Commander: Stated the FD Recon Officer reported three employees in the roadway on track 2. FLO: Informed the Incident Commander that third rail power restoration will be held off until ERT confirms they are clear and requested for it to be restored. Incident Commander: Acknowledge the message. [DCFEMS Radio]

Time	Description
13:06:09 hours	PDAS: Informed the RTC that it was reported that ERT are in the roadway. RTC: Stated they were informed that ERT was standing by, standing clear. PDAS: Informed the RTC that power would not be restored until it was confirmed that the roadway was clear. RTC: Acknowledged the message and stated ERT was in the roadway, however they were standing by to see if an arcing insulator caused the fire condition. PDAS: Informed the RTC that the Fire Department instructed that power not be restored. RTC: Acknowledged the message [PDAS Phone]
13:08:14 hours	Foggy Bottom – GWU Station OSC: Asked the MTPD Forward Liaison if ERT was in the roadway on track 2. MTPD Forward Liaison: Replied that ERT was in the roadway inspecting the interlocking. Foggy Bottom – GWU Station OSC: Instructed the Forward Liaison to inform them when all personnel had cleared the roadway. MTPD Forward Liaison: Acknowledge the message. Foggy Bottom – GWU Station OSC: Informed MTPD-1 that ERT personnel was in the roadway on track 2. MTPD-1: Acknowledged the message. MTPD Forward Liaison: Informed the Foggy Bottom – GWU Station OSC that ERT reports that the cause of the fire was debris in the roadway at the interlocking. ERT was in the process of cleaning up the debris. [MTPD-2X Radio]
13:11:57 hours	Farragut West Station OSC: Asked the Foggy Bottom – GWU Station OSC if Farragut West Station is open to customers. Foggy Bottom – GWU Station OSC: Differed to the MTPD-1 MTPD-1: Acknowledged the message and stated trains were single tracking, via track 1, bypassing Foggy Bottom – GWU Station. DCFEMS had already confirmed no smoke was observed at Farragut West Station. MTPD-1: Asked the Foggy Bottom – GWU Station OSC if ERT determined the fire to have been the result of a maintenance issue. Foggy Bottom – GWU Station OSC: Confirmed the incident was caused by trash in the roadway, and ERT was in the process of cleaning it up. MTPD-1: Acknowledged the message. MTPD Supervisor: Acknowledged the incident was a maintenance issue and requested an RTRA Supervisor for transfer of command. [MTPD-2X Radio]
13:12:15 hours	Incident Commander: Asked the DCFEMS Recon Officer if they could confirm with ERT found trash in the interlocking on track 2 DCFEMS Recon Officer: Stated they were unable to confirm because ERT did not coordinate with the Recon Officer before entering the roadway. They were waiting for them to return, and they were unable to get the CM number due to the sign being missing prior to this incident. Once the ERT makes contact they will provide an update. Incident Commander: Stated that the first CM off of the platform is 66+50 and the interlocking goes to 64+50 DCFEMS Recon Officer: Stated ERT was walking back towards their location. They would advise shortly [DCFEMS Radio]

Time	Description
13:21:07 hours	MTPD-1: Asked the Foggy Bottom – GWU Station OSC to confirm that DCFEMS had transferred Incident Command over to them and if so was it clear to resume single tracking stopping at Foggy Bottom – GWU Station on track 1. Foggy Bottom – GWU Station OSC: Replied Affirmatively and stated they would be transferring Incident Command to the RTRA Supervisor. Farragut West Station OSC: Reported trains servicing Farragut West Station via track 1, ridership was light, and the Station Manager had everything under control. They requested to relinquish command. [MTPD-2X Radio]
13:25:17 hours	MTPD-1: Asked the Foggy Bottom – GWU Station OSC to confirm that DCFEMS had transferred Incident Command over to MTPD and then to RTRA Foggy Bottom – GWU Station OSC: Replied Affirmatively that DCFEMS had transferred Incident Command to them and they are transferring it to the RTRA Supervisor. [MTPD-2X Radio]
13:25:39 hours	Battalion Chief of Special Operations: Informed all DCFEMSEMS personnel that the Incident Command was being released to Metro once all personnel were out of the station and accounted for. [DCFEMS Radio]
13:26:45 hours	DCFEMS Recon Officer: Informed Incident Command that all DC Fire Units, themselves (Truck 2), and Engine 23 were out of the Station and accounted for. Battalion Chief of Special Operations: Acknowledged the message [DCFEMS Radio]
13:27:07 hours	Battalion Chief of Special Operations: Informed the FLO that Incident Command was being transferred to MTPD [DCFEMS Radio]
13:40:27 hours	ERT cleared the roadway.
13:41:12 hours	Foggy Bottom – GWU Station was re-opened.
13:51:20 hours	Third rail power was restored on track 2 Foggy Bottom – GWU Station
13:58:20 hours	Train ID 930 was the first revenue train to service track 2 at Foggy Bottom – GWU Station

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

Closed-Circuit Television (CCTV)

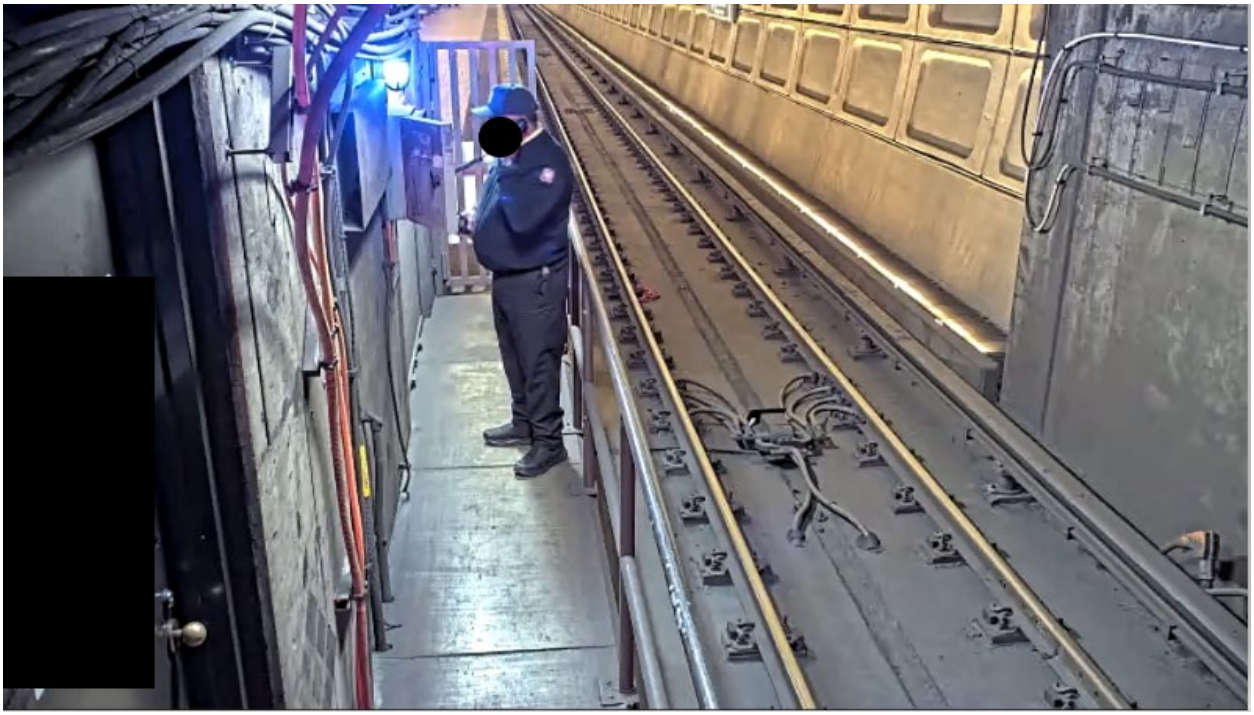


Figure 9 – depicts the Foggy Bottom – GWU Station Manager contacting the MICC via the ETS Box on track 2.

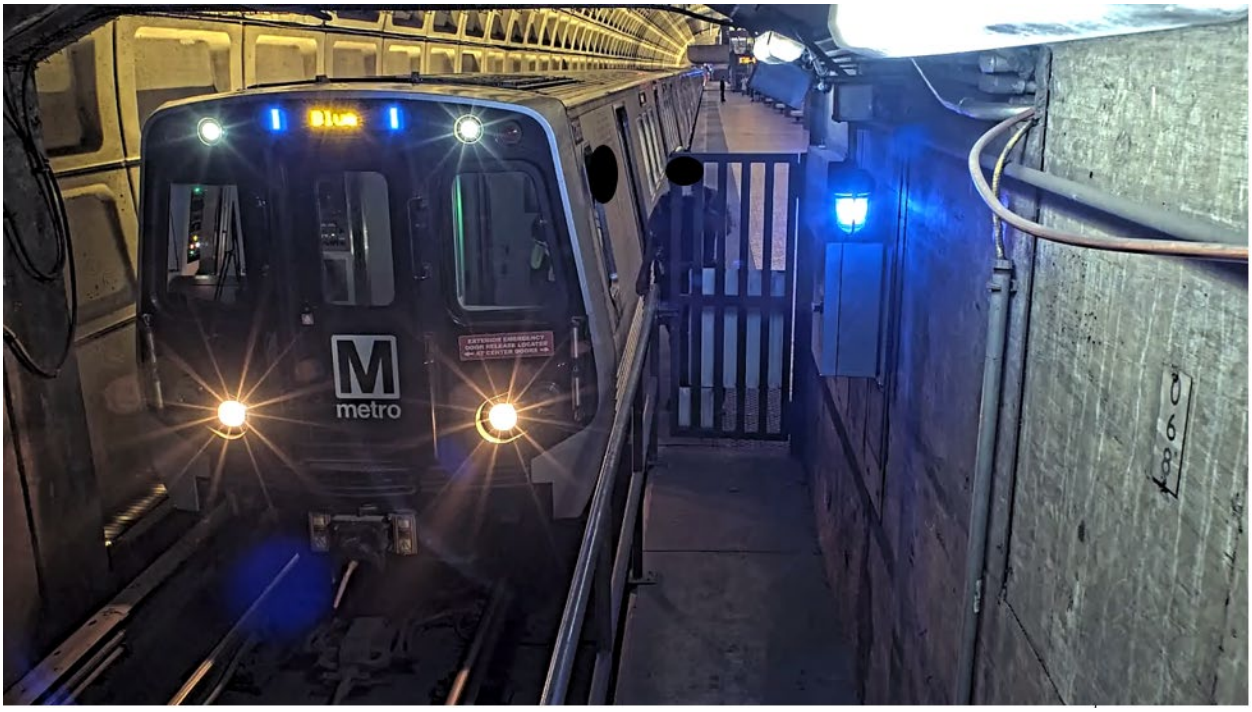


Figure 10 - MTPD Officer speaking with Train ID 401 Train Operator on track 1 towards Farragut West.

Figure 11 - depicts SPO directing customers towards the nearest exits during the station evacuation.

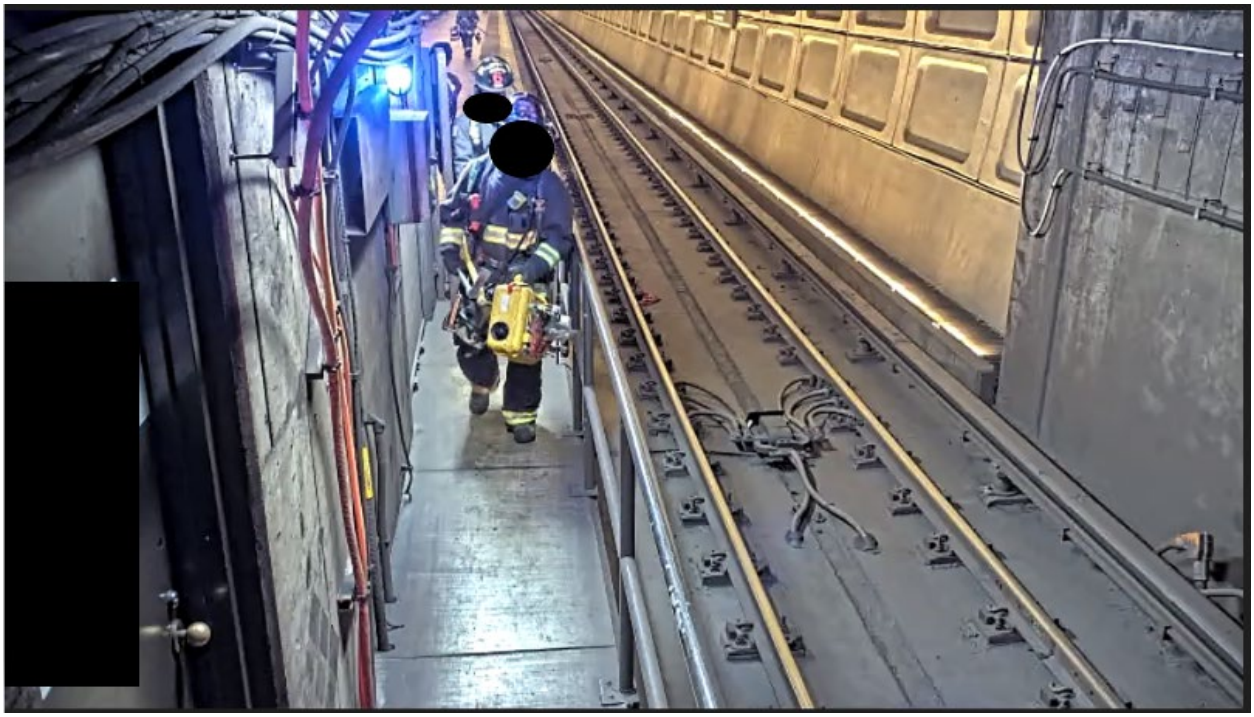


Figure 12 - depicts DCFEMS personnel walking past the end gate with a Warning Strobe Alarm Device (WSAD)

Figure 13 - depicts DCFEMS personnel returning to the platform

Figure 14 - depict the continuous handrail on track 2 towards Farragut West Station.

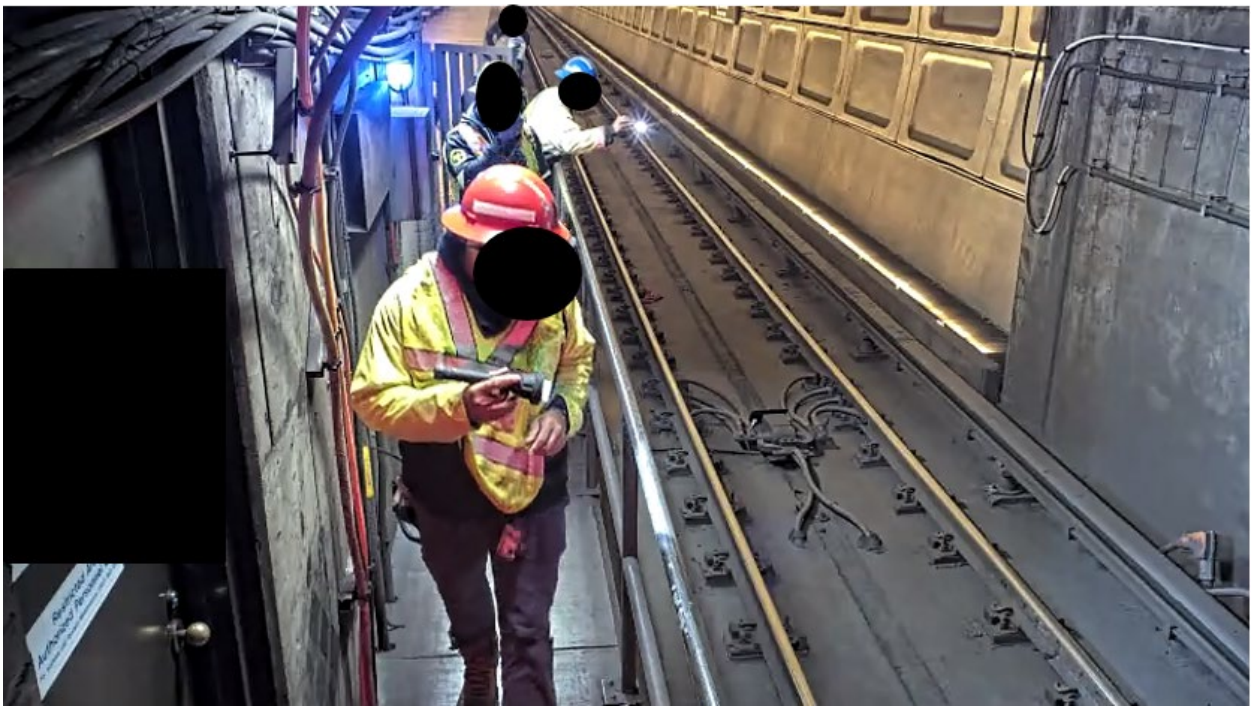


Figure 15 - depicts ERT during the track inspection

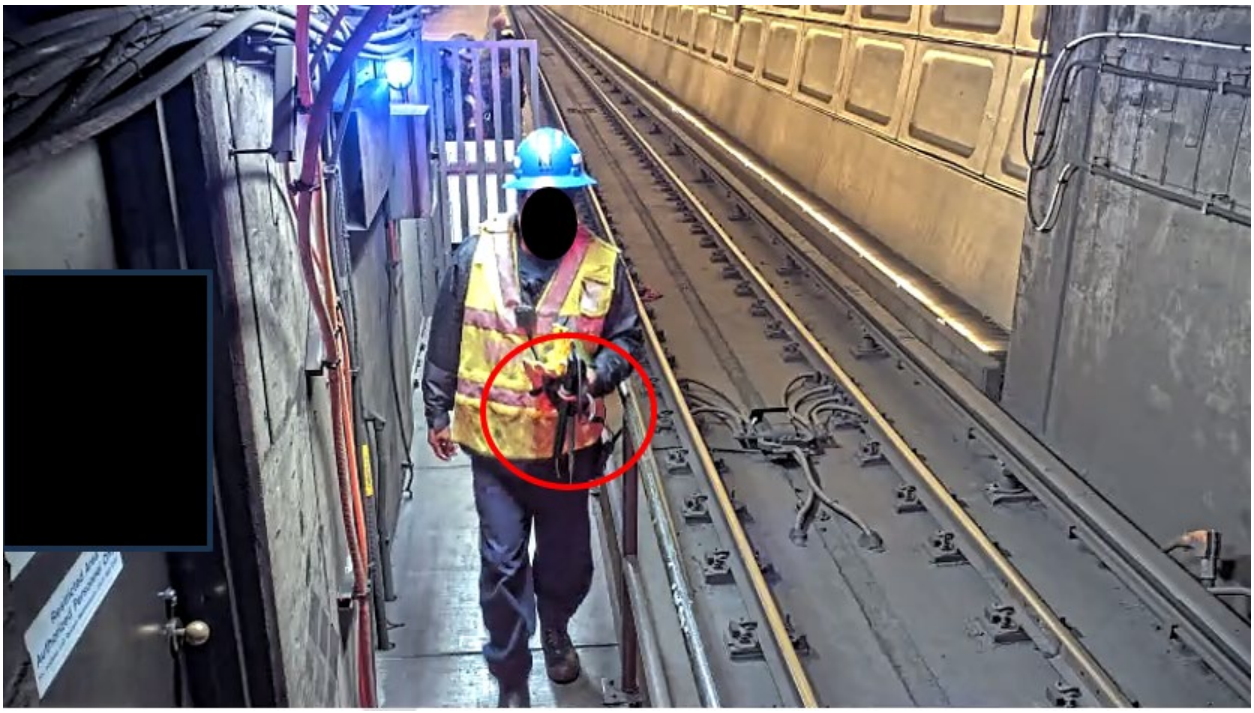


Figure 16 - depicts ERT personnel holding a hot stick used to confirm third rail power has been de-energized.

Figure 17 - ERT personnel obtaining equipment to clear debris in the roadway.

Figure 18 - depicts ERT personnel clearing the debris near the third rail on track 2

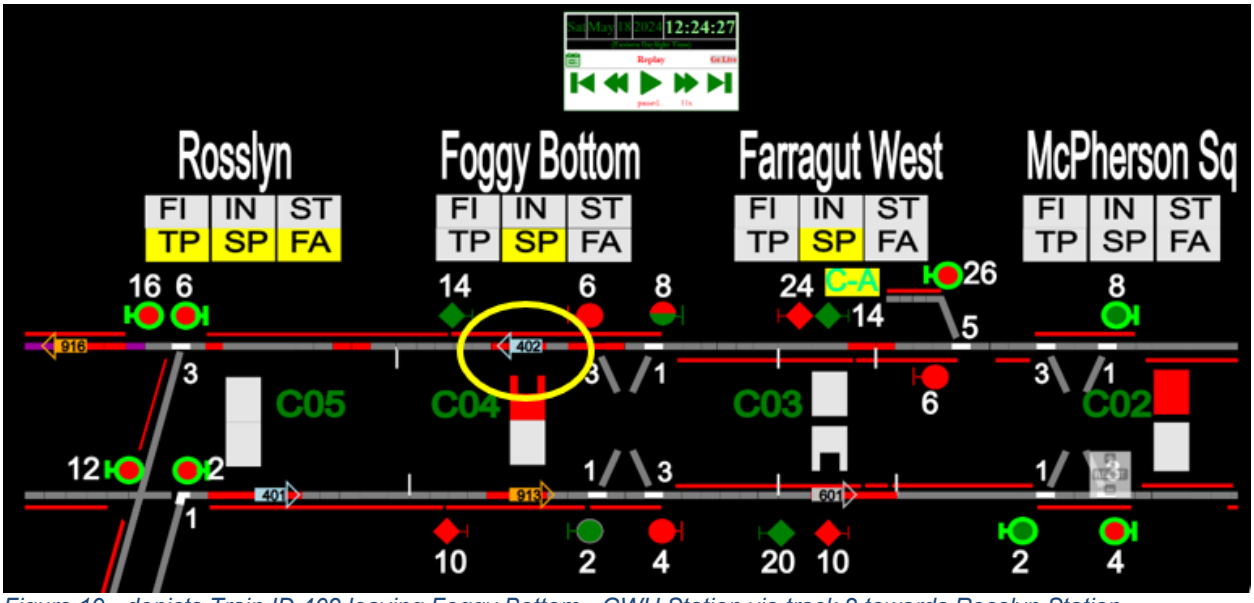


Figure 19 - depicts Train ID 402 leaving Foggy Bottom - GWU Station via track 2 towards Rosslyn Station.

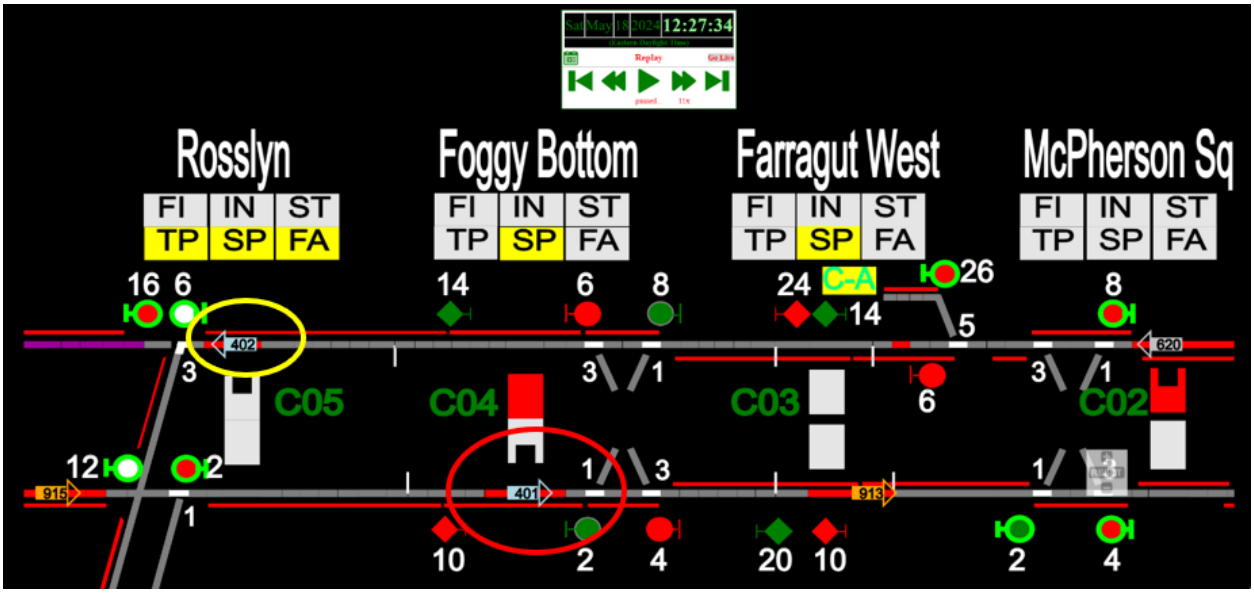


Figure 20 - depicts Train ID 401 berthed on track 1 at Foggy Bottom - GWU Station towards Farragut West Station.

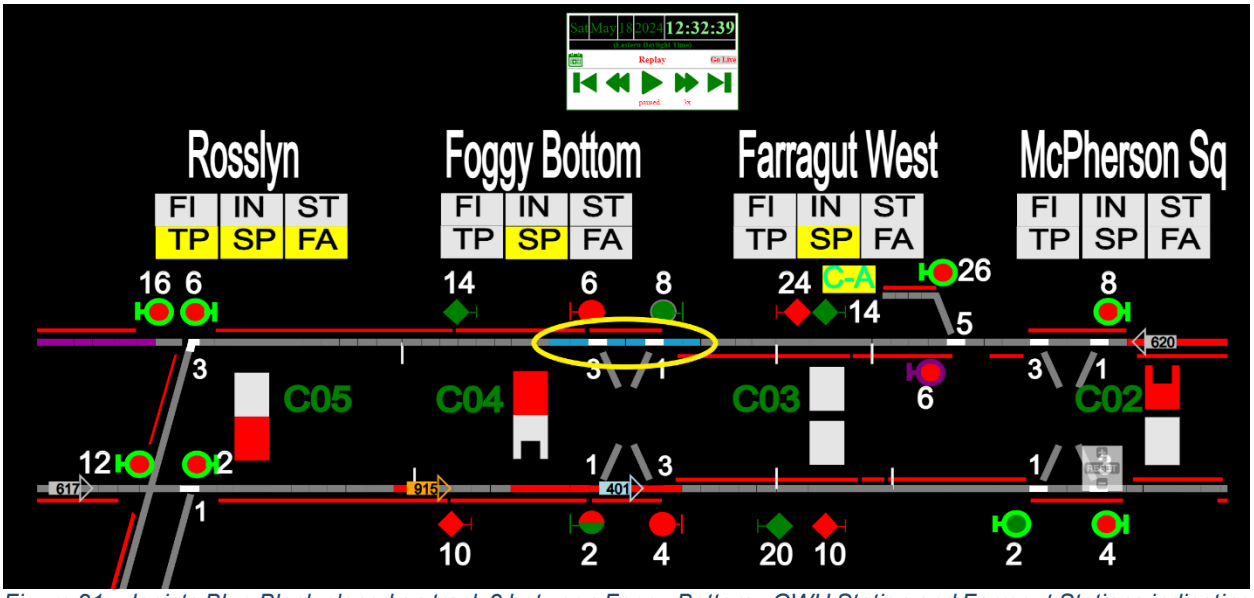
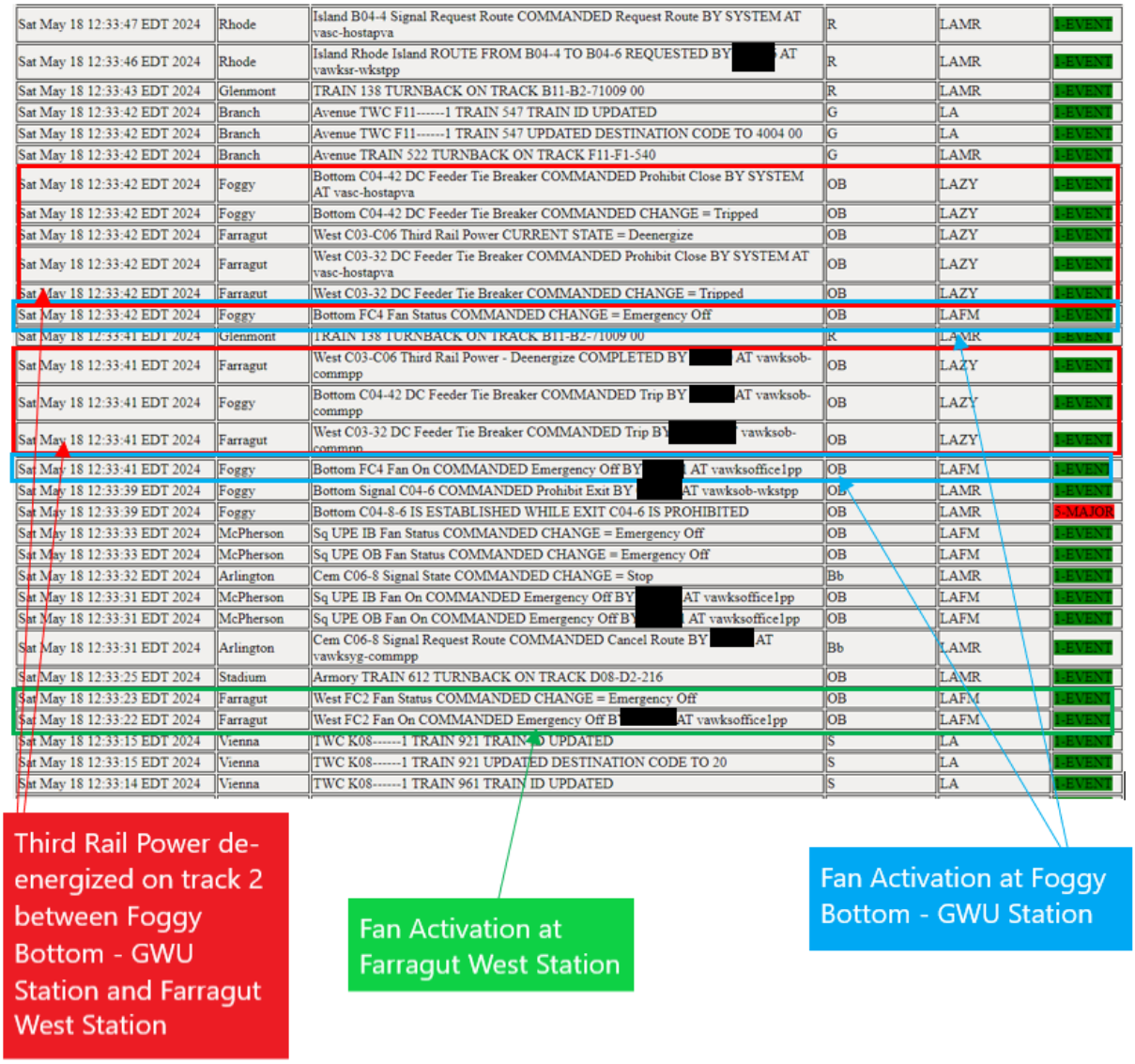
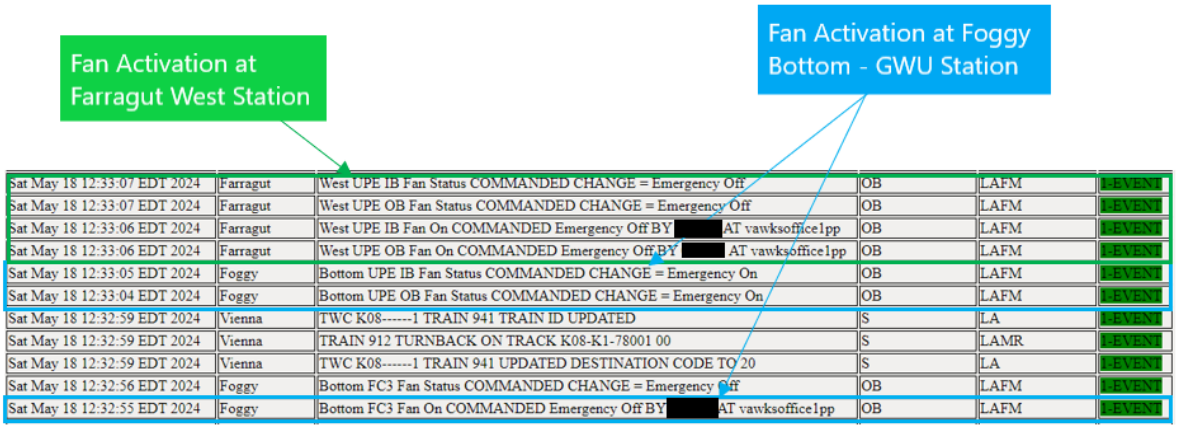


Figure 21 - depicts Blue Block placed on track 2 between Foggy Bottom - GWU Station and Farragut Stations indicating personnel were in the roadway.



Sat May 18 12:33:47 EDT 2024	Rhode	Island B04-4 Signal Request Route COMMANDED Request Route BY SYSTEM AT vasc-hostapva	R	LAMR	I-EVENT
Sat May 18 12:33:46 EDT 2024	Rhode	Island Rhode Island ROUTE FROM B04-4 TO B04-6 REQUESTED BY [redacted] AT vawksr-wkstpp	R	LAMR	I-EVENT
Sat May 18 12:33:43 EDT 2024	Glenmont	TRAIN 138 TURNBACK ON TRACK B11-B2-71009 00	R	LAMR	I-EVENT
Sat May 18 12:33:42 EDT 2024	Branch	Avenue TWC F11------1 TRAIN 547 TRAIN ID UPDATED	G	LA	I-EVENT
Sat May 18 12:33:42 EDT 2024	Branch	Avenue TWC F11------1 TRAIN 547 UPDATED DESTINATION CODE TO 4004 00	G	LA	I-EVENT
Sat May 18 12:33:42 EDT 2024	Branch	Avenue TRAIN 522 TURNBACK ON TRACK F11-F1-540	G	LAMR	I-EVENT
Sat May 18 12:33:42 EDT 2024	Foggy	Bottom C04-42 DC Feeder Tie Breaker COMMANDED Prohibit Close BY SYSTEM AT vasc-hostapva	OB	LAZY	I-EVENT
Sat May 18 12:33:42 EDT 2024	Foggy	Bottom C04-42 DC Feeder Tie Breaker COMMANDED CHANGE = Tripped	OB	LAZY	I-EVENT
Sat May 18 12:33:42 EDT 2024	Farragut	West C03-C06 Third Rail Power CURRENT STATE = Deenergize	OB	LAZY	I-EVENT
Sat May 18 12:33:42 EDT 2024	Farragut	West C03-32 DC Feeder Tie Breaker COMMANDED Prohibit Close BY SYSTEM AT vasc-hostapva	OB	LAZY	I-EVENT
Sat May 18 12:33:42 EDT 2024	Farragut	West C03-32 DC Feeder Tie Breaker COMMANDED CHANGE = Tripped	OB	LAZY	I-EVENT
Sat May 18 12:33:42 EDT 2024	Foggy	Bottom FC4 Fan Status COMMANDED CHANGE = Emergency Off	OB	LAFM	I-EVENT
Sat May 18 12:33:41 EDT 2024	Glenmont	TRAIN 138 TURNBACK ON TRACK B11-B2-71009 00	R	LAMR	I-EVENT
Sat May 18 12:33:41 EDT 2024	Farragut	West C03-C06 Third Rail Power - Deenergize COMPLETED BY [redacted] AT vawksob-commpp	OB	LAZY	I-EVENT
Sat May 18 12:33:41 EDT 2024	Foggy	Bottom C04-42 DC Feeder Tie Breaker COMMANDED Trip BY [redacted] AT vawksob-commpp	OB	LAZY	I-EVENT
Sat May 18 12:33:41 EDT 2024	Farragut	West C03-32 DC Feeder Tie Breaker COMMANDED Trip BY [redacted] vawksob-commpp	OB	LAZY	I-EVENT
Sat May 18 12:33:41 EDT 2024	Foggy	Bottom FC4 Fan On COMMANDED Emergency Off BY [redacted] AT vawksoffice1pp	OB	LAFM	I-EVENT
Sat May 18 12:33:39 EDT 2024	Foggy	Bottom Signal C04-6 COMMANDED Prohibit Exit BY [redacted] AT vawksob-wkstpp	OB	LAMR	I-EVENT
Sat May 18 12:33:39 EDT 2024	Foggy	Bottom C04-8-6 IS ESTABLISHED WHILE EXIT C04-6 IS PROHIBITED	OB	LAMR	3-MAJOR
Sat May 18 12:33:33 EDT 2024	McPherson	Sq UPE IB Fan Status COMMANDED CHANGE = Emergency Off	OB	LAFM	I-EVENT
Sat May 18 12:33:33 EDT 2024	McPherson	Sq UPE OB Fan Status COMMANDED CHANGE = Emergency Off	OB	LAFM	I-EVENT
Sat May 18 12:33:32 EDT 2024	Arlington	Cem C06-8 Signal State COMMANDED CHANGE = Stop	Bb	LAMR	I-EVENT
Sat May 18 12:33:31 EDT 2024	McPherson	Sq UPE IB Fan On COMMANDED Emergency Off BY [redacted] AT vawksoffice1pp	OB	LAFM	I-EVENT
Sat May 18 12:33:31 EDT 2024	McPherson	Sq UPE OB Fan On COMMANDED Emergency Off BY [redacted] AT vawksoffice1pp	OB	LAFM	I-EVENT
Sat May 18 12:33:31 EDT 2024	Arlington	Cem C06-8 Signal Request Route COMMANDED Cancel Route BY [redacted] AT vawksyg-commpp	Bb	LAMR	I-EVENT
Sat May 18 12:33:25 EDT 2024	Stadium	Armory TRAIN 612 TURNBACK ON TRACK D08-D2-216	OB	LAMR	I-EVENT
Sat May 18 12:33:23 EDT 2024	Farragut	West FC2 Fan Status COMMANDED CHANGE = Emergency Off	OB	LAFM	I-EVENT
Sat May 18 12:33:22 EDT 2024	Farragut	West FC2 Fan On COMMANDED Emergency Off BY [redacted] AT vawksoffice1pp	OB	LAFM	I-EVENT
Sat May 18 12:33:15 EDT 2024	Vienna	TWC K08------1 TRAIN 921 TRAIN ID UPDATED	S	LA	I-EVENT
Sat May 18 12:33:15 EDT 2024	Vienna	TWC K08------1 TRAIN 921 UPDATED DESTINATION CODE TO 20	S	LA	I-EVENT
Sat May 18 12:33:14 EDT 2024	Vienna	TWC K08------1 TRAIN 961 TRAIN ID UPDATED	S	LA	I-EVENT

Figure 22 - AIMS log depicting Fan activation and power de-energization between Foggy Bottom - GWU and Farragut West Stations.



Sat May 18 12:33:07 EDT 2024	Farragut	West UPE IB Fan Status COMMANDED CHANGE = Emergency Off	OB	LAFM	I-EVENT
Sat May 18 12:33:07 EDT 2024	Farragut	West UPE OB Fan Status COMMANDED CHANGE = Emergency Off	OB	LAFM	I-EVENT
Sat May 18 12:33:06 EDT 2024	Farragut	West UPE IB Fan On COMMANDED Emergency Off BY [redacted] AT vawksoffice1pp	OB	LAFM	I-EVENT
Sat May 18 12:33:06 EDT 2024	Farragut	West UPE OB Fan On COMMANDED Emergency Off BY [redacted] AT vawksoffice1pp	OB	LAFM	I-EVENT
Sat May 18 12:33:05 EDT 2024	Foggy	Bottom UPE IB Fan Status COMMANDED CHANGE = Emergency On	OB	LAFM	I-EVENT
Sat May 18 12:33:04 EDT 2024	Foggy	Bottom UPE OB Fan Status COMMANDED CHANGE = Emergency On	OB	LAFM	I-EVENT
Sat May 18 12:32:59 EDT 2024	Vienna	TWC K08------1 TRAIN 941 TRAIN ID UPDATED	S	LA	I-EVENT
Sat May 18 12:32:59 EDT 2024	Vienna	TRAIN 912 TURNBACK ON TRACK K08-K1-78001 00	S	LAMR	I-EVENT
Sat May 18 12:32:59 EDT 2024	Vienna	TWC K08------1 TRAIN 941 UPDATED DESTINATION CODE TO 20	S	LA	I-EVENT
Sat May 18 12:32:56 EDT 2024	Foggy	Bottom FC3 Fan Status COMMANDED CHANGE = Emergency Off	OB	LAFM	I-EVENT
Sat May 18 12:32:55 EDT 2024	Foggy	Bottom FC3 Fan On COMMANDED Emergency Off BY [redacted] AT vawksoffice1pp	OB	LAFM	I-EVENT

Figure 23 - AIMS log depicting Fan activation at Foggy Bottom - GWU and Farragut West Stations.

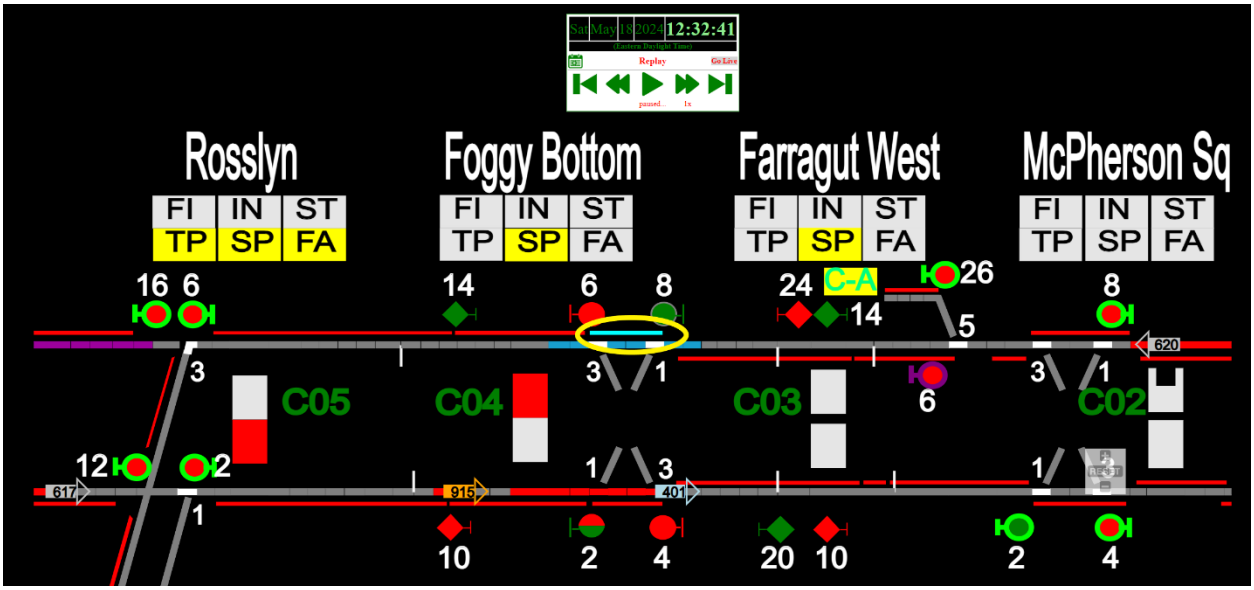


Figure 24 - depicts third rail power de-energization between Foggy Bottom - GWU and Farragut West Stations.

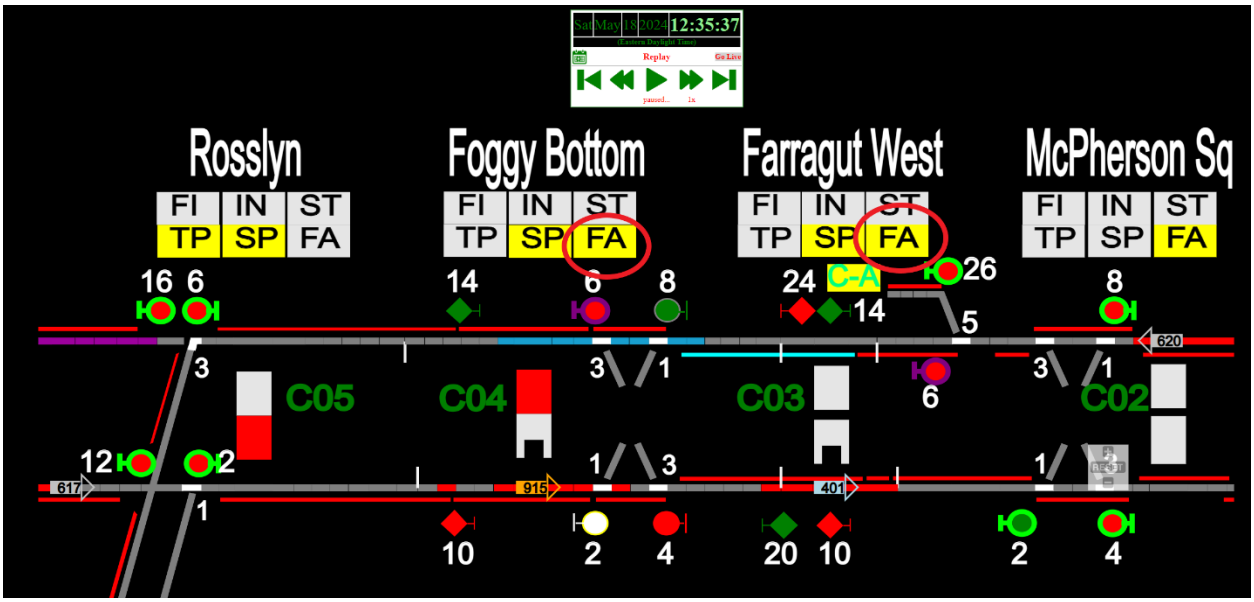


Figure 25 - depicts Fan Activation at Foggy Bottom and Farragut West Stations.

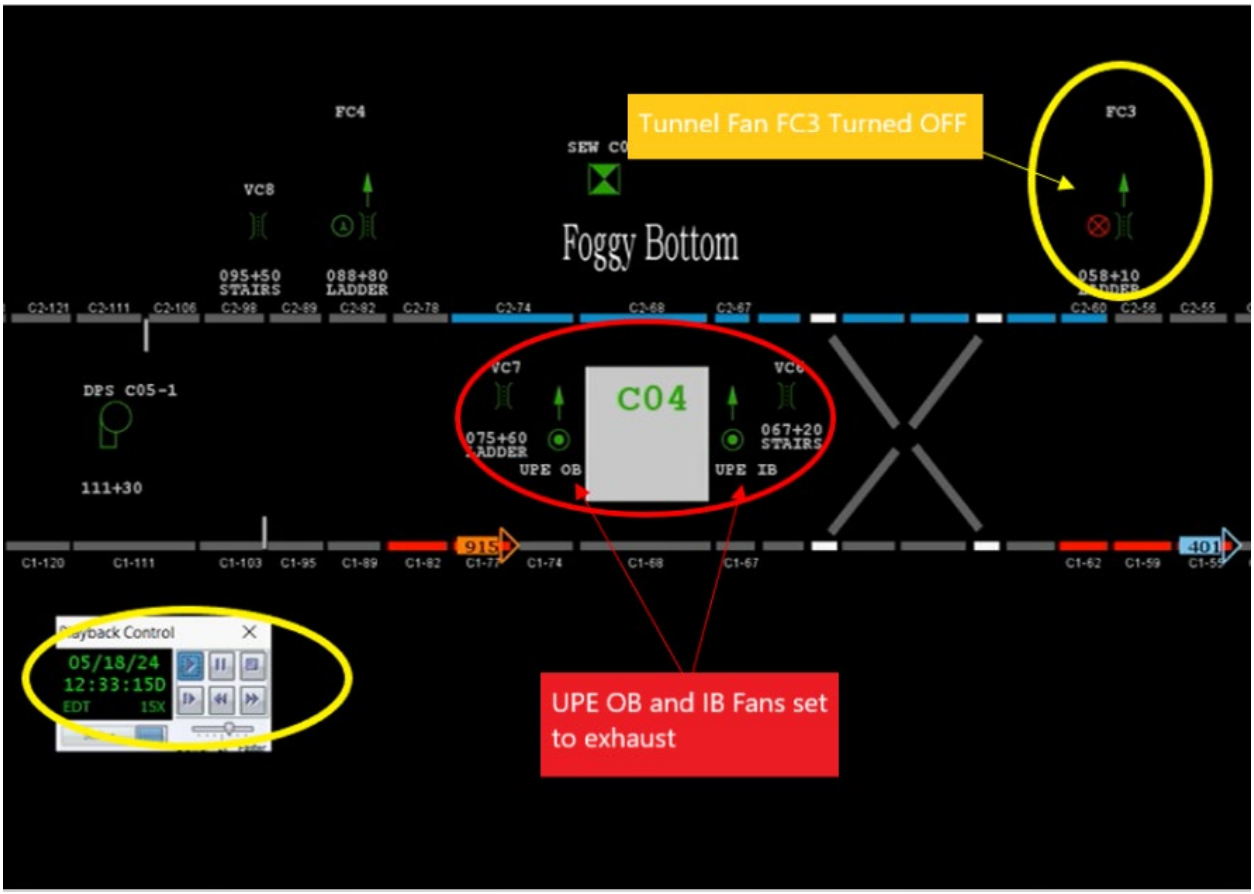


Figure 26 - depicts Tunnel Fan FC3 turned "off" and the Under Platform Exhaust (UPE) Fans set to “exhaust” at Foggy Bottom – GWU Station.

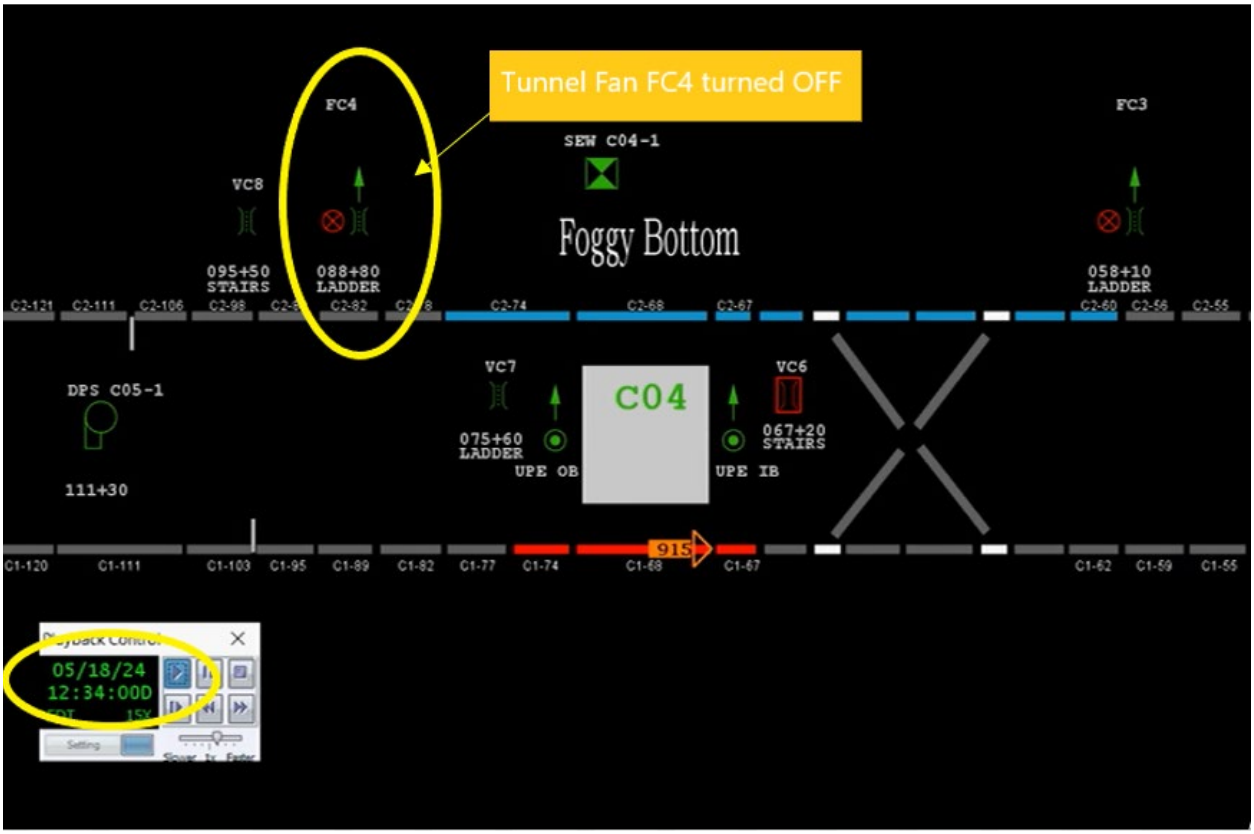
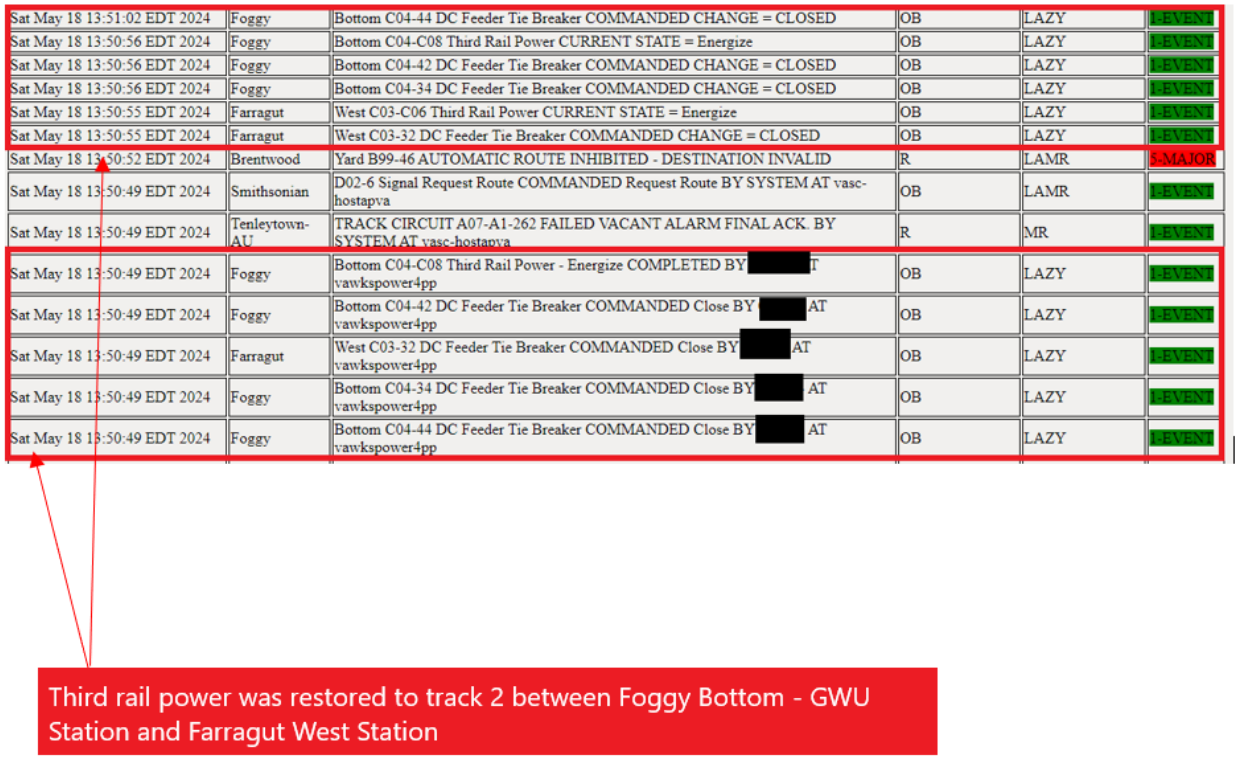


Figure 27 - depicts Tunnel Fan FC4 turned "off" in accordance with the Fan Activation Playbook for Foggy Bottom – GWU Station.



Sat May 18 13:51:02 EDT 2024	Foggy	Bottom C04-44 DC Feeder Tie Breaker COMMANDED CHANGE = CLOSED	OB	LAZY	1-EVENT
Sat May 18 13:50:56 EDT 2024	Foggy	Bottom C04-C08 Third Rail Power CURRENT STATE = Energize	OB	LAZY	1-EVENT
Sat May 18 13:50:56 EDT 2024	Foggy	Bottom C04-42 DC Feeder Tie Breaker COMMANDED CHANGE = CLOSED	OB	LAZY	1-EVENT
Sat May 18 13:50:56 EDT 2024	Foggy	Bottom C04-34 DC Feeder Tie Breaker COMMANDED CHANGE = CLOSED	OB	LAZY	1-EVENT
Sat May 18 13:50:55 EDT 2024	Farragut	West C03-C06 Third Rail Power CURRENT STATE = Energize	OB	LAZY	1-EVENT
Sat May 18 13:50:55 EDT 2024	Farragut	West C03-32 DC Feeder Tie Breaker COMMANDED CHANGE = CLOSED	OB	LAZY	1-EVENT
Sat May 18 13:50:52 EDT 2024	Brentwood	Yard B99-46 AUTOMATIC ROUTE INHIBITED - DESTINATION INVALID	R	LAMR	5-MAJOR
Sat May 18 13:50:49 EDT 2024	Smithsonian	D02-6 Signal Request Route COMMANDED Request Route BY SYSTEM AT vasc-hostapva	OB	LAMR	1-EVENT
Sat May 18 13:50:49 EDT 2024	Tenleytown-AU	TRACK CIRCUIT A07-A1-262 FAILED VACANT ALARM FINAL ACK. BY SYSTEM AT vasc-hostapva	R	MR	1-EVENT
Sat May 18 13:50:49 EDT 2024	Foggy	Bottom C04-C08 Third Rail Power - Energize COMPLETED BY [redacted]T vawkspower4pp	OB	LAZY	1-EVENT
Sat May 18 13:50:49 EDT 2024	Foggy	Bottom C04-42 DC Feeder Tie Breaker COMMANDED Close BY [redacted] AT vawkspower4pp	OB	LAZY	1-EVENT
Sat May 18 13:50:49 EDT 2024	Farragut	West C03-32 DC Feeder Tie Breaker COMMANDED Close BY [redacted] AT vawkspower4pp	OB	LAZY	1-EVENT
Sat May 18 13:50:49 EDT 2024	Foggy	Bottom C04-34 DC Feeder Tie Breaker COMMANDED Close BY [redacted] AT vawkspower4pp	OB	LAZY	1-EVENT
Sat May 18 13:50:49 EDT 2024	Foggy	Bottom C04-44 DC Feeder Tie Breaker COMMANDED Close BY [redacted] AT vawkspower4pp	OB	LAZY	1-EVENT

Figure 28 – AIMS log depicting third rail power restoration between Foggy Bottom - GWU and Farragut West Stations.

Track and Structures (TRST)
Adopted from the Maximo Work Order

ERT Personnel responded to Foggy Bottom – GWU Station (C04)for a reported smoke/ fire condition in the station. After an inspection was conducted, it was determined that trash accumulated under the third rail was the source. ERT personnel removed the trash and debris from the area, and revenue service was restored.

Office of Metro Transit Police Department (MTPD)
Adopted from MTPD report:

On May 18, 2024, at approximately 12:27 hours an MTPD Officer at Foggy Bottom – GWU Station received a report of smoke/ fire in the station. The Officer responded to the platform and observed smoke inside of the tunnel on track 2 towards Farragut West Statin. Incident Management Framework (IMF) was initiated. Train ID 401 was directed to clear the track 1 side, and with the assistance of the Station Manager and two (2) SPOs, the station was evacuated.

DCFEMS responded and assumed Incident Command. ERT responded and determined the source to be trash/ debris which ignited. ERT cleaned the affected area at 13:09 hours. DCFEMS relinquished Incident Command to MTPD and the scene was released to RTRA at 13:26 hours.

The interruption lasted from 12:30 hours to 13:26 hours. A hot wash was conducted after the incident.

Interview Findings

As part of the investigation launched into the event, SAFE interviewed six (6) people. The interviews identified the following key findings associated with this event. Findings detailed below include reported information from involved personnel and may conflict with other data sources contained in the report.

Station Manager

- Contacted the MICC from the ETS Box on track 2 near CM 68+17
- Did not manually activate the Fire Alarm
- Was on the platform evacuating the station when DCFEMS arrived.

Emergency response Team Supervisor

- Asked for foul time and for third rail power to be restored on track 2 at Foggy Bottom – GWU Station
- Performed a walking track inspection and located the source of the localized track fire.
- Stated they placed a Warning Strobes and Alarm Device (WSAD) on the third rail.
- Stated they did not confirm third rail power was de-energized by hot stick.
- Began removing the debris near the third rail.
- Did not request third rail power re-energization be halted.

Power Desk Assistant Superintendent

- Stated they halted restoring third rail power as per the direction of the Incident Commander
- Asked the RTC if ERT was clear of the roadway before restoring third rail power.
- Stated they normally interact with Rail-1 and MTPD-1, not with the FLO.

Fire Liaison Officer

- Stated the DCFEMS did not extinguish the smoke/fire condition.
- Stated DCFEMS did not enter the roadway during the emergency response.
- Stated they normally interact with Rail-1 and MTPD-1.
- They do not have any interactions with the PDAS.
- ERT reported that the fire was extinguished and did not require DCFEMS assistance.
- Before DCFEMS personnel can enter the roadway, they must get permission from the Incident Commander after third rail power de-energization has been confirmed.

Button RTC

- Stated they received a report of fire/smoke in the roadway on track 2 at Foggy Bottom – GWU Station from a Train Operator leaving the station.
- They did not hear if the smoke condition was in approach to the station or leaving the station.
- They began canceling trips into Foggy Bottom – GWU Station.
- At the start of the incident, they were operating the RTC Console and phones alone because their partner was taking a personal break.
- Normally, if no additional RTCs are assigned, the RTC commands the Radio and the Buttons while their partner is on a personal break.
- During an emergency, if an RTC at a less active station is available, they may assist with managing the emergency.
- Was informed by the Train Operator on track 1 at Foggy Bottom – GWU Station that the smoke condition was on track 2.
- Contacted the Power Desk to inform them power had been de-energized.
- Stated ERT requested third rail power be restored to investigate the source of the fire/ smoke condition.

- Stated the DCFEMS requested third rail re-energization be halted due to ERT personnel in the roadway.
- Stated there was some confusion due to information not following the chain of command.
- Stated the OPS 6 channel was utilized during this incident per the Incident Management Framework (IMF)

OM

- Initially received reports that the smoke condition was within the platform limits.
- MTPD Officer on location confirmed the smoke condition was outside of the platform limits near 08 signal and began evacuating the station.
- Stated they can only receive the request to restore third rail power from MTPD-1 at the request of the Incident Commander.
- The FLO cannot request third rail power to be restored.
- During an emergency, the request to restore third rail power must go through the Incident Commander, not at the request of ERT.
- While in the process of restoring power MTPD-1 requesting re-energization be halted.
- Stated when non-WMATA personnel enters the roadway a power restoration form must be signed off by the PDAS, Rail-1 and MTPD-1, before power is restored.

Weather

On May 18, 2024, at the time of the incident, NOAA recorded the temperature as 64.4°F, with overcast skies, winds 3 mph, and 77.48% humidity. [Washington, DC]. Weather was not a contributing factor in this incident (Weather source: NOAA) – Location: [Washington, DC].

Related Rules and Procedures

Metrorail Operating Rulebook, Effective September 1, 2023
Roadway Worker Protection

17.1 General Roadway Worker Protection Rules

17.1.8 Never sit or stand on the Third Rail, cover board, or any of its components. A Red Tag Power Outage is required before performing any work that may require contact with the Third Rail and/or any items connected to it.

17.1.9 A Supervisory Power Outage will be used for all activities on the Roadway not covered by Red Tag Power Outages. A Department of Safety approved third rail mat or physical barrier is required when the potential for incidental contact with the Third Rail is present when working under a supervisory power outage.

17.3 Defining the Roadway

17.3.9 Station platforms are not considered part of the roadway nor are the walkways beyond the station platform end-gates protected by handrails. Walkways with gaps in the handrail of six (6) feet or less are not part of the roadway. However, any maintenance or construction, the use of tools, ladders, scaffolds, or lifts that have the potential for fouling the track requires a RWIC to use RWP in accordance with these rules and instructions, even if performed behind the handrails.

17.3.11 All non-WMATA employees must be escorted and be granted permission by the Rail Traffic Controller to go beyond station platform end gates.

Procedure: Standard Operating Procedure (SOP) 2 Third Rail Power Energization and De-energization Procedures, Revision 8, May 2, 2024
6.1 Outage Requirements

Drafted By: SAFE 708 - 06/10/2024
Reviewed By: SAFE 704 – 07/17/2024
Approved By: SAFE 707 – 07/23/2024

6.1.1 A red tag power outage is required for all activities that require contact with the third rail or items connected to the third rail, excepting activities listed in Appendix A[1] and/or B.

6.1.2 A supervisory power outage is required for all activities on the Roadway not covered by Section 6.1.1 of this procedure. When incidental contact with the third rail is possible, Safety Department approved rubber mats shall be used to protect affected employees.

6.2 Compliance Requirement

6.2.1 If at any time during the energization process, there is a discrepancy between communicating parties, the process shall stop and be restarted.

6.2.2 If the discrepancy remains, the Third Rail energization process shall be halted until the discrepancy is resolved. The restart of the process shall be validated by the Power Desk Assistant Superintendent (PDAS).

6.7 Preparing for energization of third rail power protected by a supervisory outage[2]

6.7.2 When an unplanned work area under the control of Unified Command is ready to be restored to normal service, the Jurisdictional IC shall confirm to the Fire Liaison Officer (FLO)/Police 1 that all emergency personnel are clear of the roadway.

6.7.2.1 The FLO or Police 1 shall contact RAIL 1 and confirm that all emergency personnel are clear of the roadway.

6.7.2.2 RAIL 1 shall contact the PDAS and confirm that all emergency personnel are clear of the roadway.

6.7.2.3 RAIL 2 shall contact the RTC and confirm that all emergency personnel are clear of the roadway.

6.7.2.4 The PDAS shall complete and obtain signature from Police 1 that all emergency personnel are clear of roadway on the Power Energization Verification Form.

Appendix B: Authorized Momentary Contact with the Third Rail

Under a confirmed Supervisory Outage, momentary contact with third rail components is authorized if the following conditions are met:

1. There is an operational necessity or safety situation where passengers or employees are either placed in danger or a major service disruption may occur.
2. The third rail supervisory outage has been requested by a qualified RWIC with a confirmed working Hot-Stick. The Hot-Stick shall be tested on energized rail prior to usage to assure it is working properly.
3. The crew/person making the momentary contact is equipped and in possession of the following:
    a. WMATA SAFE Approved Insulated Gloves with leather over-gloves
    b. Insulated/Non-Conductive Tools, including insulated electrical safety mats to cover the third rail.
    c. WMATA SAFE Approved Safety Glasses.
    d. WMATA SAFE Approved composite toe-cap safety shoes
    e. All other required WMATA SAFE Approved Personal Protective Equipment (PPE) for roadway access, including high visibility vest, eye protection, face protection.
4. The RWIC is given confirmation by line, track and chain marker by ROCC that the third rail power has been de-energized by a supervisory outage.

---

[1] Appendix A: Exceptions to the Third Rail Power Outage Requirement states, in part," The following activities are the only exceptions to supervisory third rail power outage requirement for WMATA employees described in section 6.1.2.1: 1) Verifying third rail voltage testing devices, e.g., approved hot sticks and meters."

[2] A Supervisory Outage is a formal process requiring specific verification and coordination for a third rail power outage where circuit breakers are operated remotely.

5. The RWIC has confirmed by line, track and chain marker to ROCC that third rail power is out in the area that is to be momentarily contacted and the outage has been verified by a confirmed working Hot Stick.
6. The RWIC shall confirm with the RTC that it is safe to restore power by line, track and chain marker prior to restoring power to third rail.

Work authorized for momentary contact with the third rail under a supervisor outage shall be limited to the following:

- Striking an insulator with an insulated hammer to remove it;
- Striking or hitting a coverboard to remove it from interfering with the safe passage of trains; and

Striking or hitting a section of third rail to return it to alignment to return to safe operations.

Human Factors

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

- Unified Command was established according to the IMF.
- The Station Manager was instructed by MTPD to evacuate the station while on the platform.
- The Emergency Fire Alarm was not activated automatically or manually, preventing the fare gates from automatically opening.
- Foggy Bottom-GWU Station is equipped with modified fare gates to prevent fare evasion.
- Communication gaps between WMATA personnel and to the Incident Commander while under Unified Command.
- Third rail power de-energization was not verified by hot sticking.
- The form used by the PDAS for power re-energization during unplanned outages was revised due to changes in operational responsibilities.

Immediate Mitigation to Prevent Recurrence

- Third rail Power was de-energized on track 2 between Foggy Bottom – GWU Station and Farragut West Station.
- Tunnel and Station Platform fans were configured according to the Emergency Ventilation Playbook.
- DCFEMS was dispatched to the location to address any smoke/fire/life safety concerns.
- An ERT crew was dispatched to the location to perform a track inspection.
- The ERT crew identified debris contacting the third rail at CM 65+00 and removed the hazard.

Probable Cause Statement

The probable cause of the incident was a localized track fire between Foggy Bottom - GWU Station and Farragut West Station, likely originating near the interlocking on track 2. The fire produced smoke that entered the tunnel, prompting evacuation and extensive safety measures. The cause of the fire was determined to be debris that accumulated near the energized third rail. The incident was effectively managed by de-energizing the third rail, ventilating the tunnel, and coordinating a comprehensive response from multiple agencies. No active fire was observed during the inspection, and rail services were resumed with precautions.

Recommended Corrective Actions

There are no corrective actions required for this report at this time. WMATA is in the process of revising the IMF framework for reporting and communication protocols to address response and communication issues more effectively.

Appendices

Appendix A – Interview Summaries

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

MICC

Acting Power Desk Assistant Superintendent (PDAS)

The Acting PDAS is a WMATA employee with 19 years of service and 2.75 total years of experience as a Power Operations Controller. The Acting PDAS holds a Roadway Worker Protection (RWP) Level 2 certification that expires in October 2024.

During the formal interview, the Power Operations Controller was asked questions regarding their work history with the Washington Metropolitan Area Transit Authority (WMATA), their state of alertness during the incident, and their recollection of the event. The Power Operations Controller stated that they are in the utility succession program in which they have been trained and certified to perform the primary roles and responsibilities of the Power Desk Assistant Superintendent in their absence. On the date of the incident, they recalled being informed traction power was being de-energized between Farragut West Station and Foggy Bottom - GWU Station due to a report of fire and smoke condition. They requested that the RTC send personnel to the station to be on standby. The Acting PDAS stated once the investigation into the incident had concluded they were contacted to restore power so that a test train could be sent through the affected station.

The Acting PDAS stated that once they receive permission from the OM and AOM to restore power, the RTC will notify them that all personnel and equipment have cleared the roadway. Once the RTC has announced that power is going to be restored, the PDAS will complete their paperwork. They will then remove prohibits on the breakers and notify the Power Desk Controller to restore power.

The Acting PDAS stated that while in the process of restoring power, it was stated over the radio to the FLO that personnel were in the roadway. The Acting PDAS contacted the RTC and informed them that power restoration would be delayed until it was confirmed that all personnel were standing by and standing clear. They then notified the OM that power was not going to be restored until it was confirmed that all personnel were clear of the roadway.

The Acting PDAS stated that they do not normally interact with the FLO. They complete a form when power is brought down, which must be signed by the AOM or the OM, stating which locations were affected.

Operations Manager (OM)/ Rail-1

The OM is a WMATA employee with 17.4 years of service and 1.3 total years of experience as an OM. The OM holds an RWP Level 2 certification that expires in June 2026.

During the formal interview, the OM was asked questions regarding their work history with the Washington Metropolitan Area Transit Authority (WMATA), their state of alertness during the incident, and their recollection of the event. The OM recalled feeling fully alert and stated during the incident, they were informed of reports of a smoke condition at Foggy Bottom – GWU Station within the platform limits. MTPD was at the scene and began evacuating the station. After further

investigation, it was revealed that the smoke emanated outside of the platform limits near the 08 signal.

The OM stated service was stopped at the station for a brief period, until the DCFEMS and MTPD granted permission for a test train to be sent through track 1 for a track inspection. Once a good track inspection was reported, they began single tracking, bypassing Foggy Bottom – GWU Station.

The OM was asked about the process that occurs when power is to be restored. The OM stated during this incident the request for power was received by the FLO. However, the OM informed MTPD-1 that the request must come from the Unified Command or Incident Commander, the request could not be initiated by the FLO. Once the OM received confirmation from the MTPD-1 that the Incident Commander was permitting power to be restored, they contacted the PDAS to initiate power restoration. Shortly thereafter MTPD-1 requested the process to be stopped due to a miscommunication with ERT entering the roadway.

Normally, the OM receives verification that all personnel and equipment are clear of the roadway from MTPD-1. They then inform the PDAS to restore power. Once the RTC makes their announcements, power is restored.

When asked if any forms were given to the PDAS when power was restored, the OM stated that if non-WMATA personnel enter the roadway, a form must be signed by the OM and MTPD-1 and given to the PDAS.

When asked if ERT normally requests foul time and for power restoration during an incident, it was stated that it was not uncommon; however, the request must come from the Incident Commander via MTPD-1 when Unified Command is established.

Fire Liaison Officer (FLO)

The FLO is a Captain in the District of Columbia Fire Department employee with 24.5 years of service and 0.41 total years of experience as the FLO.

During the formal interview, the FLO was asked questions regarding their work history with the Washington Metropolitan Area Transit Authority (WMATA), their state of alertness during the incident, and their recollection of the event. The FLO stated they were moderately alert and stated during the incident, they were the liaison between WMATA and the jurisdictional Emergency Responders. When DCFEMS arrived at Foggy Bottom – GWU Station for the report of a smoke/fire condition in the station, an MTPD Officer was already on the scene and the station was being evacuated. There was no active fire present in the station. A slight haze of smoke and a faint burning odor was reported. ERT arrived at the location, performed a track inspection, and located the source of the fire/smoke condition outside of the platform limits. Once ERT determined that the fire was not active, they notified DCFEMS, and the scene was released to MTPD. No action was taken by DCFEMS to suppress any active fire during this incident.

Button RTC

The RTC is a WMATA employee with 4.5 years of service and 4.5 total years of experience as an RTC. The RTC holds an RWP Level 4 certification that expires in July 2024.

During the formal interview, the RTC was asked questions regarding their work history with the Washington Metropolitan Area Transit Authority (WMATA), their state of alertness during the incident, and their recollection of the event. The RTC recalled feeling fully alert and stated during the incident, they were informed of reports of a smoke condition at Foggy Bottom – GWU Station within the platform limits. It was initially unclear of the exact location of the smoke/fire condition due to no Chain Marker being obtained from the Train Operator that reported the smoke/fire condition. The RTC began canceling routes on track 2 into Foggy Bottom – GWU Station. During this time the RTC was managing the incident and making their notifications. A train was on the platform at Foggy Bottom – GWU Station on track 1. The RTC instructed the Train Operator to turn off their EV and began turning off automatic signals on track 1; however, by that time, a second train was behind the train in the platform on track 1. Both trains were instructed to continue towards Farragut West Station.

When asked if the RTC had any conversations with the PDAS during this incident, they stated they spoke with the PDAS when third rail power was de-energized and when ERT requested power to be restored to investigate the source of the smoke/fire condition. Once the request for power to be restored was made, the RTC began making their mandatory notifications. Shortly thereafter DCFEMS cancelled the request for power restoration due to personnel in the roadway.

Once ERT had completed their work they informed the RTC that no test train was required and exited the roadway before normal service resumed.

TRST

Track Supervisor / Emergency Response Team (ERT)

The ERT Supervisor is a WMATA employee with 23.83 years of service and 0.25 total years of experience as an ERT Supervisor. The ERT Supervisor holds an RWP Level 4 certification that expires in September 2024.

During the formal interview, the ERT Supervisor was asked questions regarding their work history with the Washington Metropolitan Area Transit Authority (WMATA), their state of alertness during the incident, and their recollection of the event. The ERT Supervisor stated they were fully alert and stated during the incident they were at Metro Center Station and received instructions to report to Foggy Bottom -GWU Station. Once on location, they reported to the On Scene Commander, went to the platform, notified the MICC that they were on location, conducted their safety briefing, and requested foul time to enter the roadway.

Once foul time was granted, they performed a walking track inspection and observed smoldering debris near the interlocking at C04-08 signal, approximately 200 feet from the platform limits. They then set their Warning Strobe Alarm Device[3] (WSAD). They then had ERT personnel retrieve equipment and supplies to remove the debris from under the third rail. The ERT Supervisor stated that the smoldering debris was not visible from the area of continuous railing at the end gate. It

[3] A third rail safety device which provides work crews with an audible siren and visual strobe light alarm when third rail power has been restored to section of track that it is connect with, the device is accidentally disconnected, or knocked over.

was only observed once they entered the roadway and had begun their track inspection. They did not observe any DCFEMS personnel in the roadway upon their arrival.

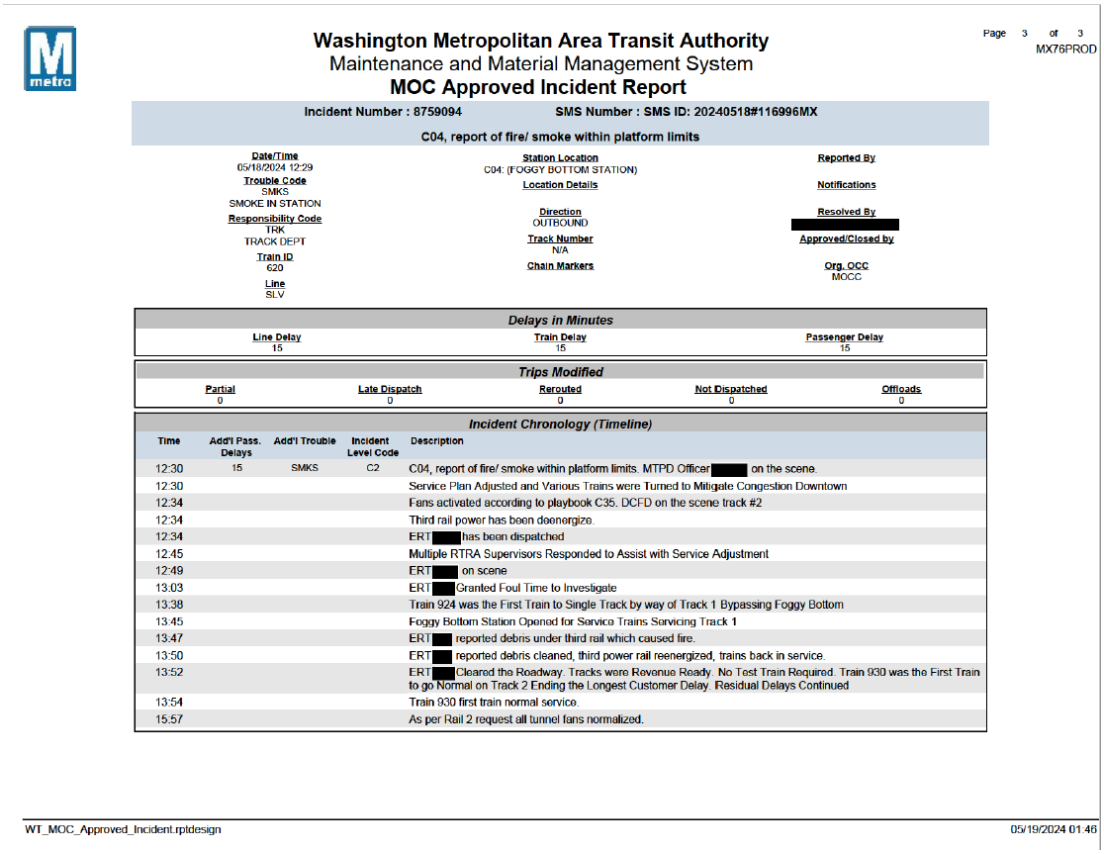
When asked if they requested that third rail power be restored, they replied no and further explained that once the incident source was identified, there was no need to have third rail power restored. Once the debris was cleared and all ERT personnel cleared the roadway, they then requested third rail power to be restored and informed the MICC that a test train was not necessary; however, fans should be kept running.

When asked if they confirmed that the third rail power was de-energized by hot sticking, the ERT Supervisor stated they did not because they were told the power was de-energized.

When asked about their arrival to Foggy Bottom—GWU Station from Metro Center Station, the ERT Supervisor stated they observed DCFEMS, the Station Manager, and MTPD. They made contact with the MTPD and DCFEMS personnel before entering the station. When they arrived on the platform, DCFEMS personnel were also on the platform. No personnel were in the roadway once power was restored.

Appendix B – Ops Reports

MOC Approved Incident Report



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

Page 3 of 3
MX76PROD

Incident Number : 8759094 **SMS Number : SMS ID: 20240518#116996MX**

C04, report of fire/ smoke within platform limits

Date/Time 05/18/2024 12:29	**Station Location** C04: (FOGGY BOTTOM STATION)	**Reported By**
Trouble Code SMKS SMOKE IN STATION	**Location Details**	**Notifications**
Responsibility Code TRK TRACK DEPT	**Direction** OUTBOUND	**Resolved By** [redacted]
Train ID 620	**Track Number** N/A	**Approved/Closed by**
Line SLV	**Chain Markers**	**Org. OCC** MOCC

Delays in Minutes

Line Delay	Train Delay	Passenger Delay
15	15	15

Trips Modified

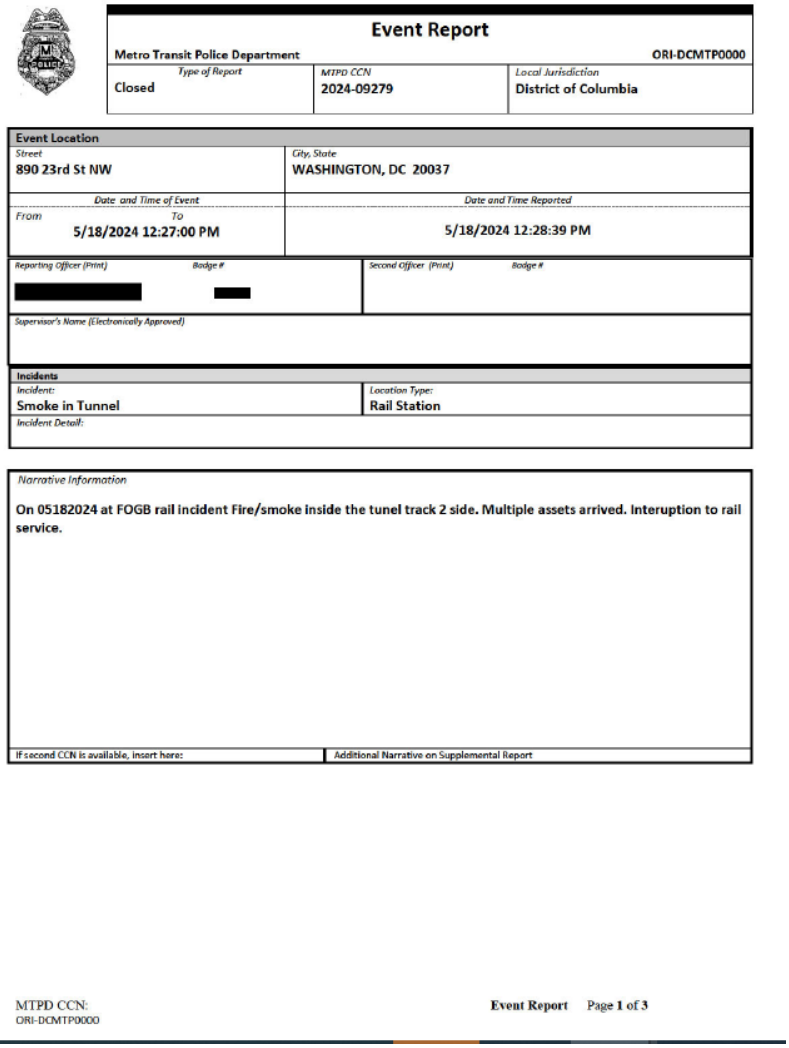
Partial	Late Dispatch	Rerouted	Not Dispatched	Offloads
0	0	0	0	0

Incident Chronology (Timeline)

Time	Add'l Pass. Delays	Add'l Trouble	Incident Level Code	Description
12:30	15	SMKS	C2	C04, report of fire/ smoke within platform limits. MTPD Officer [redacted] on the scene.
12:30				Service Plan Adjusted and Various Trains were Turned to Mitigate Congestion Downtown
12:34				Fans activated according to playbook C35. DCFD on the scene track #2
12:34				Third rail power has been deenergize.
12:34				ERT [redacted] has been dispatched
12:45				Multiple RTRA Supervisors Responded to Assist with Service Adjustment
12:49				ERT [redacted] on scene
13:03				ERT [redacted] Granted Foul Time to Investigate
13:38				Train 924 was the First Train to Single Track by way of Track 1 Bypassing Foggy Bottom
13:45				Foggy Bottom Station Opened for Service Trains Servicing Track 1
13:47				ERT [redacted] reported debris under third rail which caused fire.
13:50				ERT [redacted] reported debris cleaned, third power rail reenergized, trains back in service.
13:52				ERT [redacted] Cleared the Roadway. Tracks were Revenue Ready. No Test Train Required. Train 930 was the First Train to go Normal on Track 2 Ending the Longest Customer Delay. Residual Delays Continued
13:54				Train 930 first train normal service.
15:57				As per Rail 2 request all tunnel fans normalized.

WT_MOC_Approved_Incident.rptdesign 05/19/2024 01:46

Figure 29 - MOC Approved Incident Report



Event Report

Metro Transit Police Department — ORI-DCMTP0000

Type of Report	MTPD CCN	Local Jurisdiction
Closed	2024-09279	District of Columbia

Event Location

Street	City, State
890 23rd St NW	WASHINGTON, DC 20037

Date and Time of Event	Date and Time Reported
From: 5/18/2024 12:27:00 PM — To:	5/18/2024 12:28:39 PM

Reporting Officer (Print) / Badge #	Second Officer (Print) / Badge #
[redacted] [redacted]	

Supervisor's Name (Electronically Approved):

Incidents

Incident:	Location Type:
Smoke in Tunnel	Rail Station

Incident Detail:

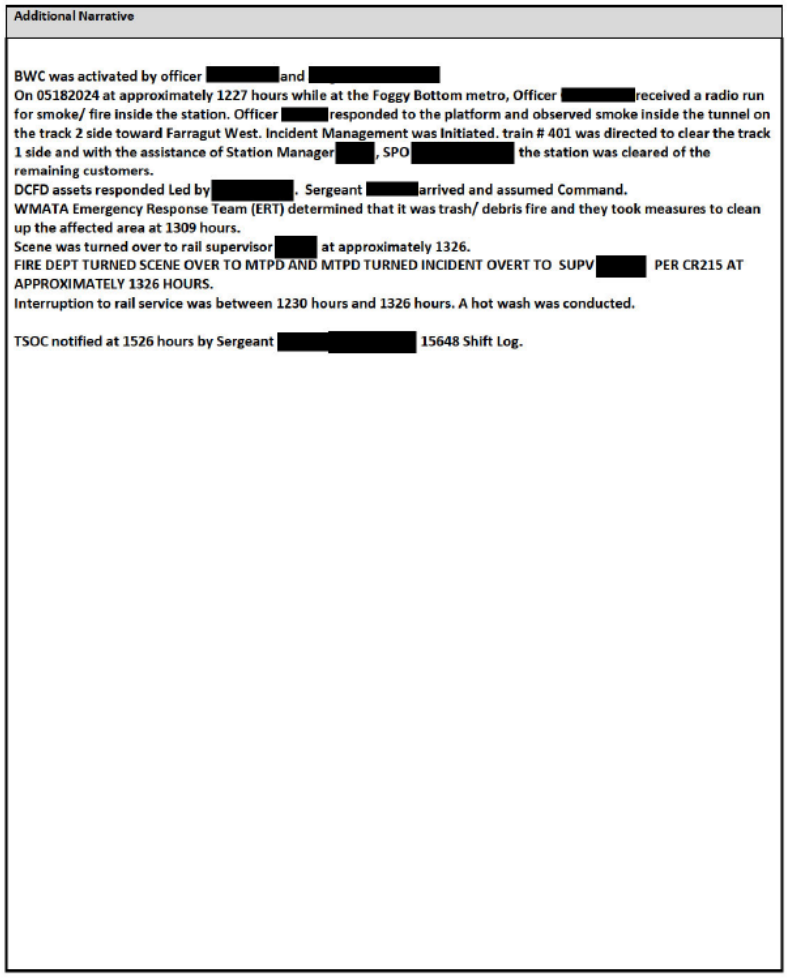
Narrative Information

On 05182024 at FOGB rail incident Fire/smoke inside the tunel track 2 side. Multiple assets arrived. Interuption to rail service.

If second CCN is available, insert here: | Additional Narrative on Supplemental Report

MTPD CCN: ORI-DCMTP0000 — Event Report Page 1 of 3

Figure 30 - MTPD Event Report, page 1 of 3.



Additional Narrative

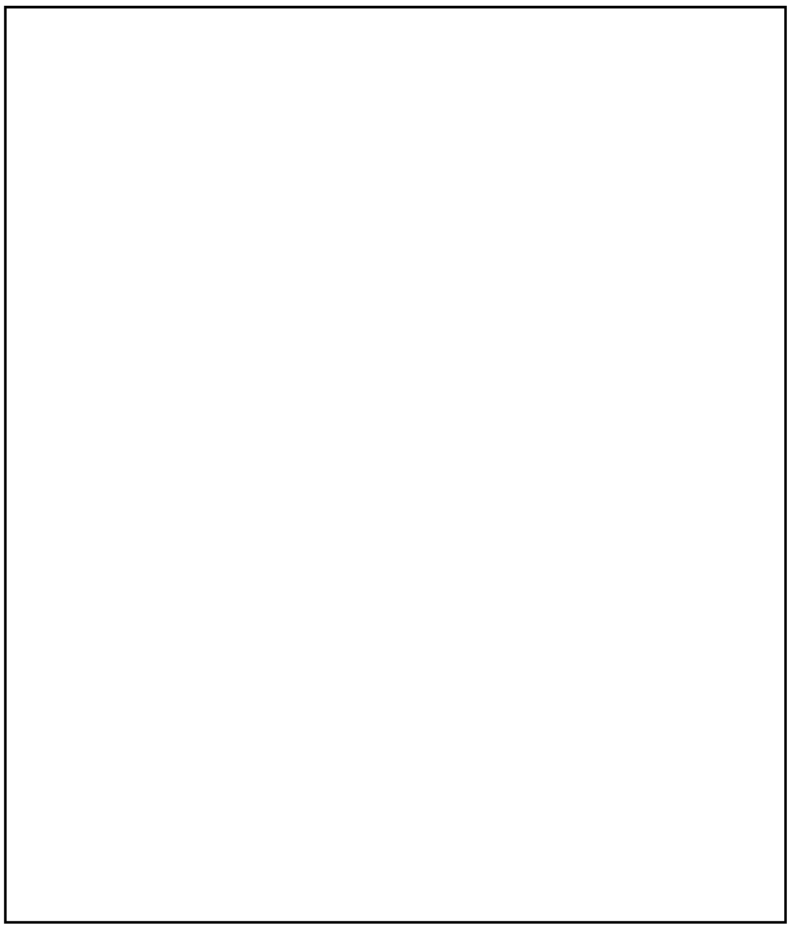
BWC was activated by officer [redacted] and [redacted]
On 05182024 at approximately 1227 hours while at the Foggy Bottom metro, Officer [redacted] received a radio run for smoke/ fire inside the station. Officer [redacted] responded to the platform and observed smoke inside the tunnel on the track 2 side toward Farragut West. Incident Management was Initiated. train # 401 was directed to clear the track 1 side and with the assistance of Station Manager [redacted], SPO [redacted] the station was cleared of the remaining customers.
DCFD assets responded Led by [redacted]. Sergeant [redacted] arrived and assumed Command.
WMATA Emergency Response Team (ERT) determined that it was trash/ debris fire and they took measures to clean up the affected area at 1309 hours.
Scene was turned over to rail supervisor [redacted] at approximately 1326.
FIRE DEPT TURNED SCENE OVER TO MTPD AND MTPD TURNED INCIDENT OVERT TO SUPV [redacted] PER CR215 AT APPROXIMATELY 1326 HOURS.
Interruption to rail service was between 1230 hours and 1326 hours. A hot wash was conducted.

TSOC notified at 1526 hours by Sergeant [redacted] 15648 Shift Log.

MTPD CCN:
ORI-DCMTP0000

Event Report Page 2 of 3

Figure 31 - MTPD Event Report, page 2 of 3.

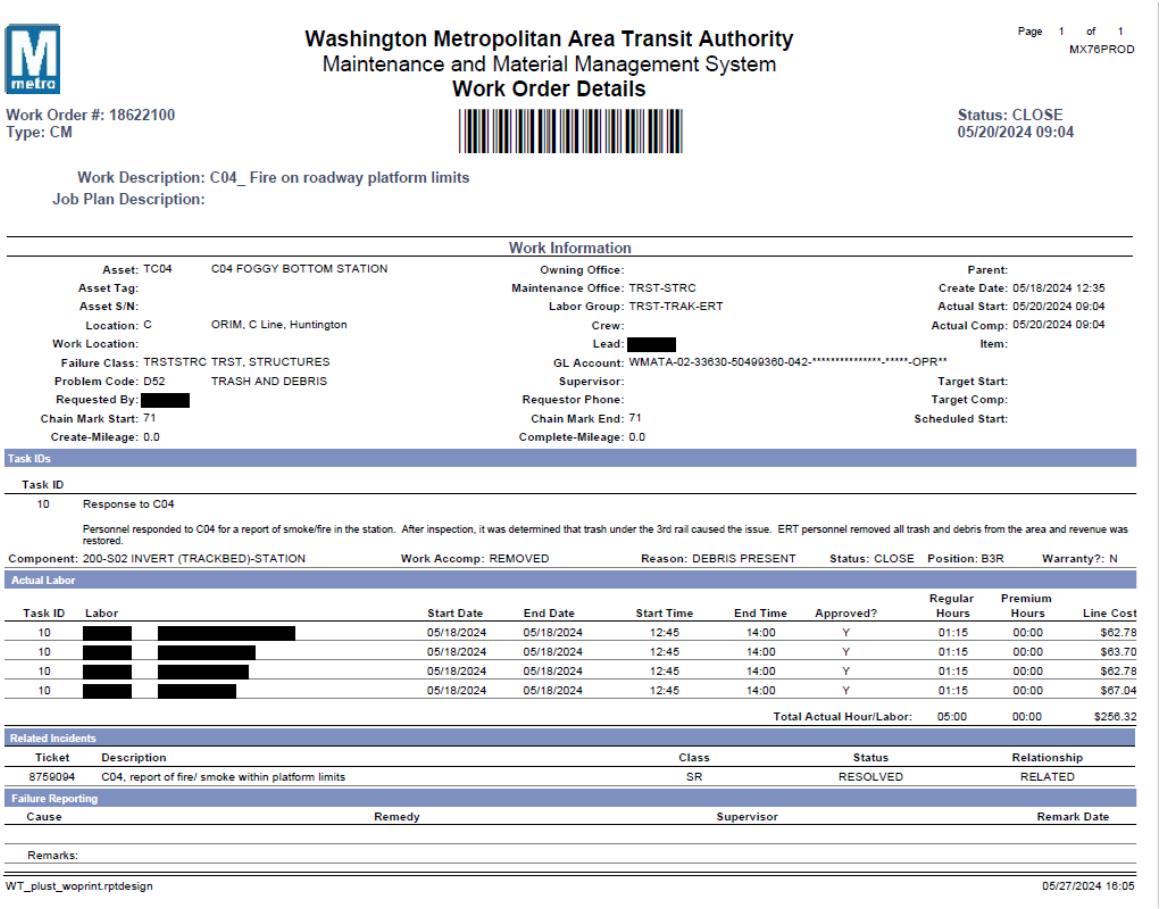


MTPD CCN:
ORI-DCMTP0000

Event Report Page 3 of 3

Figure 32 - MTPD Event Report, page 3 of 3.

Appendix C – Work Order



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

Page 1 of 1
MX76PROD

Work Order #: 18622100
Type: CM

Status: CLOSE
05/20/2024 09:04

Work Description: C04_ Fire on roadway platform limits
Job Plan Description:

Work Information

Asset:	TC04 C04 FOGGY BOTTOM STATION	Owning Office:		Parent:	
Asset Tag:		Maintenance Office:	TRST-STRC	Create Date:	05/18/2024 12:35
Asset S/N:		Labor Group:	TRST-TRAK-ERT	Actual Start:	05/20/2024 09:04
Location:	C ORIM, C Line, Huntington	Crew:		Actual Comp:	05/20/2024 09:04
Work Location:		Lead:	[redacted]	Item:	
Failure Class:	TRSTSTRC TRST, STRUCTURES	GL Account:	WMATA-02-33630-50499360-042-**********-*****-OPR**		
Problem Code:	D52 TRASH AND DEBRIS	Supervisor:		Target Start:	
Requested By:	[redacted]	Requestor Phone:		Target Comp:	
Chain Mark Start:	71	Chain Mark End:	71	Scheduled Start:	
Create-Mileage:	0.0	Complete-Mileage:	0.0		

Task IDs

Task ID	
10	Response to C04

Personnel responded to C04 for a report of smoke/fire in the station. After inspection, it was determined that trash under the 3rd rail caused the issue. ERT personnel removed all trash and debris from the area and revenue was restored.

Component: 200-S02 INVERT (TRACKBED)-STATION Work Accomp: REMOVED Reason: DEBRIS PRESENT Status: CLOSE Position: B3R Warranty?: N

Actual Labor

Task ID	Labor	Start Date	End Date	Start Time	End Time	Approved?	Regular Hours	Premium Hours	Line Cost
10	[redacted]	05/18/2024	05/18/2024	12:45	14:00	Y	01:15	00:00	$62.78
10	[redacted]	05/18/2024	05/18/2024	12:45	14:00	Y	01:15	00:00	$63.70
10	[redacted]	05/18/2024	05/18/2024	12:45	14:00	Y	01:15	00:00	$62.78
10	[redacted]	05/18/2024	05/18/2024	12:45	14:00	Y	01:15	00:00	$67.04
						Total Actual Hour/Labor:	05:00	00:00	$256.32

Related Incidents

Ticket	Description	Class	Status	Relationship
8759094	C04, report of fire/ smoke within platform limits	SR	RESOLVED	RELATED

Failure Reporting

Cause	Remedy	Supervisor	Remark Date

Remarks:

WT_plust_woprint.rptdesign 05/27/2024 16:05

Figure 33 - Maximo Work Order 18622100

Appendix D – Emergency Ventilation Playbook Default, C35, (Foggy Bottom-GWU Station)

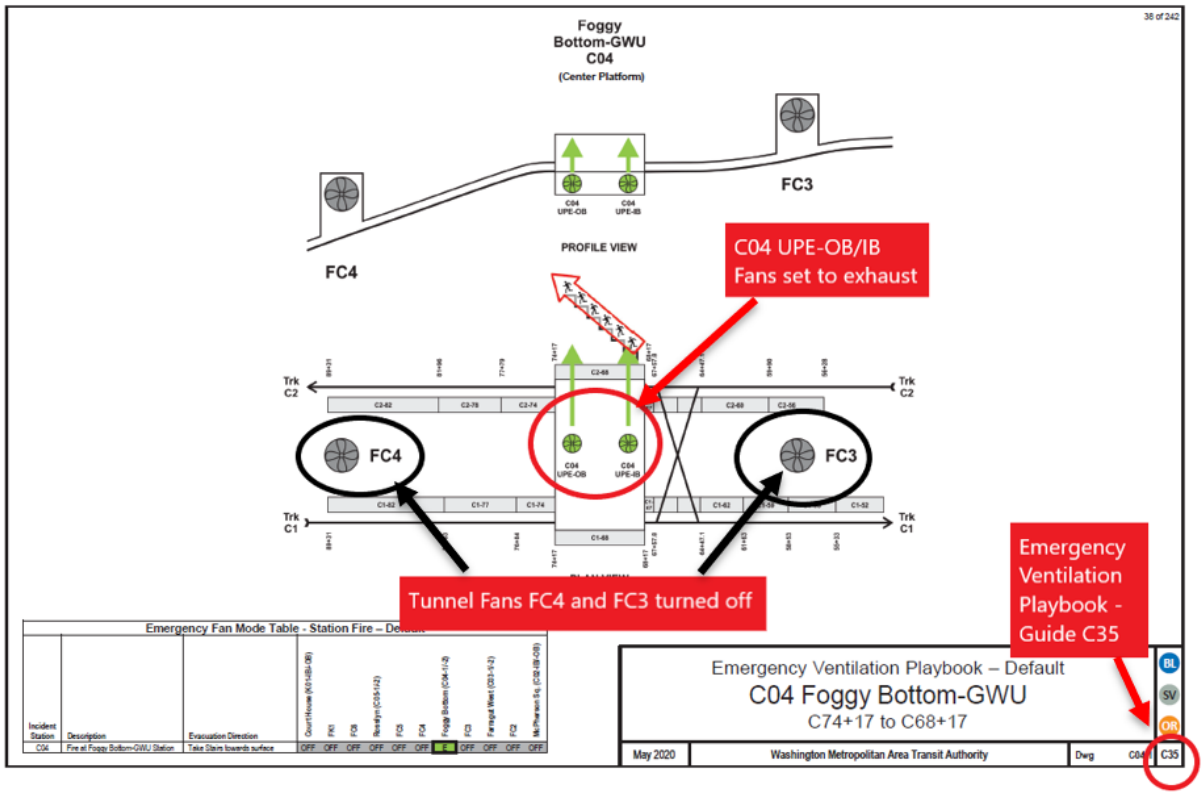


Figure 34 – Emergency Ventilation Playbook for C04 Foggy Bottom – GWU Station

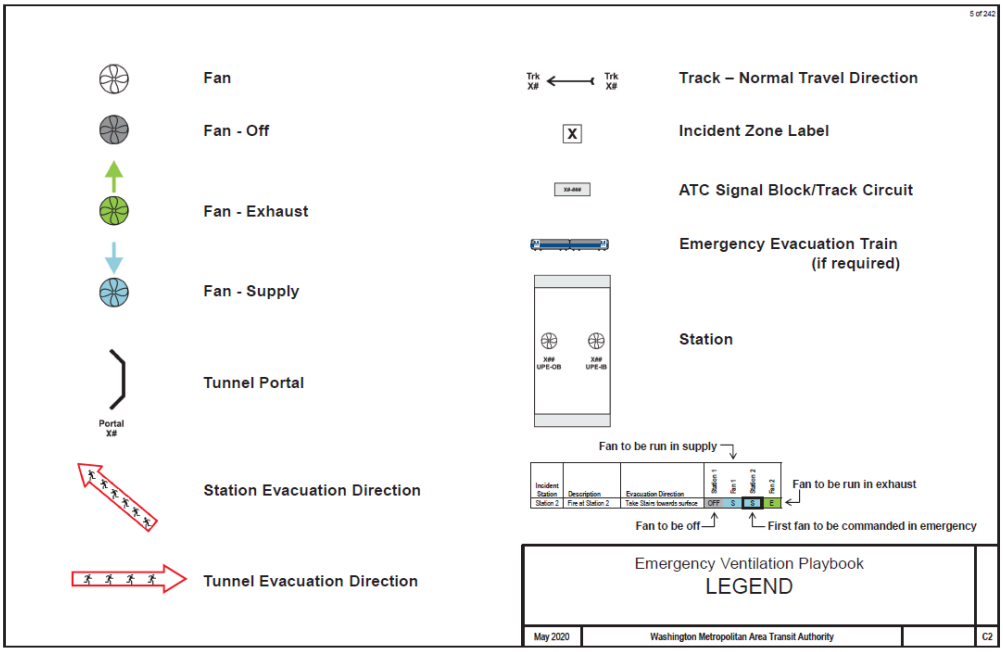
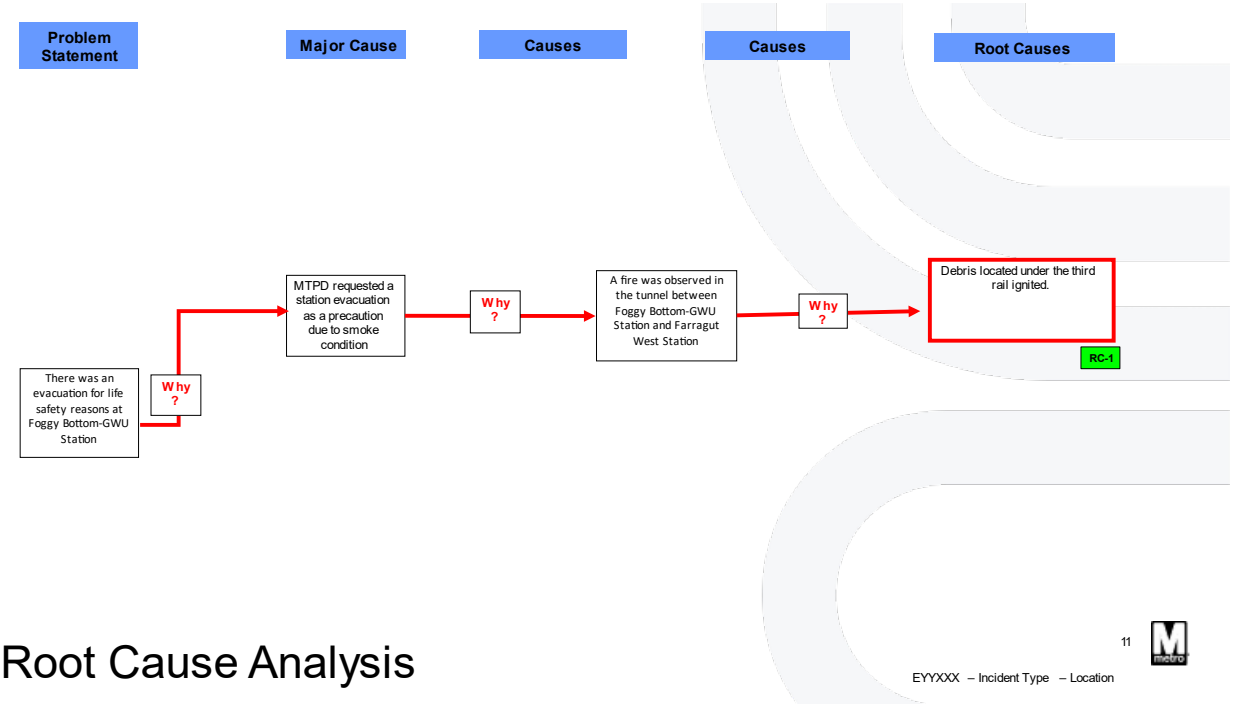


Figure 35 - Emergency Ventilation Playbook Legend

Appendix E – Why-Tree Analysis



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

FINAL REPORT OF INVESTIGATION A&I E24506

Date of Event:	July 2, 2024
Type of Event:	A-4: Evacuation for Life Safety Reasons
Incident Time:	04:33 Hours
Location:	Eisenhower Avenue Headquarters (C-88)
Time and How received by SAFE:	04:33 Hours/Safety Information Officer (SIO)
WMSC Notification Time:	05:51 Hours
Responding Safety Officers:	WMATA: Office of Safety Investigations (OSI), Office of Emergency Preparedness (OEP), Office of the Fire Marshall, Office of Safety Risk Management (SRM) WMSC: None Other: None
Rail Vehicle:	None
Injuries:	None
Damage:	Wooden Flower Planter, Cement Pavers, Pedestal Paver Supports
Emergency Responders:	Metropolitan Transit Police Department (MTPD), Alexandria Fire and Rescue Department
SUDS I/A Incident Number:	20240716#118391

Eisenhower Avenue Headquarters (C-88) – Evacuation for Life Safety Reasons

July 2, 2024

Table of Contents

Abbreviations and Acronyms

AIMS	Advanced Information Management System
ARS	Audio Recording System
CCTV	Closed-Circuit Television
DVEU	Digital Video Evidence Unit
ELES	Elevator and Escalator Section
FLO	Fire Liaison Officer
MICC	Metro Integrated Command and Communications Center
MOR	Metrorail Operating Rulebook
MTPD	Metropolitan Transit Police Officers
NOAA	National Oceanic and Atmospheric Administration
OM	Operations Manager
OEP	Office of Emergency Preparedness
OSI	Office of Safety Investigations
PDAS	Power Desk Assistant Supervisor
PDC	Power Desk Controller
RTRA	Office of Rail Transportation
SAFE	Department of Safety
SMS	Safety Measurement System
SOCC	Security Operations Control Center
SPOTS	Systems Performance on Time
SRM	Safety Risk Management
VAHQ	Virginia Eisenhower Headquarters
WMATA	Washington Metropolitan Area Transit Authority
WMSC	Washington Metrorail Safety Commission

Executive Summary

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

On Tuesday, July 2, 2024, at 04:42, occupants working within the Eisenhower Headquarters Building were evacuated because they were alerted to a fire in the exterior area of the rooftop Penthouse.

Prior to the fire alarm activation, at 02:00 hours, Closed-Circuit Television (CCTV) revealed that two (2) Metro Integrated Command and Communications Center (MICC) Power Operations Center employees exited the elevator on the penthouse level, entered the exterior penthouse rooftop, and walked towards the seating area near a wooden flower planter box. Moments later, the Power Operations Center employees began to ignite smoking paraphernalia. At 02:54 hours, the Power Operations Center employees exited the Penthouse and entered the elevators.

At 04:06 hours, the wooden flower planter box where the Power Department employees were located began to smolder and then ignited at 04:22 hours.

At 04:31, another WMATA employee entered the penthouse interior kitchen area, observed the fire, and began to make a phone call; an unknown person located on the 9th floor of the Eisenhower Headquarters Building advised the Security Operations Control Center (SOCC) that they were reviewing the cameras, noticed flames on the rooftop, and smelled smoke.

At 04:32 hours, the Assistant Operations Manager (AOM) notified the Operations Manager (OM) of a burning smell in the MICC. The OM advised the Fire Liaison Officer (FLO).

At 04:34 hours, the Digital Video Evidence Unit (DEVU) confirmed that there was a fire in the penthouse exterior area of the rooftop. The Metropolitan Transit Police Department (MTPD) dispatched officers to the Eisenhower Headquarters Building and instructed them to evacuate the building.

At 04:35 hours, the Security Operations Control Center (SOCC) contacted the Alexandria Fire and Rescue Department. At 04:41 hours, the fire alarm activated, and the building occupants began to evacuate. At 04:48 hours, the Alexandria Fire and Rescue Department arrived on the scene and extinguished the fire.

At 05:09 hours, the Alexandria Fire and Rescue Department deemed the building safe to reoccupy, and the employees returned to the building. Access to the exterior area of the Penthouse was closed.

At 05:40 hours, the Alexandria Fire and Rescue Department departed the Eisenhower Headquarters Building.

A wooden flower planter box was damaged by fire, but no injuries were reported.

In adherence to Standard Operating Procedure 102-01-02, which outlines the protocol for Removing an Employee from Service for involvement in an operational safety event, the Power Operations Center removed the Power Desk Assistant Superintendent (PDAS) and Power Desk Controller (PDC) from duty for post-incident testing.

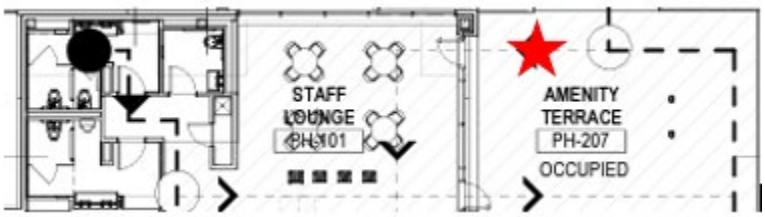
The probable cause of the Evacuation for Life Safety Reasons event on July 2, 2024, at the Eisenhower Headquarters Building Penthouse was due to employees smoking in a non-smoking area of the building and then improperly discarding flammable materials into a wooden flower box.

No injuries were reported at the time of this report. The repairs are still ongoing.

Incident Site

The Eisenhower Avenue Headquarters is a fifteen-story commercial office building at 2401 Mill Road, Alexandria, VA.

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:

- Physical Site Assessment

- Formal Interviews – SAFE interviewed two individual(s) 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(s):
    - Power Desk Assistant Supervisor (PDAS)
    - Power Desk Controller (PDC)

- Informal Interviews – Collected through conversations with individuals during the investigation to provide background and supporting information. Written statements were reviewed by 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:

- Power Desk Employees Written Statements
- MOC Incident Report
- ProWatch Advanced Badge System
- Metrorail Operating Rulebook (MOR)
- National Oceanic and Atmospheric Administration (NOAA)

- System Data Recording Review – Collection of information contained in Metro Data Recording Systems. This data includes:
  - Audio Recording System (ARS) playback
  - Closed-circuit television (CCTV)

Investigation

On Tuesday, July 2, 2024, at 04:42, occupants working within the Eisenhower Headquarters Building were evacuated because they were alerted to a fire in the exterior area of the rooftop Penthouse.

Image 1 – Image of the area where the fire occurred.

Prior to the fire alarm activation, at 02:00 hours, CCTV revealed that two (2) MICC Power Operations Center employees exited the elevator on the penthouse level, entered the exterior penthouse rooftop, and walked towards the seating area near a wooden flower planter box.

Image 2 – Images of two (2) Power Operations Center employees located on the exterior are of the rooftop at Eisenhower Headquarters Building at 02:01 hours.

Moments later, the Power Operations Center employees began to ignite smoking paraphernalia although the “No Smoking” signs were present. Smoke was visible in the area where the two Power Desk employees were located, possibly from a type of cigarette.

Image 3 – Left side image depicting the area without the glow of an ignitor, and Right side image of the glow of an ignitor.

At 02:54 hours, the Power Operations Center employees exited the Penthouse and entered the elevators.

Image 4 – Image of the two (2) Power Operations Center employees exiting the penthouse at 02:54 hours.

At 03:01 hours, Security Guard #1 exited the elevator, entered the penthouse, walked to the opposite side of where the Power Operations Center employees were located, and utilized their cellular phone. At 03:29 hours, Security Guard #1 exited the penthouse and then entered the elevator.

At 03:38 hours, Employee #1 exited the elevator and entered the penthouse but did not enter the exterior area of the rooftop. At 03:45 hours, Employee #1 exited the penthouse and then entered the elevator.

At 04:06 hours, the wooden flower planter box where the Power Department employees were located began to smolder. At 04:21 hours, Employee #2 exited the elevator and entered the penthouse but did not enter the exterior area of the rooftop. At 04:22 hours, Employee #2 exited the penthouse with a bag and then entered the elevator. Seconds later, the wooden flower planter box began to ignite.

Image 5 – Images of smoke and then fire beginning to burn within the wooden flower planter.

At 04:31, an unknown person located on the 9th floor of the Eisenhower Headquarters Building advised the SOCC that they were reviewing the cameras, noticed flames on the rooftop, and

smelled smoke. Employee #3 exited the elevator and entered the penthouse. At 04:32 hours, the AOM notified the OM of a burning smell in the MICC. The OM advised the FLO.

At 04:34 hours, DEVU confirmed that there was a fire in the penthouse exterior area of the rooftop. MTPD dispatched officers to the Eisenhower Headquarters Building and instructed them to evacuate.

Image 6 - Image of the fire within the wooden flower planter.

At 04:35 hours, Security Guard #2 exited the elevator, and was entering the penthouse when Employee #3 gestured to the exterior area of the rooftop. The SOCC contacted the Alexandria Fire and Rescue Department.

Image 7 – Image of Employee #3 gesturing to Security Guard #2.

At 04:37 hours, the OM notified the SIO of the report. The Department of Safety personnel were dispatched. The FLO exited the elevator and then entered the penthouse. At 04:41 hours, the FLO began to extinguish the fire; the fire alarm activated, and the building occupants began to evacuate.

At 04:48 hours, the Alexandria Fire and Rescue Department arrived on the scene and extinguished the fire. At 05:09 hours, the Alexandria Fire and Rescue Department deemed the

building safe to reoccupy, and the employees returned to the building. Access to the exterior area of the Penthouse was closed.

A wooden flower planter box was damaged by fire, but no injuries were reported.

Image 8 – Image of the damaged wooden flower planter.

Chronological Event Timeline

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

Time	Description
02:00:59 hours	Two Power Desk employees exited the elevator on the penthouse level, and then entered the penthouse rooftop. [CCTV]
02:03:10 hours	Two Power Desk employees began to ignite something (unknown). [CCTV]
02:03:27 hours	Smoke was visible in the area where the two Power Desk employees were located, possibly from a type of cigarette. [CCTV]
02:54:00 hours	Two Power Desk employees exited the penthouse and then entered the elevator. [CCTV]
04:21:04 hours	Employee #2 exited the elevator and then entered the penthouse. [CCTV]
04:22:35 hours	Employee #2 exited the penthouse and then entered the elevator. [CCTV]
04:31:03 hours	An employee located on the 9th floor contacted the SOCC and reported seeing flames on the camera and smelling smoke. [Phone SOCC]
04:31:36 hours	A person exited the elevator and then entered the penthouse. [CCTV]
04:32:19 hours	AOM: Reported a smell of smoke. OM: Acknowledged. [Phone Rail 1]
04:34:18 hours	DVEU: Reported observing a fire on the penthouse level. [Radio MTPD1X]
04:34:49 hours	MTPD Dispatcher: Dispatched units and instructed to evacuate the building. [Radio MTPD1X]

Time	Description
04:35:13 hours	The SOCC contacted the Alexandria Fire Department. [Phone SOCC]
04:35:45 hours	A Security Guard exited the elevator and then entered the penthouse. [CCTV]
04:37:18 hours	OM: Reported a fire on the penthouse at Eisenhower HQ Building. SIO: Acknowledged. [Phone Rail 1]
04:38:32 hours	The Fire Liaison exited the elevator and then entered the penthouse. [CCTV]
04:41:37 hours	The Fire Liaison began to extinguish the fire. [CCTV]
04:42:12 hours	Employees evacuated the building. [CCTV]
04:48:48 hours	Alexandria Fire Department arrived at the penthouse. [CCTV]
05:09:50 hours	Employees returned to the building. [CCTV]
05:40:20 hours	Alexandria Fire Department departed Eisenhower HQ Building. [CCTV]
05:53:54 hours	OEP personnel arrived at the penthouse. [CCTV]
05:17:39 hours	CSO arrived on the scene. [CCTV]
06:28:30 hours	Safety Investigations arrived at the penthouse. [CCTV]

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

Interview Findings and Written Statements

As part of the investigation launched into the event, SAFE interviewed 2 people. The interview(s) identified the following key findings associated with this event. The findings detailed below include reported information from involved personnel and may conflict with other data sources contained in the report.

Power Desk Controller, Assistant Superintendent

- Took a smoke break after the workload decreased.
- Went to the penthouse to smoke a cigar.
- Stated the weather was windy.
- After 10-15 minutes of smoking the cigar, it was discarded in the toilet.
- Smelled smoke two hours later in the MICC.
- Was not aware of the no-smoking signs.
- Evacuated the MICC when the fire was activated.

Power Desk Controller

- Went to the penthouse to smoke a cigar during their break.
- Was aware of the no smoking signs but assumed they were for the kitchen area.
- Stated the weather was windy.
- Was not sure if the embers entered the flower planter.
- Extinguished the cigar in a cup with water, and then it was flushed in the toilet.
- Evacuated the MICC when the fire was activated.

Weather

On July 2, 2024, at the time of the incident, NOAA recorded the temperature as 66.9°F, with clear skies, winds NW 7 MPH, 63% humidity, and a dew point of 54. The weather did not contribute to this incident (Weather source: NOAA) – Location: Alexandria, VA.

Related Rules and Procedures

- Policy Instruction 7.7.5/2 – Smoke Free Workplace

Human Factors

Evidence of Fatigue

Power Desk Controller, Assistant Superintendent

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

Power Desk Controller

SAFE examined signs and symptoms of fatigue that may have been present during the incident. A video of the involved person was available to ascertain whether signs of fatigue were present. The PDC reported feeling fully alert at the time of the incident and experiencing no symptoms of fatigue leading up to the incident.

Fatigue Risk

Power Desk Controller, Assistant Superintendent

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

Power Desk Controller

SAFE evaluated incident data for fatigue risk factors. No significant risk was identified. The incident time of day did not suggest an increased risk of fatigue-related impairment. The PDC reported that their sleep stayed the same in the days leading up to the incident. The PDC worked the 3rd shift in the days leading up to the incident. The PDC was awake for 11.16 hours at the time of the incident. The employee reported 7-8 hours of sleep in the 24 hours preceding the incident. The off-duty period was 15 hours and 50 minutes, providing an opportunity for more than 7-9 hours of sleep. The employee reported having no issues with sleep.

Post-Incident Toxicology Testing

Power Desk Controller, Assistant Superintendent

WMATA's Drug and Alcohol Program determined that the Power Desk Controller, Assistant Superintendent, complied with the Drug and Alcohol Policy and Testing Program 7.7.3/6.

Power Desk Controller

WMATA's Drug and Alcohol Program determined that the Power Desk Controller, Assistant Superintendent, complied with the Drug and Alcohol Policy and Testing Program 7.7.3/6.

Findings

- Two (2) Power Operations Center employees were observed smoking before the wooden planter box ignited.
- No smoking signs were visible on the doors before entering the penthouse roof.
- The Audio Recording System revealed that MICC employees reported a burning smell.
- Several cigarettes and matches were found in the wooden planter box.
- An employee located on the 9th floor notified SOCC of the fire.
- The FLO began to extinguish the fire using a plastic trash receptacle.
- CCTV revealed that the fire alarm activated.
- The building was evacuated of employees.

Immediate Mitigation to Prevent Recurrence

- 2 WMATA employees were removed from service.
- High visibility No Smoking signage was in the penthouse area by the Office of the Fire Marshal.
- A designated non-smoking area was identified at the Eisenhower Headquarters.

Probable Cause Statement

The probable cause of the Evacuation for Life Safety Reasons event on July 2, 2024, at the Eisenhower Headquarters Building Penthouse was due to employees smoking in a non-smoking area of the building and then improperly discarding flammable materials into a wooden flower box.

Recommended Corrective Actions

Corrective Action Code	Description	Responsible Party	Estimated Completion Date
118391_SAFECAPS_PWR_001	Employees reviewed and signed the MetroDoc's smoke-free workplace policy.	PWR	Completed
118391_SAFECAPS_PWR_002	Developed a Safety Campaign for the daily safety briefing.	PWR	Completed
118391_SAFECAPS_PWR_003	Reviewed the incident during the Power Departmental Safety Committee Meeting.	PWR	Completed

Appendices

Appendix A – Interview Summaries

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

MICC

Power Desk Controller, Assistant Superintendent

The PDAS is a WMATA employee with more than 6 years of service and 2 years and 5 months of experience as a PDC. The PDAS holds a Roadway Worker Protection (RWP) Level 4 certification that expires in December 2024.

During the formal interview, the PDAS stated they arrived early at work on the day of the incident, and as the workload began to decrease, they proceeded to the penthouse with another co-worker for a smoke break. The PDAs stated that after smoking for between 10 and 15 minutes, they extinguished the cigar in a cup of water and disposed of it in the penthouse toilet. After the cigar was disposed of, both employees returned to their duty stations.

The PDAS stated that after 2 hours, they began to smell smoke on the floor of the MICC. Between 10 and 15 minutes after smelling smoke, the fire alarm was activated, and at 04:30 hours, employees began to self-evacuate and returned to the MICC between 15 and 20 minutes later.

The PDAS stated that after their shift ended at 06:00 hours, their direct supervisor contacted them and instructed them to return to the MICC to write a statement and were escorted to perform a drug and alcohol test because they were identified as one of the last individuals seen in the penthouse after the wooden flower planter ignited.

The PDAS stated it was windy, but they did not recall embers blowing into the wooden flower planter.

The PDAS stated they were not aware of the no-smoking signs posted in the penthouse's kitchen and assumed it was common to smoke in the penthouse since they had seen other WMATA employees smoking in the penthouse.

Power Desk Controller

The PDC is a WMATA employee with 10 years of service and 2.5 total years of experience as a PDC. The PDC holds a RWP Level 2 certification that expires in July 2024.

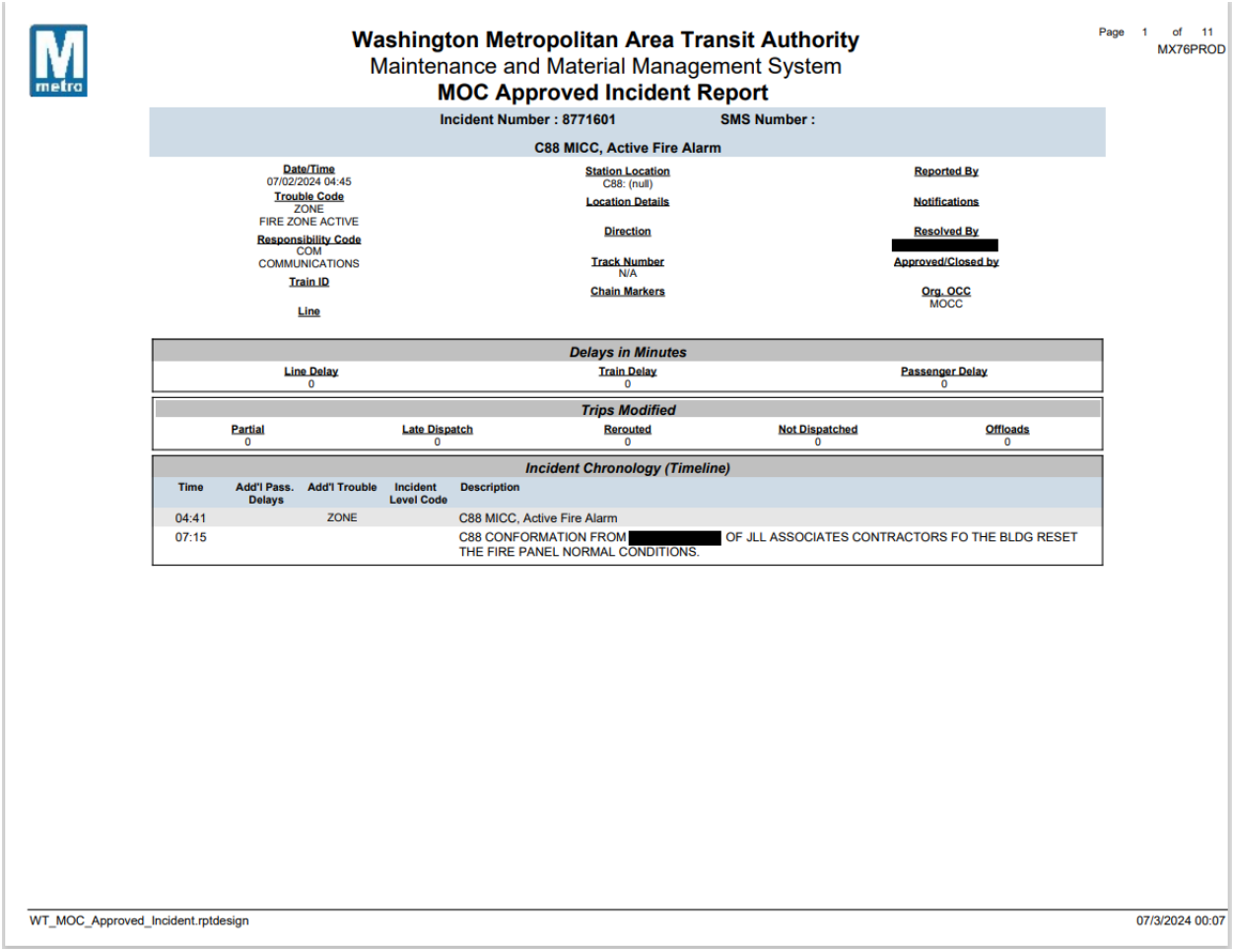
During the formal interview, the PDC stated that the workday started off as a typical day. As the evening progressed, they proceeded to the penthouse with another WMATA employee for a break at around 02:15 hours. The PDC stated they were smoking a cigar while on the penthouse level, and after smoking, they extinguished the cigar in a cup of water and disposed of it in the penthouse toilet.

The PDC stated they smelled something burning in the MICC between 1.5 and 2 hours after they departed the penthouse; the fire alarm activated about 10 minutes later, and the building was evacuated briefly before MICC personnel were allowed to reoccupy it.

The PDC stated they were aware of the no-smoking signs posted on the door in the penthouse kitchen area but did not know that the signs also applied to the exterior penthouse area.

The PDC stated they recall the windy weather while in the penthouse, but they do not recall if any embers were possibly blown into the wooden flower planter.

Appendix B – Incident Report(s)



Page 1 of 11
MX76PROD

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

Incident Number : 8771601 **SMS Number :**

C88 MICC, Active Fire Alarm

Date/Time 07/02/2024 04:45	**Station Location** C88: (null)	**Reported By**
Trouble Code ZONE FIRE ZONE ACTIVE	**Location Details**	**Notifications**
Responsibility Code COM COMMUNICATIONS	**Direction**	**Resolved By** [redacted]
Train ID	**Track Number** N/A	**Approved/Closed by**
Line	**Chain Markers**	**Org. OCC** MOCC

Delays in Minutes

Line Delay	Train Delay	Passenger Delay
0	0	0

Trips Modified

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

Incident Chronology (Timeline)

Time	Add'l Pass. Delays	Add'l Trouble	Incident Level Code	Description
04:41		ZONE		C88 MICC, Active Fire Alarm
07:15				C88 CONFORMATION FROM [redacted] OF JLL ASSOCIATES CONTRACTORS FO THE BLDG RESET THE FIRE PANEL NORMAL CONDITIONS.

WT_MOC_Approved_Incident.rptdesign 07/3/2024 00:07

Document 1: Maintenance Operations Center (MOC) incident report.

Submitted by: [redacted]

OEP Office of Emergency Preparedness

SAFE OEP Incident Response Report

Overview

Incident Date/Time:
2024-07-02
04:33

Incident Location:
Eisenhower HQ

Responder 1:
[redacted]

SIO 1: [redacted]

SIO 2: N/A

SIO Log #: 11807

Additional Responders: N. [redacted]

Incident Type:
Smoke/Fire in a Building

Incident Metrics

OPS Channel: N/A- Bus or other Incident

MTPD Channels:
MTPD 1x

Bus/Rail Yard Channel:

Incident Start Time: 04:33

PR Dispatch Time: 04:40

Response Time: 04:41

On Scene Time: 05:00

Disregard Time: N/A

Time of Recovery: 005:00

In-Service Time: 06:00

Command Est. Time: 04:50

Transfer of Command Time: N/A

Incident Personnel

Metro IC: MTPD [redacted]

Jurisdictional IC: Alexandria Fire

Fire Liaison ROCC: DCFD [redacted]

Transportation Group Supervisor- RAIL:
N/A

Operations Section Chief: N/A

Maintenance Lead (ERT): N/A

Investigations Lead (MTPD):
N/A

Investigations Lead (Safety): OEP FM [redacted]

Transportation Lead (Bus TFS): N/A

Submitted by: [redacted]

Incident Overview

Was Power removed: No

Red Tag (if applicable): N/A

Incident Narrative:

Received a call for a reported fire on the 14th floor of the Eisenhower HQ building. The incident was reported to the MICC at 04:33 and then to the SIO at 04:37 with the PR [redacted] being dispatched at 04:41 hours. The SDOC, Safety On-Call, and FM's offices were notified. [redacted] dispatched at 04:50 hours and enroute at 04:55 hours. While enroute, the incident was reported as under control, and the fire was out at approximately 04:50 with the FD permitting to reoccupy the building. The ICP was established at 04:50 hours with the FD outside of the building. The fire was contained to a planter on the 14th-floor penthouse roof area. Upon OEP PR arrival, Alexandra FD was leaving and had turned the scene over to MTPD. IC [redacted] moved the ICP into the lobby area and MICC Rail/Bus/MTPD/DVEU staff were allowed to restaff the MICC. A small group of Safety personnel proceeded to the roof with MTPD officers to visualize the damage. The decision was made to block off the roof and the stairs due to water and repairs. Hot Wash was held in the Lobby. OEP units were placed back in service around 06:00 hours.

Incident Successes:

Good coordination of resources, especially with the SIO and MTPD radio operations. Quick thinking by MTPD officers to pull the fire alarm to notify and evacuate the building. AFD was very efficient in locating and extinguishing the fire.

Opportunities for Improvement:

Consideration for emergency communications if the MICC must evacuate.

Document 2: OEP Incident Report.

Report Submitted by: [redacted]

Incident Management Framework

Hot Wash Report

Office of Emergency Preparedness

Basic Incident Information

Incident Date: 2024-07-02

Incident Time: 445

Incident Type: Fire/Smoke Alarm

Location of the Incident: Eisenhower Head Quarters

Rail Line:

Track #:

Train #:

Train Consist:

Bus Number:

Bus Route:

Incident Timeline

Incident Start: 0445

Time Command was Established: 0450

Jurisdictional FD on Scene: Alexandria

Jurisdictional FD Clear: 0545

Recovery Phase Start: 0500

Return to Partial Service:

Return to Full Service: 0509

Command Terminated: 0510

Incident Management

Incident Command Post Location: Mandville and Mill RD

3rd Rail Power Outage:

1

Document 3: Hot Wash Report. Page 1 of 3.

Report Submitted by: [redacted]

Red Tag/Supervisory Outage Number:

Bus Bridge: No

Ops Channel:

MTPD Channel: 1x

Personnel On Scene

WMATA Incident Commander: [redacted]

Metro Initial Responder: [redacted]

Jurisdictional Incident Commander:

Deputy Incident Commander:

Metro Operations Section Chief:

Investigation Group Supervisor (SAFE):

Investigation Group Supervisor (MTPD):

Media Relations:

Scene Safety Officer:

Maintenance Group Supervisor:

Transportation Group Supervisor- RAIL:

Transportation Group Supervisor-BUS:

Staging:

Roadway Worker in Charge:

Other:

Control Center Personnel

Safety Information Official: none

RAIL 1/BUS 1: none

MTPD- Police 1:

Fire Liaison Officer: none

Other:

Report Submitted by: [redacted]

Narrative

Incident Narrative: Units received a call from communications in reference to a possible fire of Metro headquarters located at Mill Rd. Once the fire was confirmed [redacted] initiated evacuation of the building. Occupants pulled the 6floor fire alarm and the building was evacuated and stated across the street. All were accounted for with no injuries. Fire responded to the 14th floor penthouse and extinguished a fire in a plant bed. Once the fire was out and safe to enter the building occupants were able to enter and resume all normal services. A visual inspection shows no structural damage however light burning to the flower area of the 14th floor. The 14th floor will remain closed today and Stairwell B will be closed due to water in the stairwell. Building was declared safe to enter by [redacted] and MICC relocation was canceled. Mill Road headquarters operations are back to normal service. Hotwash was conducted at 0550hrs.

What went well during the incident: Communication with all wmata employees and surround jurisdictions went extremely well.

What could have gone better during the incident: immediate evacuation once fire is confirmed

What would you do differently next time: Make sure all scene decisions are made with Incident Command.

Robust scene handoff was carried out with the Metro Initial Responder: Strongly agree

All personnel that were required responded to the incident: Strongly agree

Communication between all incident personnel was clear, concise, and effective: Strongly agree

All responding incident personnel carried out their responsibilities effectively in accordance with the incident objectives: Strongly agree

The WMATA Incident Commander received good and timely information from the OCC(s)/MAC: Strongly Agree

Administration

Name of the person completing this form: [redacted]

Email address of the person completing this form: [redacted]

Contact number for the person completing this form: [redacted]

3

Document 5: Hot Wash Report. Page 3 of 3.

Appendix C – Scene Photographs

Image 9: Wooden flower planter (post-fire).

Image 10: Wooden flower planter (post-fire).

Image 11: Wooden flower planter (post-fire).

Image 12: Wooden flower planter (post-fire).

Image 13: Penthouse door displaying a no smoking sign leading to the kitchen (post-fire).

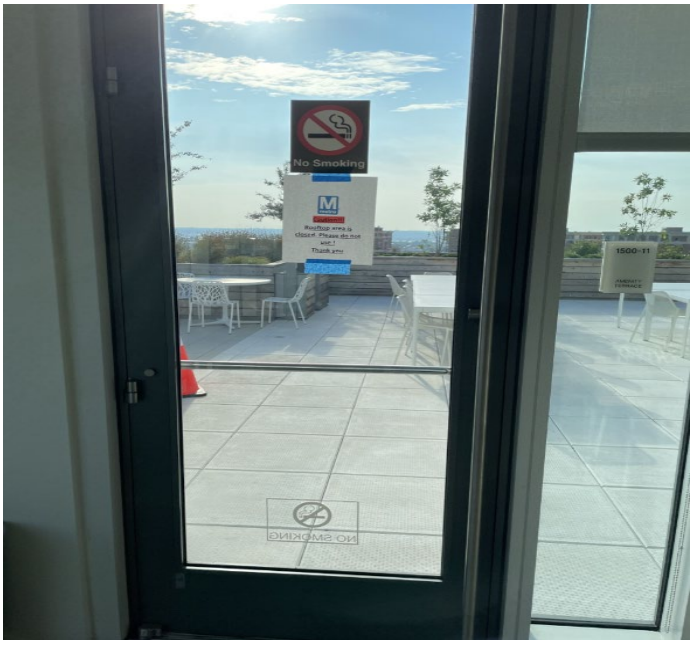
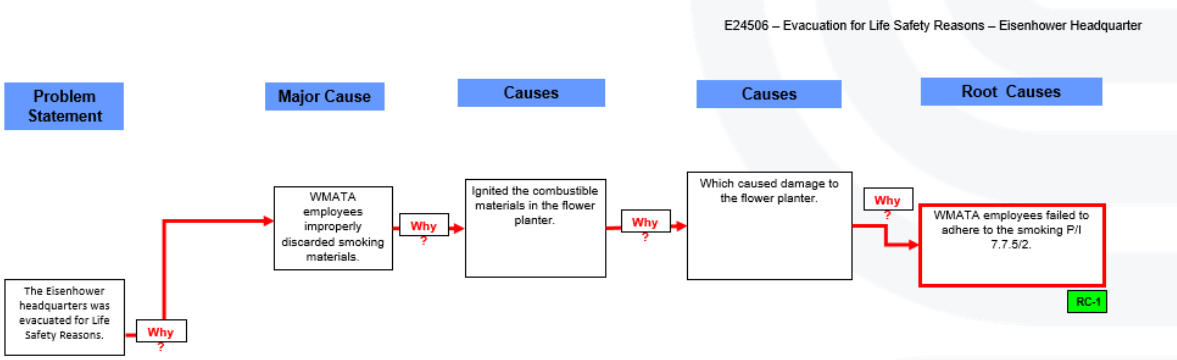


Image 14: The penthouse door leading to the penthouse area displays a high visibility no smoking sign (post-fire).

Image 15: A high visibility no smoking sign placed on the awning (post-fire).

Appendix D – Why-Tree Analysis



Root Cuse Analysis

8

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

FINAL REPORT OF INVESTIGATION A&I E24569

Date of Event:	July 22, 2024
Type of Event:	A-4: Evacuation for Life Safety Reasons
Incident Time:	11:48 hours
Location:	Benning Road Station
Time and How received by SAFE:	11:54 hours / MICC Notification
WMSC Notification Time:	13:50 hours
Responding Safety Officers:	Safety Investigations (OSI)
Rail Vehicle:	Train ID 617 [**L**7718/19**x**7137/36**x**7740/41**x**7525/24**T**]
Injuries:	None
Damage:	Insulator at CM 307+00
Emergency Responders:	Metro Transit Police Department (MTPD), Metropolitan Police Department (MPD), District of Columbia Fire and Emergency Medical Services (DCFEMS)
SMS I/A Incident Number:	20240722#118534MX

Benning Road Station – Evacuation for Life Safety Reasons

July 22, 2024

Table of Contents

Abbreviations and Acronyms

AIMS	Advanced Information Management System
AOM	Assistant Operations Manager
ARS	Audio Recording System
CAP	Corrective Action Plan
CCTV	Closed-Circuit Television
CM	Chain Marker
COMR	Office of Radio Communications
CMOR	Office of the Chief Mechanical Officer
DCFEMS	District of Columbia Fire and Emergency Medical Services
ERT	Emergency Response Team
EV	Environmental System
FLO	Fire Liaison
GOTRS	General Orders Track Rights System
HVAC	Heating, Ventilation, and Air Conditioning
ICP	Incident Command Post
IIT	Incident Investigation Team
MICC	Metro Integrated Command and Communications Center
MOC	Maintenance Operations Center
MOR	Metrorail Operating Rulebook
MTPD	Metro Transit Police Department
NOAA	National Oceanic and Atmospheric Administration
OEP	Office of Emergency Preparedness
OM	Operations Manager
OSI	Office of Safety Investigations
PDAS	Power Desk Assistant Superintendent
RWP	Roadway Worker Protection
RTC	Rail Traffic Controller
RTRA	Office of Rail Transportation
SAFE	Department of Safety
SIO	Safety Information Officer
SOP	Standard Operating Procedure
SPO	Special Police Officer
SPOTS	System Performance On-Time Summary
SUDS	Safety Universal Data System
TRST	Office of Track and Structures
UPE	Under-Platform Exhaust
VMDS	Vehicle Monitoring and Diagnostic System
WIC	WMATA Incident Commander
WMATA	Washington Metropolitan Area Transit Authority
WMSC	Washington Metrorail Safety Commission

Executive Summary

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

On Monday, July 22, 2024, at 11:48 hours, Train ID 617, eight (8) car 7000 series consist [**L**7718/7719**X**7137/7736**X**7740/7741**X**7525/7524**T**], reported smoke in the tunnel while approaching Benning Road Station on track 1. This initiated a coordinated emergency response to manage the situation, ensure passenger safety, and investigate the cause of the smoke. The Metro Integrated Command and Communications Center (MICC) Radio Rail Traffic Controller (RTC) instructed Train ID 617 to turn off its Environmental System (EV) and proceed to Benning Road Station while halting all other train traffic in the immediate area.

Upon arrival at Benning Road Station at 11:51 hours, Train ID 617 offloaded its passengers. Concurrently, Train ID 630, also stopped at the station on track 2, was instructed to offload its passengers. Benning Road Station Closed Circuit Television (CCTV) footage confirmed smoke entering the station as Train ID 617 reached the platform, triggering the emergency fire alarm. The District of Columbia Fire and Emergency Medical Services (DCFEMS) were dispatched, and the Emergency Ventilation Fans were activated to manage the smoke; however, the fan configuration did not allow ventilation at the incident location. A WMATA Incident Commander (WIC) from the Metro Transit Police Department (MTPD) ensured Allied Security Special Police Officers (SPO) evacuated all customers. Train services were diverted away from the incident location.

By 12:00 hours, MTPD and DCFEMS personnel had established Unified Command, staged an Incident Command Post (ICP) at the station entrance, and DCFEMS personnel proceeded to the platform. A Track and Structures (TRST) Emergency Response Team (ERT) and Power Crew arrived to identify the source of the smoke. Due to the heavy smoke between Benning Road Station and the D&G Junction, track inspections were initially not feasible, and both Train IDs 617 and 630 were directed to Downtown Largo Station. The third rail power on track 1 was de-energized to facilitate safe operations.

The Safety Information Officer (SIO) was notified of the incident. Train services were temporarily terminated at Cheverly, Eastern Market, and Addison Road stations to accommodate the de-energization of power at the D&G Junction. However, it was confirmed that the de-energized power at Benning Road did not affect the D&G Junction. Shuttle buses were requested to accommodate the customers.

A delay in confirming the power de-energization was due to initial misinformation about trains operating through the area. This issue was resolved after maintenance crews communicated with the MICC Command Line. The service pattern was adjusted, with Silver Line trains operating from Ashburn to Eastern Market Stations, Blue Line trains from Franconia-Springfield to Stadium-Armory and Largo to Addison Road Stations, and Orange Line trains maintaining normal service from Vienna to New Carrollton Stations.

Track inspections identified an insulator near Chain Marker (CM) G1-307+00 as the probable cause of the smoke. The insulator was removed, power was restored, and a test train confirmed the area was safe for revenue service, allowing the resumption of normal operations.
In adherence to Standard Operating Procedure 102-01-02, which outlines the protocol for Removing an Employee from Service for involvement in an operational safety event, the Train Operator was relieved from duty and sent for post-incident testing.

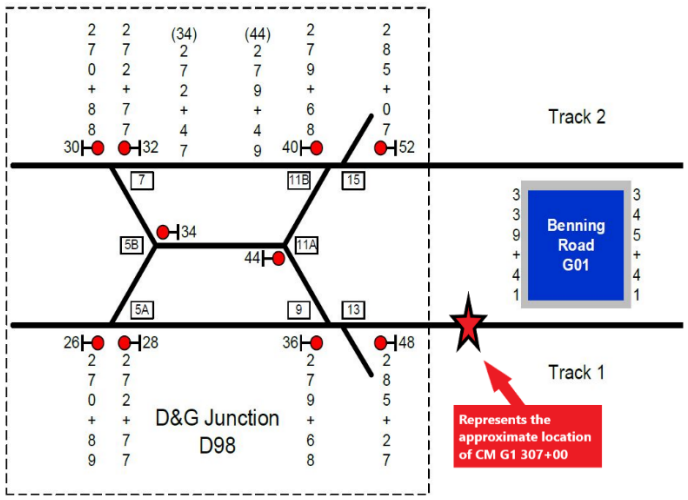
The Radio RTC was relieved from duty and taken for post-incident testing.

The probable cause of the smoke incident on July 22, 2024, near Benning Road Station was electrical arcing resulting from an insulator near Chain Marker (CM) G1-307+00. This triggered the smoke observed in the tunnel and at the station.

Incident Site

Benning Road Station, Track 1 at CM G1 307+00

Field Sketch/Schematics



The above depiction is not to scale.

Purpose and Scope

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

Investigative Methods

The investigative methodologies included the following:

- Site Assessment through video and document review
- Formal Interviews – SAFE interviewed eight (8) individuals as part of this investigation. The interview included persons present at, during, and after the incident, those directly involved in the response process, and representatives from the Washington Metrorail Safety Commission (WMSC). SAFE interviewed the following individuals:
  - Train Operator - Train ID 617
  - Radio RTC
  - Maintenance Controller
  - Power Desk Superintendent
  - Power Desk Assistant Superintendent (PDAS)

- MTPD WMATA Incident Commander
- MICC Operations Manager/ Rail 1
- Rail Supervisor #1

- Documentation Review – Collection of relevant work history information and process documentation contained in WMATA systems of record. These records include:
  - Metrorail Operating Rulebook (MOR)
  - National Oceanic and Atmospheric Administration (NOAA)
  - Metro Integrated Command and Communications (MICC) Incident Report
  - Maximo Data

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

Investigation

On Monday, July 22, 2024, at 11:48 hours, Train ID 617, an eight-car 7000 series consist [**L**7718/19**X**7137/36**X**7740/41**X**7525/24**T**] Train Operator observed smoke in the tunnel on track 1, as it approached Benning Road Station, leaving Stadium-Armory Station. The Train Operator contacted the MICC OPS 2 Radio RTC to report the incident. The Radio RTC asked the Train Operator to confirm their Train ID. The Train Operator responded that they had Train ID 617. The RTC instructed Train ID 417, located at the D&G Junction behind Train ID 617, to halt their train and instructed Train ID 617 to continue towards Benning Road Station with a permissive block to the 8-car marker. The RTC then began halting all other rail vehicle traffic immediately.

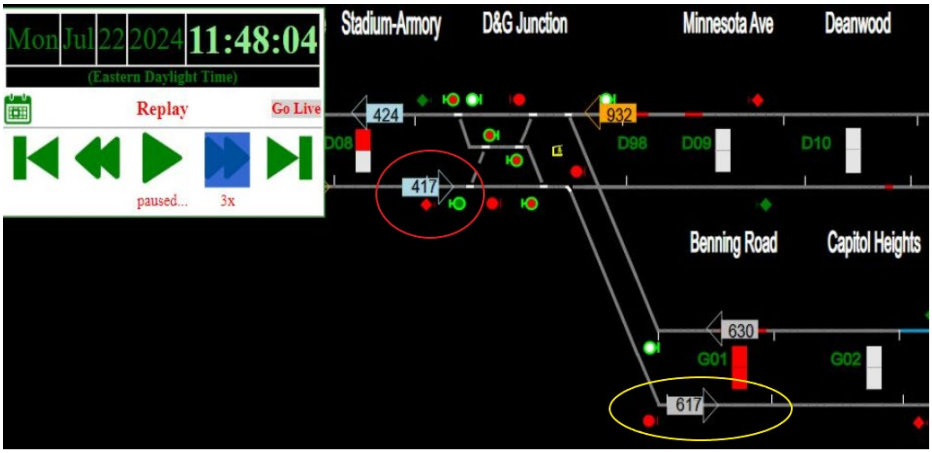


Figure 1 - Depicts Train ID approaching Benning Road Station on Track 1 as Train ID 417 approaches the D&G Junction on Track 1.

The RTC radioed Train ID 617 shortly after to inquire if the train was moving. The Train Operator informed the Radio RTC that they had zero visibility, and passengers informed them via the intercom that smoke was entering the railcars. The RTC instructed the Train Operator to turn off their EVs and offload their customers once they arrived at Benning Road Station.

Train ID 630, berthed at Benning Road Station on track 2, reported no smoke on the platform. At 11:51 hours, Train ID 617 entered the Benning Road track 1 platform limits. CCTV footage

revealed smoke entering the station from behind the train. Once properly berthed, all customers were offloaded from the train. At this time the Assistant Operation Manager (AOM) contacted the Maintenance Operations Center (MOC) Fan Desk Controller to request Emergency Ventilation Fan activation at Benning Road Station and the adjacent tunnels; however, no Chain Marker (CM) location was provided. ERT and Power personnel were requested and dispatched to Benning Road Station. At 11:52 hours, the MICC Operations Manager (OM) notified DCFEMS of a report of smoke between Benning Road Station and Stadium-Armory Station. DCFEMS personnel were dispatched to the station. At 11:53 hours, MTPD was dispatched to Benning Road Station. At 11:54 hours, the Benning Road Station fire alarm was activated.

Figure 2 - CCTV footage of smokey haze entering the station platform behind Train ID 617.

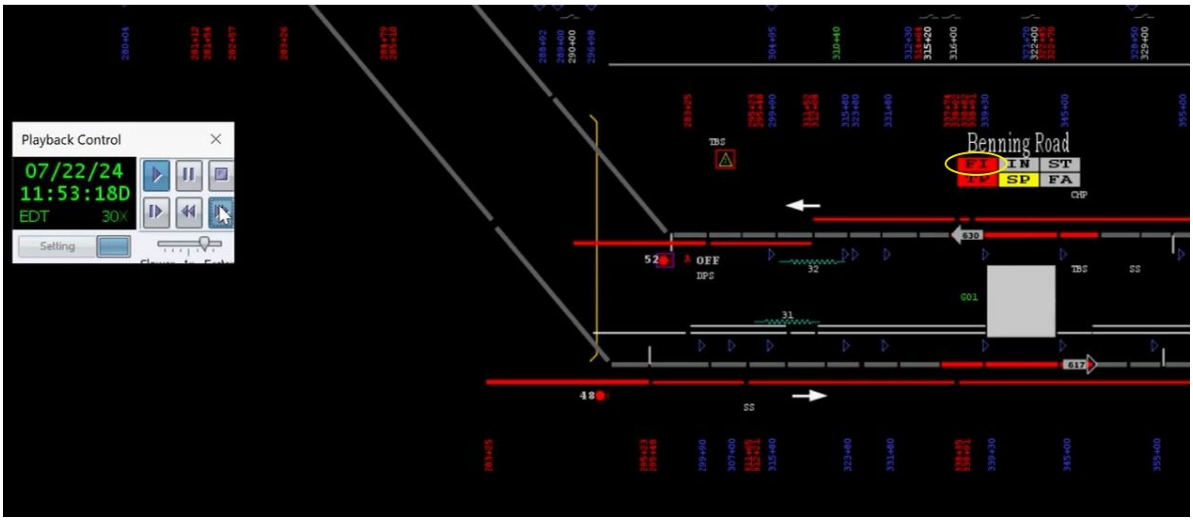


Figure 3 - Depicts Benning Road Station Composite Panel Alarms, illuminating the Fire Alarm Indication.

Train ID 630 was instructed to offload customers. At 11:53 hours, the MOC Fan Desk Controller configured the Benning Road Station fans to exhaust the platform limits only, using the Emergency Ventilation play G10 which sets the Under Platform Exhaust (UPE) fans to “exhaust” and the tunnel fans at either side of the platform to be turned “off.” At 11:54 hours, an Allied Security Special Police Officer (SPO) on the Benning Road Station platform began evacuating the station. At 11:56 hours, DCFEMS received an additional notification of a Metro Station Box alarm at Benning Road Station.

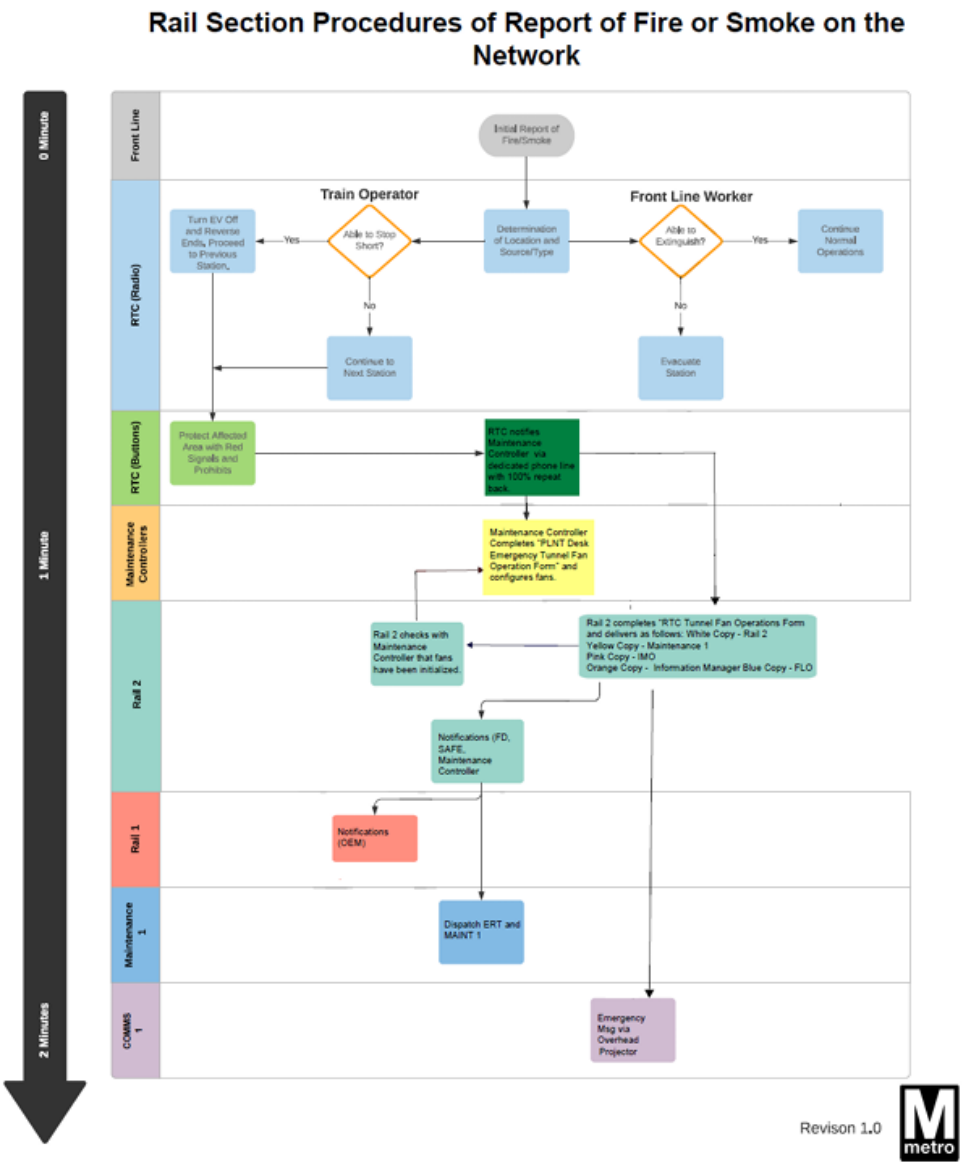


Figure 4 - Rail Section Procedures of Report of Fire or Smoke on the Network, Source: MICC-ALL-PRO-04 Emergency and Maintenance Tunnel Fan Ventilation Procedures, Rev. 0, 1/4/2024.

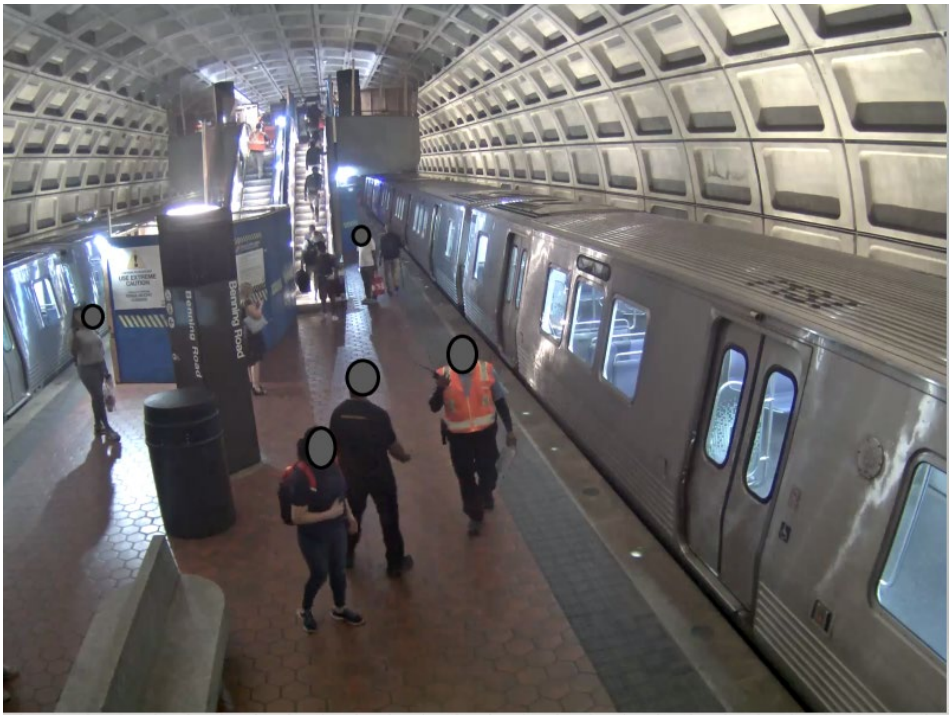


Figure 5 - Depicts an Allied Security SPO evacuating Benning Road Station

Rail Supervisor #1 located at Addison Road Station was dispatched to assist. An MTPD unit was sent to Addison Road Station to escort Rail Supervisor #1 to Benning Road Station. At 11:57 hours, MTPD personnel arrived at Benning Road Station and established Incident Command. DCFEMS arrived at 12:00 hours and established an ICP and Unified Command. Both MTPD and DCFEMS went to the station platform to assess the situation. Upon arrival, Train ID 630 and 617 remained berthed on their respective tracks. Third rail power remained energized on tracks 1 and 2, and smoke was observed coming from the tunnel in the direction of Stadium-Armory Station.

The Fire Liaison Officer (FLO) informed the DCFEMS Incident Commander that the MICC planned to have Train ID 630 perform a track inspection towards Stadium-Armory Station via track 2. Train ID 617 would be sent in non-revenue service to Downtown Largo Station. Train ID 630 notified the Radio RTC that there was heavy smoke in front of their train. The Radio RTC decided to terminate the track inspection and to have Train ID 630 key down and reverse end towards Downtown Largo Station. Power was de-energized on track 1 between Benning Road Station and the D&G Junction. At 12:05 hours, Train ID 617 on track 1 was reblocked to Train ID 717 and departed Benning Road Station towards Downtown Largo Station. At 12:08 hours, Train ID 630 on track 2 was reblocked to Train ID 730 and departed Benning Road Station towards Downtown Largo Station. The FLO informed the DCFEMS Incident Commander that no track inspection was performed due to smoke in the tunnel. The MTPD Officer on the scene was instructed to report to the topside of the station, where Incident Command was transferred to an MTPD sergeant.

At 12:08 hours, a Rail Station Supervisor arrived at Benning Road Station. The RTC, not knowing that MTPD and DCFEMS were on location, had appointed the Rail Station Supervisor, the WMATA Incident Commander. The Rail Station Supervisor notified the Radio RTC that DCFEMS personnel were on location and heavy smoke was present at the station. The Radio RTC informed the Rail Station Supervisor that Rail Supervisor #1 was being escorted from Addison Road Station to confirm third rail power was de-energized.

At 12:12 hours, Train services were temporarily terminated at Cheverly, Eastern Market, and Addison Road stations to accommodate the de-energization of power at the D&G Junction.

However, it was confirmed that the de-energized power at Benning Road did not affect the D&G Junction. At 12:28 hours, ERT arrived on location and reported to the ICP. ERT was escorted to the platform. Due to heavy smoke in the tunnel, ERT contacted the MOC Desk Controller to request that all ventilation fans be set to exhaust. ERT was informed that the request had to be made by the MICC OM (Rail 1), who was managing the incident.

At 12:41 hours, the DCFEMS Special Operations Commander contacted the FLO to request an update on the fan activation. They were informed that there was no change in the status, and that track 2 third rail power remained energized. A few seconds later third rail power was de-energized on track 2 and the FLO requested the Benning Road Station Tunnel Fan be set to “exhaust” At 12:48 hours, The MOC Desk Fan Controller activated Benning Road Station Tunnels fans, set to “exhaust.” At 13:01 hours, ERT hot-sticked and confirmed power was de-energized on track 1 and at 13:08 hours track 2 was hot-sticked and confirmed de-energized.

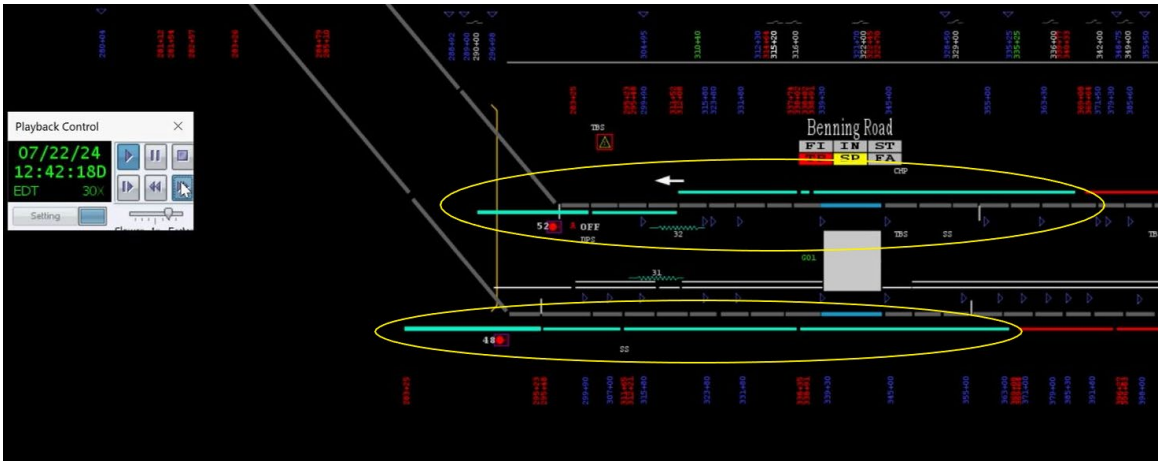


Figure 6 - Depicts Third Rail power de-energized at Benning Road Station on tracks 1 and 2 between Capitol Heights Station and the D&G Junction.

At 13:13 hours, a walking track inspection via track 1 was performed by ERT, POWER, and DCFEMS personnel. At 13:37 hours, the MTPD Forward Liaison Officer notified the WIC that ERT identified the source of the smoke to be an insulator near CM G1-307+00. The insulator was removed. ERT requested that the tunnel fans be turned off and third rail power be restored on track 1 to see if any additional insulators were affected. At 13:38 hours, the tunnel fans were shut off. At 13:45 hours, ERT confirmed that the incident was due to a maintenance issue and that no DCFEMS support was needed. DCFEMS turned Unified Command over to MTPD, who in turn relinquished Incident Command to the Rail Supervisor. At 13:48 hours, third rail power was restored on track 1.

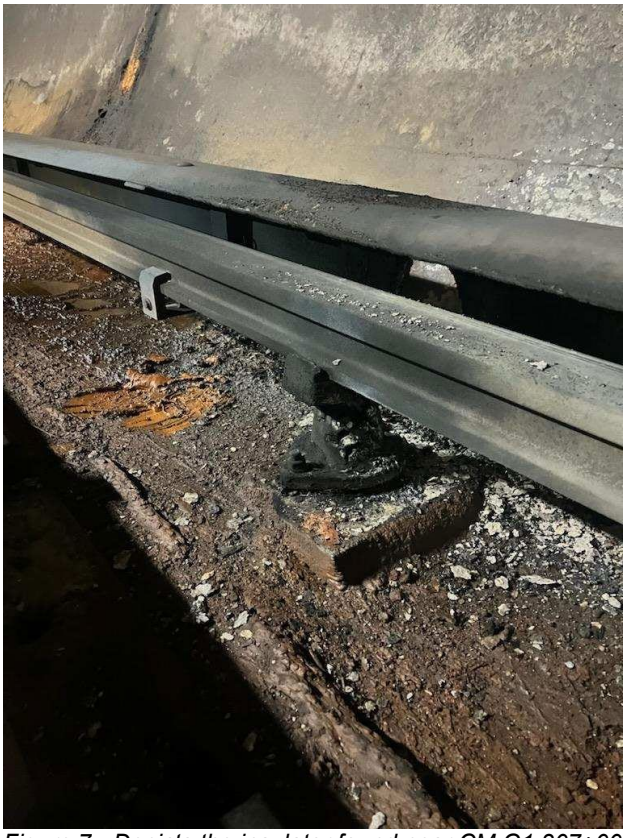


Figure 7 - Depicts the insulator found near CM G1 307+00.

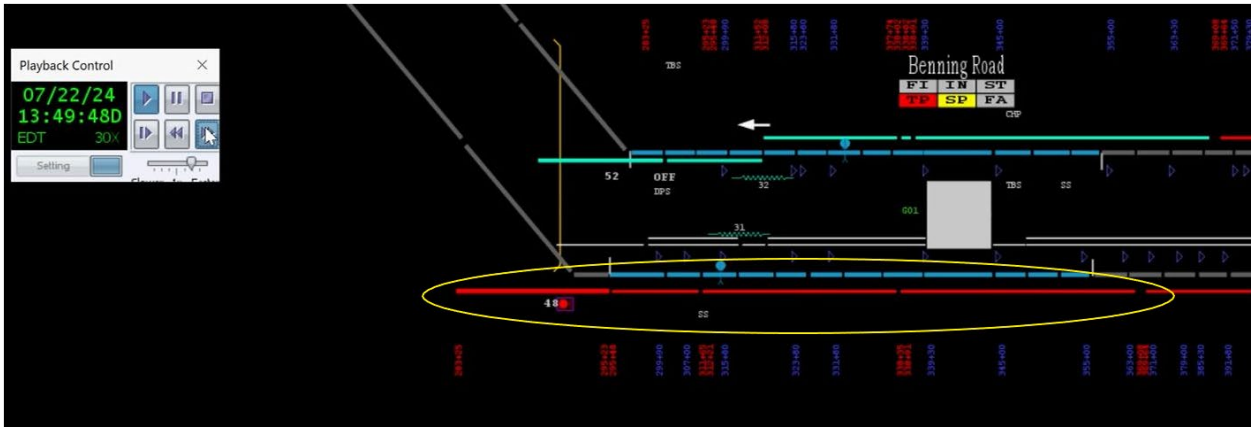


Figure 8 - Depicts Third Rail power restored on track 1 at Benning Road Station.

At 14:16 hours, ERT requested that the third rail power be restored at Benning Road Station on track 2. They reported that no test train inspection was required. At 14:33 hours, Train ID 643 was the first revenue train to service Benning Road Station via track 1.

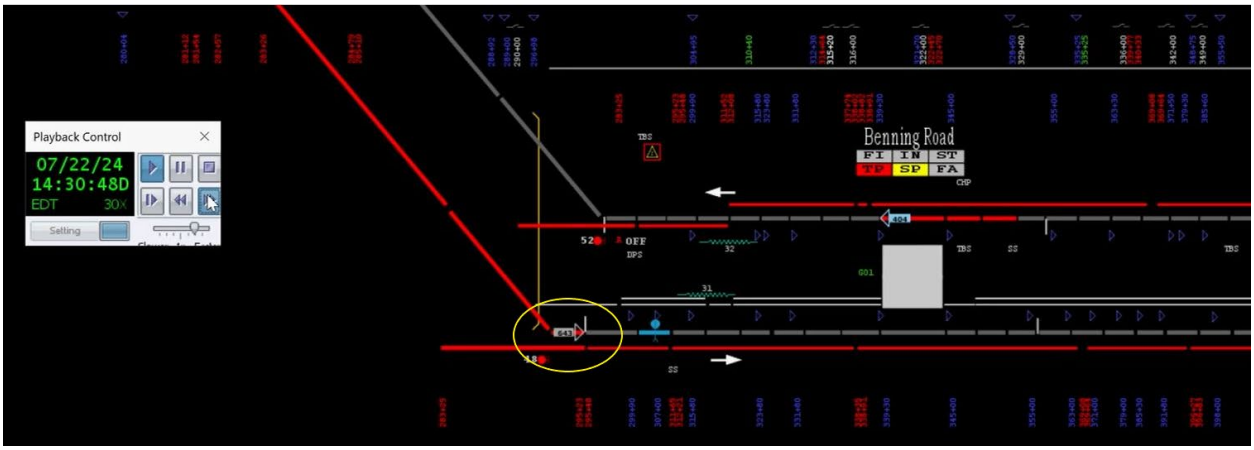


Figure 9 - Train ID 643 in approach to Benning Road Station via track 1.

Several contributing factors compounded the severity of the incident. Environmental conditions played a critical role. The heavy smoke that filled the tunnel impaired visibility, making it challenging to assess and address the smoke condition. This lack of visibility delayed the identification of the source of the smoke and the initiation of appropriate safety measures, including the location of chain markers.

Operational challenges further complicated the response. There was a delay in confirming the de-energization of the third rail power, primarily due to miscommunication about the status of trains operating in the affected area. This delay hindered the timely access of maintenance crews to the site, prolonging the resolution of the incident.

While generally effective, coordination among the DCFEMS, MTPD, and Metro operational teams faced logistical hurdles. Communication breakdowns during the response operations created difficulties in ensuring that all safety protocols were promptly followed and that information was accurately relayed among all involved parties.

In summary, the immediate cause of the smoke was identified as electrical arcing from an insulator. Contributing factors included environmental conditions, operational delays, and response coordination issues.

Chronological Event Timeline

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

Time	Description
11:48:00 hours	Train ID 617: Reported smoke in the tunnel in approach to Benning Road Station on track 1. Radio RTC: Asked the Train Operator to confirm if their Train ID was 417 or 617. Train ID 617: Confirmed their Train ID as 617 Radio RTC: Instructed Train ID 417 to stop their train. Train ID 617: Stated they had zero visibility. Radio RTC: Instructed Train ID 630 to stop their train and hold at Benning Road Station, Train ID 426 to hold at Capitol Heights Station [OPS 2 Radio]
11:48:56 hours	Radio RTC: Gave Train ID 617 a permissive block to Benning Road Station to the 8-car marker and Train ID 417 to standby at signal D98-26, displaying a red aspect. [OPS 2 Radio]
11:49:03 hours	Train ID 617: Reported smoke was entering the train consist. Radio RTC: Acknowledged the message and instructed Train ID 617 to turn off their EV, continue to Benning Road Station, and offload customers. [OPS 2 Radio]
11:49:34 hours	Radio RTC: Asked Train ID 630 if smoke was observed in the station at Benning Road. Train ID 630: Reported no smoke observed at Benning Road Station. [OPS 2 Radio]
11:49:53 hours	Radio RTC: Informed the ROIC of smoke between Benning Road Station and the D&G Junction. Trains are being held on tracks 1 and 2. Train IDs 619 and 630 may be offloaded to perform track Inspections. [MICC Extra Phone]
11:49:58 hours	Radio RTC: Asked Train ID 617 if they were moving. Train ID 617: They stated they were moving but could not see anything due to the smoke. Radio RTC: Acknowledged the message and instructed Train ID 617 to properly berth at the station and offload customers. [OPS 2 Radio]
11:50:26 hours	Radio RTC: Radioed for Rail Supervisor #1 Rail Supervisor #1: responded [inaudible] [OPS 2 Radio]
11:50:57 hours	Radio RTC: Asked Train ID 617 if they observed smoke in front of them or behind them. Train ID 617: Stated they observed the smoke in the middle of the tunnel. As they entered the station, the smoke cleared. Radio RTC: Instructed Train ID 617 to offload customers and perform a track inspection from Benning Road Station to Capitol Heights Station. Radio RTC: Instructed Train ID 630 to offload customers at Benning Road Station. Train ID 630: Asked if they were to verify clear of customers. Radio RTC: Replied affirmatively. Radio RTC: Instructed Train ID 417 to enter the pocket track. Train ID 417: Acknowledged the message. Radio RTC: Instructed Train ID 619 to offload customers at Stadium-Armory Station. Radio RTC: Radioed for Rail Supervisor #2. [OPS 2 Radio]

Time	Description
11:51:18 hours	METRO 1: contacted Rail 1 to request ERT between the D&G Junction and Benning Road Station, in the tunnel on track 1. No Chain Marker was available. [MICC Metro 1 Phone]
11:51:30 hours	Smoke observed smoke in the station [CCTV]
11:51:54 hours	AOM: Contacted the MOC Controller to request fan activation at Benning Road Station and the adjacent tunnels. MOC Controller: Asked the AOM reason for fan activation. AOM: Replied the request was due to smoke conditions reported on tracks 1 and 2. MOC: The Controller asked for a Chain Marker, or was the smoke located at the station? OM: Stated they were attempting to locate the nearest chain marker. MOC Controller: Replied, "I don't know?" [ROCC Power PDAS 3 Phone]
11:52:06 hours	Train ID 630: Reported smoke entering the station and smoke observed in front of their train. [OPS 2 Radio]
11:52:12 hours	All Benning Road Fare gates opened. Escalators were still operating. [CCTV]
11:52:27 hours	Customers observed standing on the platform at Benning Road Station [CCTV]
11:52:30 hours	Radio RTC: Instructed Train ID 630 to offload customers and reverse end towards Capitol Height Station. Radio RTC: Instructed Train ID 426 to offload customers. Train ID 630: Stated the station needed to be evacuated. Radio RTC: Replied affirmatively and radioed for the location of the Addison Road Station Automatic Train Control Maintenance (ATCM) personnel. ATCM: Stated they were at the 03 interlocking. Radio RTC: Instructed ATCM to clear the roadway immediately. [OPS 2 Radio]
11:52:30 hours	Tunnel Fan FG1 on Auto Exhaust. UPE IB and OB on Auto Exhaust [AIMS]
11:53:24 hours	Tunnel Fan FG1 (Benning Road) command change Emergency Off Tunnel Fan FG2 (Benning Road) command change Emergency Off Tunnel Fan FG3 (Capitol Heights) command change Emergency Off [AIMS]
11:52:57 hours	OM: Notified DCFEMS of smoke in the Benning Road Station. [Rail 2 Phone]
11:52:57 hours	METRO 1: contacted MOC Desk to request fan activation at Benning Road Station [METRO 1 Phone]
11:53:00 hours	Radio RTC: Announced the report of smoke at Capitol Heights Station. All Train Operators observing smoke need to make 100% repeat back of messages. Radio RTC: Instructed Train ID 426 to report when they had keyed down and reversed ends on track 2 towards Capitol Heights. [OPS 2 Radio]
11:53:18 hours	G01 Panel Alarm Fire displaying a red aspect [AIMS]
11:53:14 hours	MTPD: Announced a unit to respond to a report of smoke between Benning Road Station and D&G Junction. [MTPD1X]
11:53:29 hours	Radio RTC: Announced fans being activated at G01 (Benning Road Station). Train ID 430: [inaudible message] Radio RTC: Asked Train ID 630 for conditions update at Benning Road Station. Train ID 630: Stated they were walking through the train consist towards the Largo end; smoke had not reached that far into the station. [OPS 2 Radio]

Time	Description
11:53:32 hours	METRO 1: Notified the SIO of the smoke conditions at Benning Road Station. [METRO 1 Phone]
11:54:12 hours	Allied Security observed evacuating the platform at Benning Road Station [CCTV]
11:54:16 hours	Radio RTC: Asked Train ID 426 for an update regarding reversing ends. Train ID 426: Stated they were walking through the train consist. Radio RTC: Acknowledged the message. [OPS 2 Radio]
11:54:22 hours	Radio RTC: Granted Train ID 417 a permissive block, no closer than 10 feet of signal D98-44 displaying a red aspect. [OPS 2 Radio]
11:54:30 hours	Tunnel Fan FG1 turned off. UPE IB and OB on Exhaust [AIMS]
11:54:40 hours	ATCM: Informed the RTC that all personnel and equipment were clear of the roadway at G03 (Addison Road Station). Radio RTC: Acknowledged the message and stated the clearing time was 11:55 hours.
11:54:52 hours	MTPD: Informed their units that Rail was evacuating Benning Road. [MTPD1X]
11:55:36 hours	Radio RTC: Instructed Train ID 921 at the D&G Junction to shut off EV. Informed the Train Operator they would be going straight towards Minnesota Avenue Station. [OPS 2 Radio]
11:55:46 hours	Radio RTC: Instructed Train ID 410 to offload at Stadium-Armory Station. This was revised to Train ID 419. Train ID 419: Acknowledged the message. Train ID 619: At Stadium-Armory, track 1 stated they were offloading customers. Rail Supervisor #1: Stated they were at Addison Road Station. Radio RTC: Instructed Rail Supervisor #1 to board Train ID 632. [OPS 2 Radio]
11:56:09 hours	DCFEMS dispatched. Engine 30, 27, 38 and 18; Trucks 17 and 7, Ambulance 30, Safety Battalion Chief 53, Battalion Chief 3, Medic 8, Battalion Chief Special Operations, EMS 3 and Rescue Squad 3. [DCFEMS]
11:56:14 hours	MTPD: Directed a unit to go toward the D&G Junction, advising that the smoke location had not been identified. [MTPD1X]
11:56:27 hours	DCFEMS Specialist announced a Metro Station Box Alarm. Engine 30, 27, 38, and 18; Trucks 17 and 7; Ambulance 30; Safety Battalion Chief 53; Battalion Chief 3; Medic 8; Battalion Chief Special Operations; EMS 3; and Rescue Squad 3 to respond to a station fire. Reported smoke was seen between Benning Road and Stadium-Armory Stations. 4500 Central Avenue NE, cross street of Benning Road. [DCFEMS]
11:57:05 hours	MTPD observed on scene at Benning Road Station topside [CCTV]
11:57:46 hours	Radio RTC: Instructed Train ID 630 to reverse ends towards their Downtown end for a track inspection. Radio RTC: Instructed Train ID 616 to reblock as Train ID 717 and hold at Benning Road Station. [OPS 2 Radio]
11:57:58 hours	MPD observed on scene at Benning Road Station topside [CCTV]
11:58:22 hours	FLO: Contacted the Battalion Chief regarding the Benning Road incident [DCFEMS]
11:59:53 hours	PDAS: Dispatched power personnel to Traction Power (TP) 2 at Benning Road Station. [POC Phone]
12:00:00 hours	DCFEMS observed arriving at Benning Road Station [CCTV]

Time	Description
12:00:53 hours	Rail Supervisor #2: Stated they were at L'Enfant Plaza Station, track 1, and asked the RTC if they should exit at Stadium-Armory Station. [OPS 2 Radio]
12:00:58 hours	DCFEMS was observed walking down the escalator to the mezzanine. [CCTV]
12:01:25 hours	Train ID 630: Informed the RTC that there was heavy smoke in front of their train on their Downtown end. Radio RTC: Instructed Train ID 630 to reverse ends towards Downtown Largo Station. [OPS 2 Radio]
12:01:39 hours	MTPD: Announced Fire Department's presence at Benning Road. [MTPD1X]
12:02:06 hours	Radio RTC: Announced smoke in the tunnel at Benning Road Station on tracks 1 and 2. Silver and Blue line trains would be turning back at Eastern Market. Orange lines trains would continue on to New Carrolton Station [OPS 2 Radio]
12:02:22 hours	Radio RTC: Announced smoke at Benning Road Station. Train ID 452: At Stadium-Armory Station, asked if a bus shuttle had been established. Radio RTC: Replied that a bus shuttle had been requested and was being established.
12:02:37 hours	DCFEMS Incident Commander: Stated they were on the platform with MTPD. Trains were occupying both tracks, power was still energized, and smoke was observed coming from the direction of Stadium-Armory Station. [DCFEMS]
12:02:49 hours	Third rail power de-energized on Benning Road Station track 1. [AIMS]
12:02:50 hours	Radio RTC: Asked Train ID 717 for their lead car number and informed them that the breakers would be commanded open, indicating third rail power on track 1 was de-energized. The RTC instructed the Train Operator to key down and provide a handheld radio check. The RTC informed Train ID 717 that IMF procedures were in effect and that they were the Initial Responder. [OPS 2 Radio]
12:04:13 hours	Radio RTC: Announced all Blue and Silver line trains leaving Downtown Largo Station would terminate at Addison Road Station and turn around for service at the interlocking. [OPS 2 Radio]
12:05:04 hours	Radio RTC: Instructed Train ID 717 to key up on their Downtown Largo end and granted a permissive block to Capitol Height Station on track 1. Radio RTC: Announced Blue and Silver line trains from Virginia would turn back at Eastern Market Station. This directive was revised for blue and silver line trains leaving Virginia to terminate at Stadium-Armory Station using the D&G Junction to turn back. All Orange line trains would be operating normally. Blue and Silver line trains from Downtown Largo Station would terminate at Addison Road Station and reverse ends. [OPS 2 Radio]
12:05:08 hours	FLO: Informed the DCFEMS Incident Commander that the MICC requested to move Train ID 630 on track 2 towards Stadium-Armory Station. [DCFEMS]
12:05:59 hours	Train ID 717 departed Benning Road Station, track 1, towards Downtown Largo Station. [CCTV][SPOTS][AIMS]
12:08:04 hours	FLO: Informed the DCFEMS Incident Commander that Train ID 617 departed Benning Road Station. Train ID 630 will be departing Benning Road Station shortly. [DCFEMS]

Time	Description
12:08:15 hours	Rail Station Supervisor: Notified the Radio RTC that they had arrived at Benning Road Station. Radio RTC: Informed the Rail Station Supervisor that they now had WMATA Incident Command. Train ID 717: Informed the Radio RTC that they had arrived at Addison Road Station and asked if they had permission to continue on. Radio RTC: Replied affirmative. [OPS 2 Radio]
12:08:50 hours	Train ID 730 departed Benning Road Station, track 2, towards Downtown Largo Station. [CCTV][SPOTS][AIMS]
12:09:30 hours	MTPD: Tried to find out where smoke was coming from; requested to advise if smoke was seen; Fire Department was checking Benning Road Station. [MTPD1X]
12:10:40 hours	FLO: Informed the DCFEMS Incident Commander that no track inspection was performed due to the smoke. Both Trains were routed to Downtown Largo Station. [DCFEMS]
12:11:39 hours	MTPD: Informed a cruiser to go to the Benning Road; the Incident Command Post had been moved to the topside by Truck 17. [MTPD1X]
12:15:19 hours	Radio RTC: Announced a revision to the train routing. All Blue, Orange and Silver trains coming from Virginia would terminate at Eastern Market Station. Orange line trains departing New Carrollton Station would turn around at Cheverly Station. Blue and Silver line trains departing Downtown Largo Station would turn around at Addison Road Station. Minnesota Avenue, Deanwood, Benning Road, Stadium-Armory, and Potomac Avenue stations were closed. Power was being de-energized at the D&G Junction. [OPS 2 Radio]
12:20:59 hours	MTPD: Advised all units at Benning Road Station to switch communication to MTPD channel 2. [MTPD1X]
12:23:21 hours	Radio RTC: Announced smoke in the station at Benning Road on tracks 1 and 2. Potomac Avenue, Stadium-Armory, Minnesota Avenue, Deanwood, Benning Road and Capitol Heights Stations are out of service due to smoke in the area and third rail power de-energizing at those locations momentarily. The RTC instructed Train Operators to make good announcements to their customers. Orange line trains would service from Vienna to Eastern Market Station and turn back. All Orange line trains from New Carrollton would go to Cheverly Station and turn back. Blue and Silver line trains would serve from Wiehle-Reston East and Dulles Airport Stations to Eastern Market Station and turn around. Blue and Silver line trains from Downtown Largo would service to Addison Road Station and turn back. Shuttle bus services were requested. [OPS 2 Radio]
12:23:48 hours	MTPD: Received a report that Rail was in the process of powering down between Benning Road and D&G Junction; power was still active. [MTPD2X]
12:24:24 hours	Rail Station Supervisor: Informed the RTC that DFEMS was on location. Heavy smoke was observed at Benning Road Station. Radio RTC: Acknowledged the message and informed the Rail Station Supervisor that additional power needs to be de-energized. A Rail Supervisor needed to hot-stick and confirm third rail power de-energization. Rail Supervisor #1 was being escorted from Addison Road Station. [OPS 2 Radio]
12:28:45 hours	MTPD: ERT checked in with the command post. [MTPD2X]

Time	Description
12:35:15 hours	ERT: Contacted to MOC Desk Controller to request tunnel fan activation at Benning Road Station. MOC Desk Controller: Advised the ERT they could not request a fan reconfiguration. That request would have to come from Rail 1. ERT: Acknowledged the message [ROCC Power PDAS 3 Phone]
12:38:39 hours	MTPD: Received a report that track 2 power was not down yet. [MTPD2X]
12:39:09 hours	ERT: Notified Rail 1 that the fans needed to be activated in the tunnel at Benning Road Station due to heavy smoke. Rail 1: Informed the ERT that the power was still energized, and they believed a cable was causing the smoke. Since the power was still energized, the smoke condition still exists. They were working to clear trains out of the area, de-energize the third rail power, and keep the fans running. ERT: Acknowledged the message and stated there was still alot of smoke in the tunnel. Rail 1: Agreed and stated this was due to power still being energized at the time. Rail 1 stated third rail power was in the process of being de-energized at that time. ERT: Acknowledged the message [MICC Rail 1 Phone]
12:41:07 hours	DCFEMS Special Operations Commander: Asked the FLO for an update regarding fan activation. FLO: Reported no change in the status of fan activation. DCFEMS Special Operations Commander: Asked what the cause was of the delay. FLO: Stated they did not have an answer and were also waiting for power de-energization on track 2 at Benning Road Station. The FLO informed the Special Operations Commander that Battalion Chief 2 was in direct communications with MTPD for fan activation. However, no changes have been made. [ROCC FLO Phone]
12:41:40 hours	Third rail power de-energized at Benning Road Station track 2 [AIMS]
12:48:30 hours	Tunnel Fan FG1 Turned on. UPE IB and OB on Exhaust [AIMS]
12:53:04 hours	MTPD: Received a report that track 1 power was down, waiting for confirmation for track 2 power status with hot stick. [MTPD2X]
12:55:33 hours	Radio RTC: Granted Train ID 729 a permissive block, from signal D06-02 to Stadium-Armory Station, in order to verify third rail power in the D&G Junction due to power reconfiguration in the area. Train ID 729: Acknowledged message with 100% repeat back. [OPS 2 Radio]
12:56:09 hours	ERT: Requested permission to hot stick track 1 only
12:57:09 hours	Radio RTC: Granted ERT foul-time protection to enter track 1 at Benning Road Station to hot-stick and confirm power de-energization, checking all gaps and providing Chain Markers. ERT: Responded with 100% repeat back. Radio RTC: Acknowledged Affirmative [OPS 2 Radio]
12:58:50 hours	ERT: Reported Benning Road Station (G01) track 1 third rail confirmed de-energized at CM G1 339+00. All gaps where checked. Radio RTC: Asked ERT to confirm track 1 at G01 third rail power de-energized and all gaps checked. ERT: Confirmed message. Radio RTC: Acknowledged message and provided a time check of 12:59 hours. [OPS 2 Radio]

Time	Description
13:01:16 hours	MTPD: Communications confirmed that MTPD had a unit presence at Station-Armory [MTPD2X]
13:01:43 hours	Rail Station Supervisor: Asked the Button RTC to clarify if power was down on both tracks 1 and 2 at Benning Road Station. Button RTC: Stated ERT was presently hot sticking and confirming on track 2. Hot sticking was already performed on track 1. Track 1 was confirmed de-energized at CM 339+00. Rail Station Supervisor: Confirmed ERT was presently walking towards track 2. Button RTC: Stated that they were waiting on hot stick confirmation for track 2. No test train was requested at the time. The source of the smoke/fire was attempting to be located. [BL-OR Phone]
13:02:00 hours	Radio RTC: Granted ERT foul time protection to enter track 2 at Benning Road Station to hot-stick and confirm power de-energization, checking all gaps and providing Chain Markers. ERT: Responded with 100% repeat back. Radio RTC: Acknowledged Affirmative [OPS 2 Radio]
13:05:34 hours	ERT: Informed the Radio RTC that G2 339+00 and all gaps were checked and were de-energized. Radio RTC: Repeated to ERT that third rail power was de-energized on G1 and G2 339+00 with all gaps checked at 13:05 hours. They instructed ERT to notify them when they relinquished their foul time so that they could get trains moving. [OPS 2 Radio]
13:06:05 hours	ERT: Informed the Radio RTC that they were back on the platform and were relinquishing their foul time. Radio RTC: Asked ERT if they were relinquishing foul time for tracks 1 and 2 ERT: Acknowledged Affirmative. [OPS 2 Radio]
13:08:13 hours	WIC: Advised Police 1 that ERT has permission to enter the roadway on track 1. [MTPD2X]
13:08:32 hours	WIC: Advised Police 1 that ERT confirmed power was down on tracks 1 and 2. [MTPD2X]
13:13:14 hours	Rail Station Supervisor: Informed the Button RTC that a walking track inspection was being performed on track 1. The RWIC was accompanying DCFEMS. [BL-OR Phone]
13:17:10 hours	Radio RTC: Announced Orange line train service was restored to normal [OPS 2 Radio]
13:20:35 hours	MTPD: Reported radio transmission issue. [MTPD2X]
13:24:53 hours	MTPD: Reported that Rail will attempt to contact units using ETS. [MTPD2X]
13:28:31 hours	MTPD: ERT requested fans be turned off on track 1. [MTPD2X]
13:28:52 hours	MTPD: Reported radio transmission issue. [MTPD2X]

Time	Description
13:35:50 hours	WIC: Advised Police 1 that they authorized ERT to switch from the OPS 6 channel to the OPS 2 channel, all Fire personnel had cleared the roadway, and requested for power to be restored on track 1. All WMATA personnel to confirm that everyone is accounted for. Police 1: Acknowledged the message and asked to confirm that all Fire Department and MTPD personnel was clear of the roadway. MTPD Forward Liaison: Reported that personnel remained in the roadway on track 1. They advised that third rail power not be restored. Police 1: Instructed MTPD personnel to confirm when all persons have cleared the roadway. [MTPD 2X Radio]
13:37:13 hours	MTPD Forward Liaison: Reported finding an arcing insulator at CM307+00 on track 1 and instructed third rail power remain de-energized on track 1. WIC: Acknowledge the message. [MTPD2X]
13:38:24 hours	Tunnel Fan FG1 Turned off. UPE IB and OB on Exhaust [AIMS]
13:39:09 hours	FLO: Informed the DCFEMS Battalion Chief that Benning Road tunnel fans FG1 and FG2 were turned off. The Under Platform fans were still operating in exhaust. DCFEMS Battalion Chief: Acknowledged the message. DCFEMS Battalion Chief: Informed the DCFEMS Recon Officer that WMATA personnel has determined the cause of the smoke to be a maintenance issue, due to an arcing insulator. ERT requested to inspect 300 feet past the incident location to portal G1 to see if there were additional concerns. DCFEMS Recon Officer: Acknowledged the message and stated they were standing by. [DCFEMS]
13:41:59 hours	DCFEMS Battalion Chief: Informed the DCFEMS Recon Officer that ERT just wanted to confirm that there were no additional concerns. Once they confirm that there is only a maintenance issue, they can begin to clear the scene. They have been requested to stand by until the determination has been made. [DCFEMS]
13:43:37 hours	DCFEMS Battalion Chief: Informed the DCFEMS Recon Officer that third rail power has been requested for track 1. Confirming that all personnel and equipment were clear of the roadway. DCFEMS Recon Officer: Acknowledged the message and stated it would take the WMATA personnel sometime to get back to the platform [DCFEMS]
13:44:21 hours	MTPD: Announced all fire personnel were cleared from the roadway, and all WMATA personnel were on a catwalk, requesting power be turned on for visual inspection. [MTPD2X]
13:45:14 hours	DCFEMS Battalion Chief: Informed the DCFEMS Recon Officer that ERT has determined the incident to be a maintenance issue. All DCFEMS personnel can return. All units in the station are to report to the topside of the Benning Road Station to perform accountability. Incident Command has been transferred over to WMATA personnel. [DCFEMS]

Time	Description
13:46:47 hours	Rail 1: Informed the PDAS that ERT is requesting power to be restored at Benning Road Station on track 1. All personnel and equipment are standing by clear of the roadway. Fire Department and MTPD personnel are on the platform at the station. PDAS: Asked which track? Rail 1: Stated track 1 only. PDAS: Stated, "Alright, track 1 only at 13:47 (hours). Operations knows to stand by and stand clear." Rail 1: Acknowledged message affirmatively. [Rail 1 Phone]
13:47:38 hours	Rail 1: Informed the AOM that ERT was standing by on the catwalk at Benning Road Station. Fire Department and MTPD personnel are on the platform at the station. Third rail power restoration for track 1 at Benning Road Station has been requested. They had notified the PDAS of the plan. The PDAS will fill out the (Energization Verification) form, then the AOM is to proceed with making announcements. This is the game plan at the time. AOM: Asked if that they would be standing by, waiting for Rail 1 and the PDAS to sign the form, then Rail 1 would inform them when to restore third rail power? Rail 1: Replied, "Yes." Rail 1 then explained the process ERT takes once the arcing insulator has been identified. [Rail 1 Phone]
13:49:14 hours	Rail 1: Instructed the AOM to have the RTCs make their power restoration announcements because it appeared that third rail power was being restored prior to announcements being made. [Rail 1 Phone]
13:50:12 hours	Third rail power restored on Benning Road Station track 1. [AIMS]
13:51:16 hours	MTPD: Determined the incident as a maintenance issue; remanded control of the scene to Rail Supervisor #1. [MTPD2X]
13:53:02 hours	Rail Supervisor #1: Informed the Radio RTC that MTPD and ERT had transferred Incident Command to them. They requested a test train for track 1 only at Benning Road Station. Radio RTC: Asked Rail Supervisor #1 to confirm that all personnel and equipment were clear of the roadway on track 1 at Benning Road Station. Rail Supervisor #1: Confirmed that all personnel and equipment were clear of the roadway at Benning Road Station on track 1. [OPS 2 Radio]
14:06:32 hours	Rail Supervisor #1: Advised the Radio RTC that ERT was requesting third rail power be restored on track 2 at Benning Road Station. [OPS 2 Radio]
14:07:16 hours	Radio RTC: Made announcements that third rail power was being restored on track 2 at Benning Road Station. [OPS 2 Radio]
14:13:01 hours	Third rail power restored on Benning Road Station track 2. [AIMS]
14:16:03 hours	Radio RTC: Asked ERT if track 2 at Benning Road Station was safe for train movement. ERT: Reported that track 2 was safe for revenue service. Radio RTC: Asked ERT if a test train was required for track 2 at Benning Road Station. ERT: Stated that a test train was not required. [OPS 2 Radio]
14:34:04 hours	Train 643 was the first train to go into service at Benning Road track 1. [SPOTS][AIMS]

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

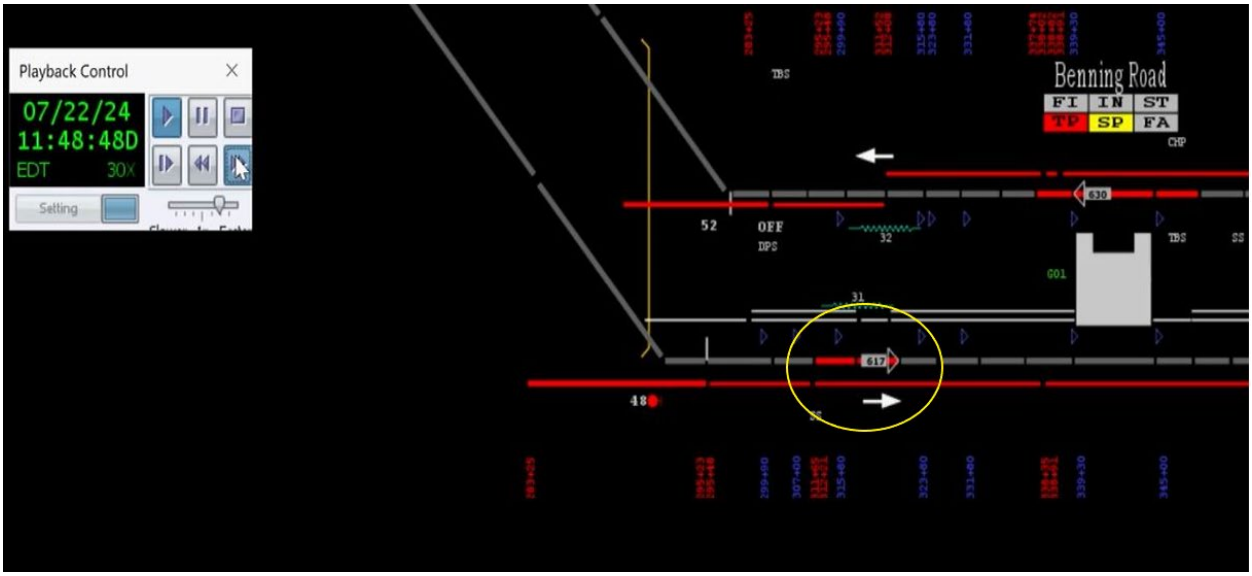


Figure 10 - Depicts Train ID 617 approaching Benning Road Station. Train ID 630 berthed at the platform on track 2.

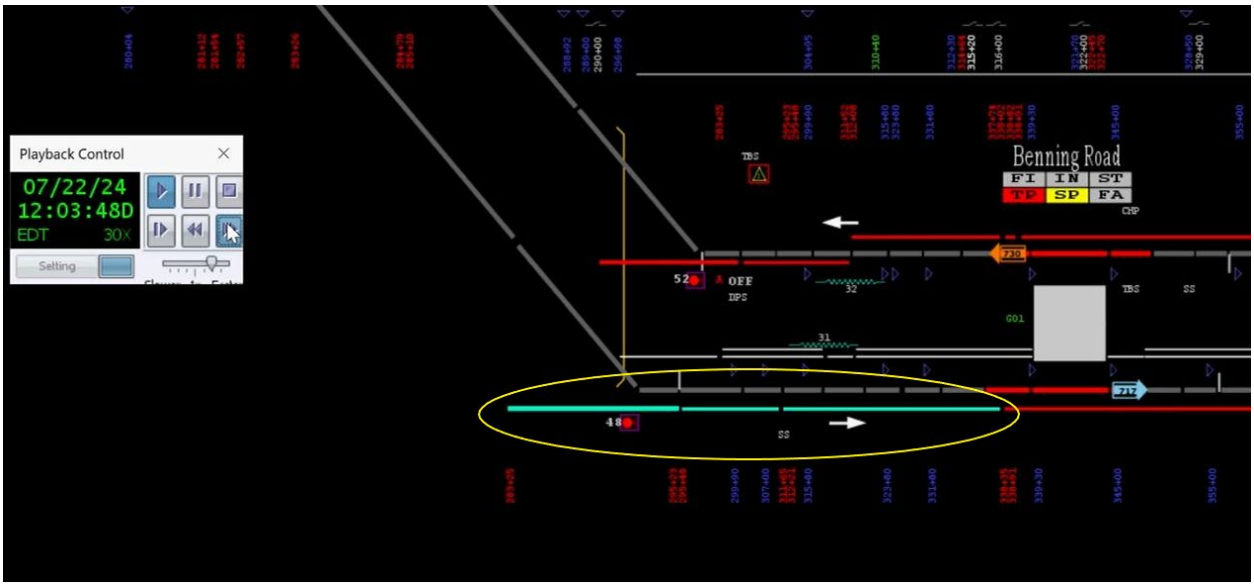


Figure 11 - Depicts Third Rail power de-energized on track 1 between Benning Road Station and the D&G Junction.

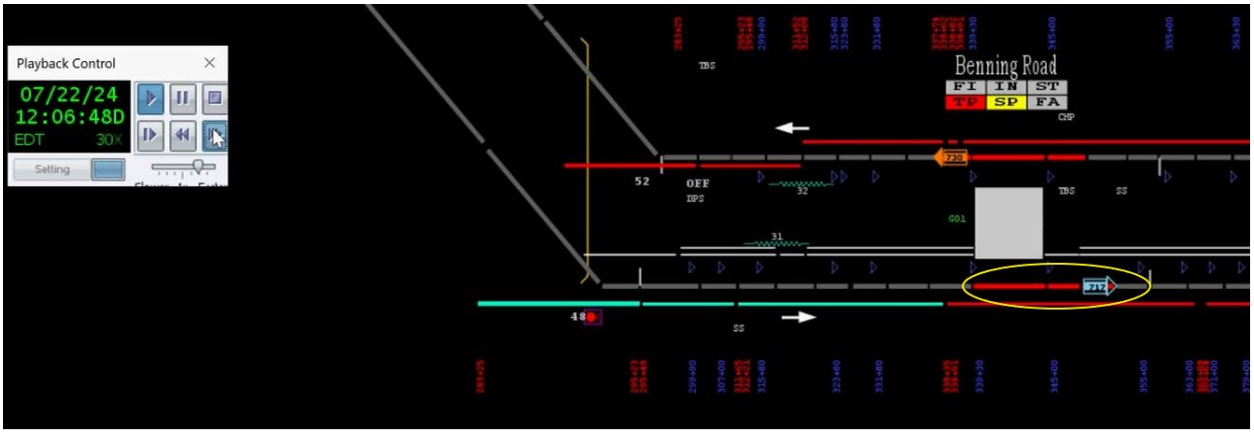


Figure 12 - Depicts Train ID 717 departing Benning Road Station via Track 1.

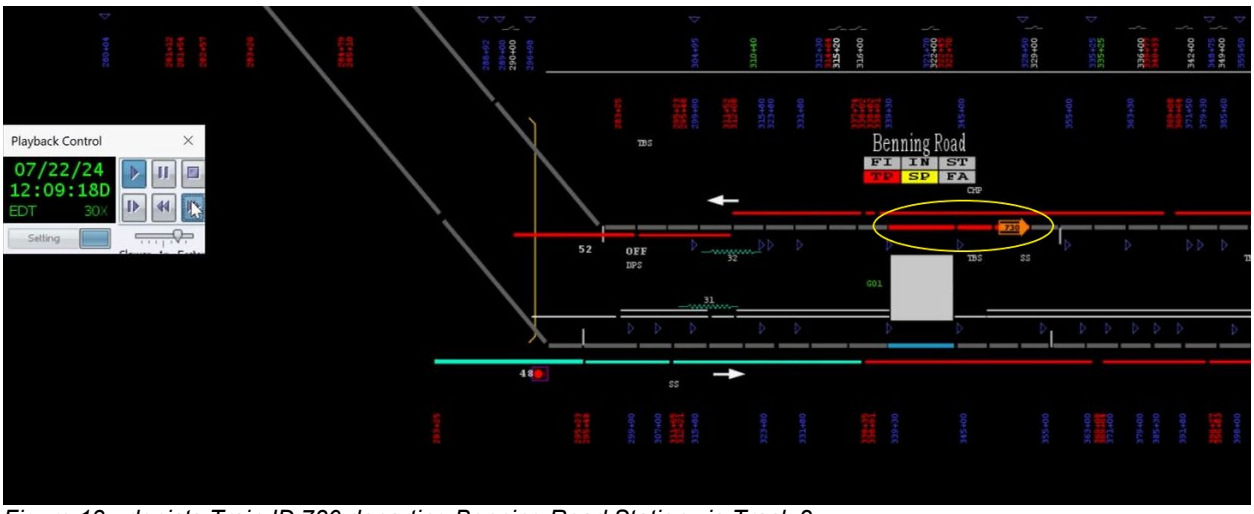


Figure 13 - depicts Train ID 730 departing Benning Road Station via Track 2.

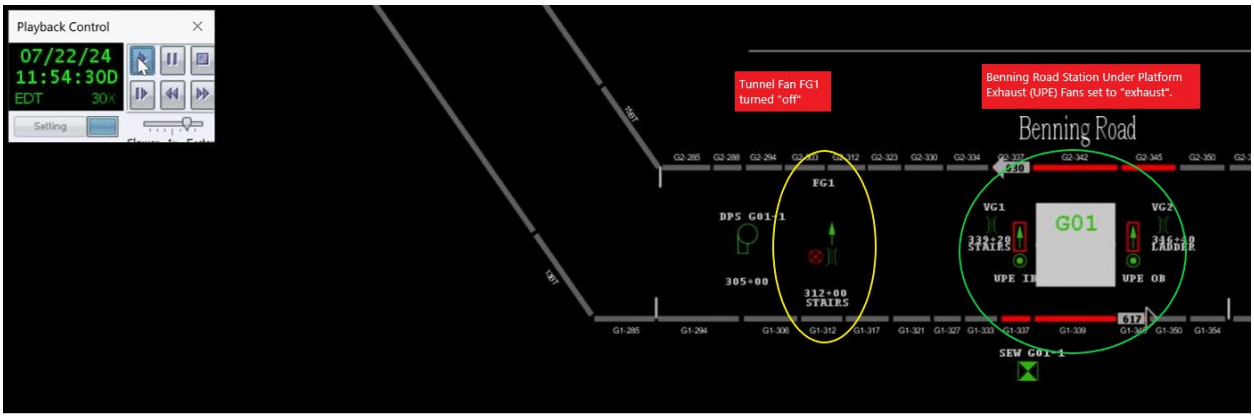


Figure 14 - depicts Benning Road Station Tunnel Fan activation using Emergency Ventilation Playbook G10.

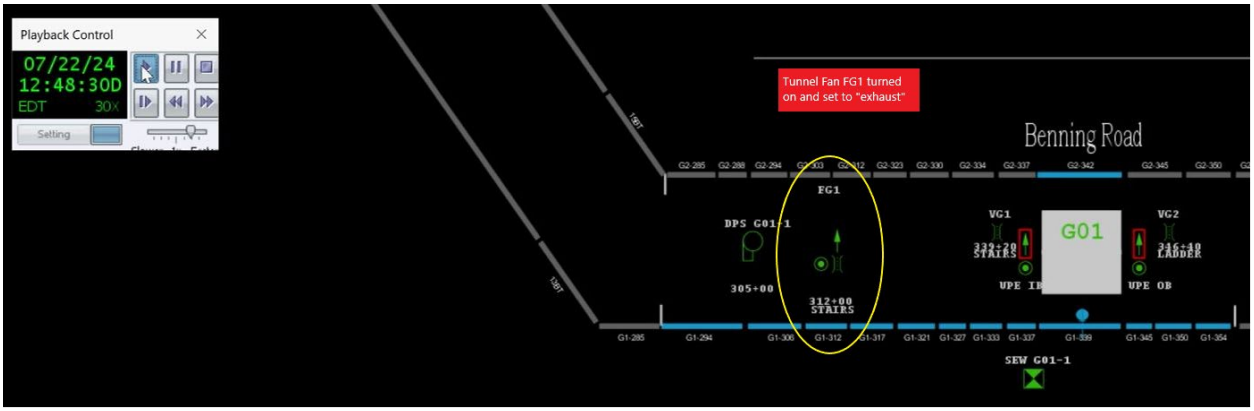


Figure 15 - depicts Benning Road Station Tunnel Fan FG1 turned on and set to "exhaust."

AIMS Logs for Benning Road (G01)

```
11:52:30.042D 07/22/24        ing Road        UPE OB Fan  Exhaust COMMANDED
Exhaust             BY [redacted] AT vawkspower10pp
11:52:30.042D 07/22/24        ing Road        UPE OB Fan  On COMMANDED
Emergency On        BY [redacted] AT vawkspower10pp
11:52:32.562D 07/22/          EM              A work Crew() is removed on
Track N04-N2-771 By [redacted] At vawkss-commpp
11:52:34.172D 07/22/          ing Road        UPE IB Fan  Exhaust COMMANDED
Exhaust             BY [redacted] AT vawkspower10pp
11:52:34.172D 07/22/24        ing Road        UPE IB Fan  On COMMANDED
Emergency On        BY [redacted] AT vawkspower10pp
11:53:00.161D 07/22/24        ing Road        UPE OB Fan  Status COMMANDED
CHANGE = Emergency On
11:53:06.164D 07/22/24   Benning Road         UPE IB Fan  Status COMMANDED
CHANGE = Emergency On
11:53:23.071D      /24   Benning Road         FG2 Fan  On COMMANDED Emergency
Off       BY [redacted] AT vawkspower10pp
11:53:24.321D      /24   Benning Road         FG2 Fan  Status COMMANDED CHANGE
= Emergency Off
11:53:25.823D      /24   Capitol H            FG3 Fan  On COMMANDED Emergency
Off       BY [redacted] AT vawkspower10pp
11:53:24.321D      /24   Benning Road         FG2 Fan  Status COMMANDED CHANGE
= Emergency Off
11:53:25.823D      /24   Capitol H            FG3 Fan  On COMMANDED Emergency
Off       BY [redacted] AT vawkspower10pp
11:53:32.905D      /24   Benning Road         FG1 Fan  On COMMANDED Emergency
Off       BY [redacted] AT vawkspower10pp
11:53:34.063D      /24   Benning Road         FG1 Fan  Status COMMANDED CHANGE
= Emergency Off
11:54:00.903D 07/22/24   Benning Road         G01-1 Fresh Air AHU Fan CURRENT
STATE = Normal        ALARM FINAL ACK. BY SYSTEM AT vasc-hostapva
11:54:06.371D 07/22/24   Benning Road         G01-2 Fresh Air AHU Fan CURRENT
STATE = Normal        ALARM FINAL ACK. BY SYSTEM AT vasc-hostapva
11:54:56.483D 07/22/24   Benning Road         G01-1 Fire Alarm CURRENT STATE =
Active              ACKNOWLEDGED BY [redacted] AT vawkspowersuppp
11:55:28.421D 07/22/24   Benning Road         VG1 Ventilation Shaft Damper
CURRENT STATE = Normal   ALARM FINAL ACK. BY SYSTEM AT vasc-hostapva
11:56:47.231D 07/22/24   Benning Road         VG2 Ventilation Shaft Damper
CURRENT STATE = Normal   ALARM FINAL ACK. BY SYSTEM AT vasc-hostapva
11:58:55.809D 07/22/24   Benning Road         G01-1 Fire Alarm CURRENT STATE =
Active              ACKNOWLEDGED BY [redacted] AT vawkspowersuppp
12:00:28.303D 07/22/24   Benning Road         G01-1 Fire Alarm CURRENT STATE =
Active              ACKNOWLEDGED BY [redacted] AT vawkspowersuppp
12:02:49.029D 07/22/24   Benning Road         G01-G03 Third Rail  Power
CURRENT STATE = Deenergize
12:06:13.649D 07/22/      enning Road         TRACK CIRCUIT G01-G1-339
ABSOLUTE BLOCKED BY [redacted] AT vawksob-commpp
12:06:18.751D 07/22/      enning Road         TRACK CIRCUIT G01-G2-342
ABSOLUTE BLOCKED BY [redacted] AT vawksob-commpp
12:12:10.544D 07/22/      enning Road         G01-1 Fire Alarm CURRENT STATE =
Off                 ACKNOWLEDGED BY [redacted] AT vawkspower9pp
12:20:00.594D 07/22/24   Benning Road         G01-1 Fire Alarm CURRENT STATE =
Off                 ACKNOWLEDGED BY [redacted] AT vawkspower9pp
12:22:31.435D 07/22/24   Benning Road         G01-1 Fire Alarm CURRENT STATE =
Off                 ACKNOWLEDGED BY [redacted] AT vawkspower1pp
12:27:51.351D 07/22/24   Benning Road         G01-1 Fire Alarm CURRENT STATE =
Off                 ACKNOWLEDGED BY [redacted] AT vawkspower9pp
```

Figure 16 - AIMS Logs for Benning Road (G01), page 1 of 3.

```
12:30:23.319D 07/22/24   Benning Road        G01-1 Fire Alarm CURRENT STATE =
Off                 ACKNOWLEDGED BY [redacted] AT vawkspower9pp
12:41:11.065D 07/22/24        ng Road        G01-G04 Third Rail  Power -
Deenergize COMPLETED BY [redacted] AT vawksob-commpp
12:41:12.535D 07/22/24        ng Road        G01-G04 Third Rail  Power
CURRENT STATE = Deenergize
12:41:12.535D 07/22/24   Benning Road        G01-G06A Third Rail  Power
CURRENT STATE = Deenergize
12:41:40.948D 07/22/24   Benning            G01-42 DC Feeder Tie Breaker
COMMANDED Trip                BY [redacted] AT vawksob-commpp
12:41:40.948D 07/22/24   50th St          ral A G01-52 DC Feeder Tie Breaker
COMMANDED Trip                BY [redacted] AT vawksob-commpp
12:41:41.151D 07/22/24        ng             G01-G06 Third Rail  Power -
Deenergize COMPLETED BY [redacted] AT vawksob-commpp
12:41:42.104D 07/22/24        ng Road        G01-G06 Third Rail  Power
CURRENT STATE = Deenergize
12:41:51.490D 07/22/24   Benning            G01-41 DC Feeder Tie Breaker
COMMANDED Trip                BY [redacted] AT vawksob-commpp
12:41:51.490D 07/22/24   50th St          ral A G01-51 DC Feeder Tie Breaker
COMMANDED Trip                BY [redacted] AT vawksob-commpp
12:41:51.709D 07/22/24        ng             G01-G05 Third Rail  Power -
Deenergize COMPLETED BY [redacted] AT vawksob-commpp
12:41:52.716D 07/22/24        ng Road        G01-41 DC Feeder Tie Breaker
COMMANDED CHANGE = Tripped
12:41:52.716D 07/22/24   50th St & Central A G01-51 DC Feeder Tie Breaker
COMMANDED CHANGE = Tripped
12:41:52.716D 07/22/24   50th St & Central A G01-51 DC Feeder Tie Breaker
COMMANDED Prohibit Close BY SYSTEM AT vasc-hostapva
12:41:52.716D 07/22/24   Benning Road        G01-G05 Third Rail  Power
CURRENT STATE = Deenergize
12:41:52.716D 07/22/24   Benning Road        G01-4 DC Bus  Power CURRENT
STATE = Off
12:45:27.986D 07/22/24   Benning Road        G01-1 Fire Alarm CURRENT STATE =
Off                 ACKNOWLEDGED BY [redacted] AT vawkspower9pp
13:10:20.363D 07/22/24   Benning Road        G01-1 Fire Alarm CURRENT STATE =
Off                 ACKNOWLEDGED BY [redacted] AT vawkspower9pp
13:38:24.235D      /24   Benning Road        FG1 Fan  On COMMANDED Emergency
Off       BY [redacted] AT vawkspower10pp
13:38:25.376D      /24   Benning Road        FG1 Fan  Status COMMANDED CHANGE
= Emergency Off
13:38:28.251D      /24   Benning Road        FG2 Fan  On COMMANDED Emergency
Off       BY [redacted] AT vawkspower10pp
13:38:29.501D      /24   Benning Road        FG2 Fan  Status COMMANDED CHANGE
= Emergency Off
13:47:46.695D 07/22/24   B        Road        G01-43 DC Feeder Tie Breaker
COMMANDED Enable Close BY [redacted] AT vawkspowersuppp
13:47:46.695D 07/22/24   B        Road        G01-41 DC Feeder Tie Breaker
COMMANDED Enable Close BY [redacted] AT vawkspowersuppp
13:47:46.695D 07/22/24   S        & Central A G01-51 DC Feeder Tie Breaker
COMMANDED Enable Close BY [redacted] AT vawkspowersuppp
13:48:55.395D 07/22/24   B        Road        G01-G03 Third Rail  Power
CURRENT STATE = Energize
13:49:01.170D 07/22/24   Benning Road        G01-G05 Third Rail  Power
CURRENT STATE = Energize
13:49:11.541D 07/22/24   Benning            G01-41 DC Feeder Tie Breaker
COMMANDED Close               BY [redacted] AT vawkspower1pp
```

Figure 17 - AIMS Logs for Benning Road (G01), page 2 of 3.

```
13:49:11.541D 07/22/24   Benning              G01-43 DC Feeder Tie Breaker
COMMANDED Close               BY [redacted] AT vawkspower1pp
13:49:24.045D 07/22/24   Benning              G01-4 DC Bus  Power CURRENT
STATE = On
13:54:41.741D 07/22/24   Benning Road         G01-1 Fire Alarm CURRENT STATE =
Off                  ACKNOWLEDGED BY [redacted] AT vawkspower9pp
14:00:09.208D 07/22/24   Benning              TRACK CIRCUITS G01-G2-285
THROUGH G01-G2-353 UNBLOCKED BY [redacted] AT vawksob-commpp
14:05:34.282D 07/22/24   Benning              G01-1 Fire Alarm CURRENT STATE =
Off                  ACKNOWLEDGED BY [redacted] AT vawkspower9pp
14:11:50.923D 07/22/24   B       Road         G01-44 DC Feeder Tie Breaker
COMMANDED Enable Close BY [redacted] AT vawkspowersuppp
14:11:50.923D 07/22/24   B       Road         G01-46 DC Feeder Tie Breaker
COMMANDED Enable Close BY [redacted] AT vawkspowersuppp
14:11:50.923D 07/22/24   B       Road         G01-42 DC Feeder Tie Breaker
COMMANDED Enable Close BY [redacted] AT vawkspowersuppp
14:11:50.923D 07/22/24   5       & Central A G01-52 DC Feeder Tie Breaker
COMMANDED Enable Close BY [redacted] AT vawkspowersuppp
14:12:21.719D 07/22/24   B                    D98-66 DC Feeder Tie Breaker
COMMANDED Close               BY [redacted] AT vawkspower1pp
14:12:21.719D 07/22/24   Benning              G01-44 DC Feeder Tie Breaker
COMMANDED Close               BY [redacted] AT vawkspower1pp
14:12:21.719D 07/22/24   Benning              G01-42 DC Feeder Tie Breaker
COMMANDED Close               BY [redacted] AT vawkspower1pp
14:12:21.719D 07/22/24   50th St         ral A G01-52 DC Feeder Tie Breaker
COMMANDED Close               BY [redacted] AT vawkspower1pp
14:12:29.248D 07/22/24   Benning              G01-G04 Third Rail  Power
CURRENT STATE = Energize
14:12:29.248D 07/22/24   Benning Road         G01-G06 Third Rail  Power
CURRENT STATE = Energize
14:12:34.290D 07/22/24   Benning Road         G01-42 DC Feeder Tie Breaker
COMMANDED CHANGE = CLOSED
14:12:34.290D 07/22/24   Benning Road         G01-44 DC Feeder Tie Breaker
COMMANDED CHANGE = CLOSED
14:12:46.411D 07/22/24   Benning Road         G01-G06A Third Rail  Power
CURRENT STATE = Energize
14:13:01.093D 07/22/24   Benning Road                DC Feeder Tie Breaker
UNCOMMANDED CHANGE = CLO ALARM FINAL ACK. BY [redacted] AT vawkspower1pp
14:13:01.093D 07/22/24   Benning Road                DC Feeder Tie Breaker
CONTROL FAILURE = CLOSED ACKNOWLEDGED BY [redacted] AT vawkspower1pp
14:13:01.093D 07/22/24   Benning Road         1-1 Fire Alarm CURRENT STATE =
Off                  ACKNOWLEDGED BY [redacted] AT vawkspower1pp
14:13:37.292D 07/22/24   Benning Road         D98-66 DC Feeder Tie Breaker
CONTROL FAILURE = CLOSED ALARM FINAL ACK. BY SYSTEM AT vasc-hostapva
14:24:41.797D 07/22/24   Benning Road         G01-1 Fire Alarm CURRENT STATE =
Off                  ACKNOWLEDGED BY [redacted] AT vawkspower9pp
14:25:23.399D 07/22/24   Benning Road         G01-1 Fire Alarm CURRENT STATE =
Off                  ACKNOWLEDGED BY [redacted] AT vawkspower9pp
14:29:37.624D 07/22/24   Benning Road         G01-1 Fire Alarm CURRENT STATE =
Off                  ACKNOWLEDGED BY [redacted] AT vawkspower9pp
```

Figure 18 - AIMS Logs for Benning Road (G01), page 3 of 3.

Select Platform: G01-1 and/or Select ID: Leave blank to remove criteria
and/or Select 4-digit car number: Leave blank to remove criteria
Select Date: Jul 22 2024 Select Times (0-24HRS): From 11:00 To 16:00
Generate Report

ID	Platform	length	dcode	Right door open	Right door close	dwell	Left door open	Left door close	dwell	Head Arrived	Tail cleared	cars	Headway door open to door open
609	G01-1	6	51				11:00:48	11:01:01	13	11:00:05	11:01:26	7388-7389.7408-7409.7449-7448	-
409	G01-1	6	72				11:02:25	11:02:38	13	11:01:47	11:03:03	3055-3054.3091-3090.3049-3048	1:37
611	G01-1	6	51				11:09:18	11:09:34	16	11:08:43	11:09:58	7472-7473.7134-7135.7633-7632	6:53
411	G01-1	2	72							11:19:08	11:20:37	7398-7399.7687-7686.7192-7193.7557-7556	10:38
613	G01-1	8	51							11:21:01	11:22:18	unknown	1:40
413	G01-1	8	72						24	11:22:49	11:24:12	7492-7493.7283-7282.7674-7675.7737-7736	1:47
615	G01-1	2	51				11:34:04	11:34:18	14	11:33:30	11:34:43	7256-7257.7105-7104.7230-7231.7351-7350	10:41
415	G01-1	8	72				11:35:41	11:36:01	20	11:35:14	11:36:32	7164-7165.7111-7110.7598-7599.7571-7570	1:37
717	G01-1	8	77				11:51:24	11:51:55	31	11:50:42	12:06:22	7718-7719.7137-7136.7740-7741.7525-7524	15:43
735	G01-1	8	77							14:19:19	14:20:09	unknown	-
643	G01-1	6	51				14:34:04	14:34:20	16	14:33:31	14:34:43	7388-7389.7408-7409.7449-7448	162:40
452	G01-1	6	72				14:36:21	14:36:25	4	14:35:25	14:36:55	3177-3176.3153-3152.3199-3198	2:17
645	G01-1	6	51				14:37:55	14:39:15	80	14:37:19	14:39:40	7472-7473.7134-7135.7633-7632	1:34
445	G01-1	8	72				14:45:14	14:45:29	15	14:44:41	14:45:53	7224-7225.7535-7534.7712-7713.7665-7664	7:19
447	G01-1	6	72				15:01:31	15:01:47	16	15:00:19	15:02:11	6033-6032.6098-6099.6143-6142	16:17
649	G01-1	8	72				15:03:07	15:03:26	19	15:02:29	15:03:50	6167-6166.6113-6112.6148-6149	1:36
449	G01-1	8	72				15:07:41	15:07:57	16	15:06:51	15:08:22	7542-7543.7745-7744.7663-7662	4:34
401	G01-1	2	72				15:10:39	15:10:51	12	15:10:06	15:11:16	7540-7541.7569-7568.7728-7729.7371-7370	2:58
601	G01-1	8	51				15:13:51	15:14:06	15	15:13:23	15:14:31	7132-7133.7285-7284.7112-7113.7215-7214	3:12
603	G01-1	2	51				15:27:35	15:27:52	17	15:27:03	15:28:19	7584-7585.7015-7014.7004-7005.7233-7232	13:44
403	G01-1	2	72				15:33:52	15:34:08	16	15:33:20	15:34:38	7622-7623.7545-7544.7402-7403.7359-7358	6:17
405	G01-1	8	72				15:42:41	15:42:54	13	15:42:11	15:43:24	7338-7339.7603-7602.7440-7441.7419-7418	8:49
605	G01-1	8	51				15:45:33	15:45:48	15	15:45:01	15:46:12	7590-7591.7589-7588.7324-7325.7301-7300	2:52
407	G01-1	2	72				15:54:04	15:54:24	20	15:53:31	15:54:47	7390-7391.7479-7478.7238-7239.7691-7690	8:31
607	G01-1	6	51				15:57:40	15:57:56	16	15:57:05	15:58:20	3084-3085.3002-3003.3102-3103	3:36

Train ID 617 (reblocked to Train ID 717) reported smoke in the tunnel on track 1 between Benning Road Station and the D&G Junction

Train ID 643. First Train to serice Benning Road Station after the Smoke Incident

Figure 19 - SPOTS Report for Benning Road Station, track 1.

Select Platform: G01-2 and/or Select ID: Leave blank to remove criteria
and/or Select 4-digit car number: Leave blank to remove criteria
Select Date: Jul 22 2024 Select Times (0-24HRS): From 11:00 To 16:00
Generate Report

ID	Platform	length	dcode	Right door open	Right door close	dwell	Left door open	Left door close	dwell	Head Arrived	Tail cleared	cars	Headway door open to door open
622	G01-2	8	68				11:01:19	11:01:40	21	11:00:46	11:02:09	7514-7515.7289-7288.7346-7347.7305-7304	-
622	G01-2	8	68							11:02:10	11:02:19	7514-7515.7289-7288.7346-7347.7305-7304	-
418	G01-2	8	16				11:04:35	11:04:50	15	11:04:03	11:05:17	7418-7419.7441-7440.7602-7603.7339-7338	3:16
418	G01-2	8	16							11:05:19	11:05:25	7418-7419.7441-7440.7602-7603.7339-7338	-
800	G01-2	6	94							11:06:08	11:06:44	7420-7421.7385-7384.7433-7432	-
624	G01-2	8	68				11:13:43	11:13:58	15	11:13:11	11:14:25	7702-7703.7461-7460.7518-7519.7309-7308	9:08
624	G01-2	8	68							11:14:26	11:14:30	7702-7703.7461-7460.7518-7519.7309-7308	-
624	G01-2	8	68							11:14:31	11:14:33	7702-7703.7461-7460.7518-7519.7309-7308	-
420	G01-2	8	16				11:16:56	11:17:12	16	11:16:23	11:17:37	7108-7109.7195-7194.7156-7157.7281-7280	3:13
420	G01-2	8	16							11:17:39	11:17:45	7108-7109.7195-7194.7156-7157.7281-7280	-
626	G01-2	6					:03	11:29:27	24	11:28:16	11:29:51	7448-7449.7409-7408.7389-7388	12:07
422	G01-2	6					:48	11:31:05	17	11:30:14	11:31:27	3048-3049.3090-3091.3054-3055	1:45
628	G01-2	6	68				11:37:13	11:37:45	32	11:36:33	11:38:21	7632-7633.7135-7134.7473-7472	6:25
628	G01-2	6	68							11:38:22	11:38:31	7632-7633.7135-7134.7473-7472	-
424	G01-2	8	16				11:43:54	11:44:11	17	11:43:18	11:44:38	7556-7557.7193-7192.7686-7687.7399-7398	6:41
730	G01-2	8	94				11:48:30	11:52:05	215	11:47:59	12:08:55	7592-7593.7171-7170.7294-7295.7341-7340	4:36
450	G01-2	8	55				14:26:08	14:26:23	15	14:25:33	14:26:52	7736-7737.7675-7674.7282-7283.7493-7492	157:38
450	G01-2	8	55							14:26:53	14:27:00	7736-7737.7675-7674.7282-7283.7493-7492	-
404	G01-2	8	16				14:30:47	14:31:03	16	14:30:14	14:31:29	7350-7351.7231-7230.7104-7105.7257-7256	4:39
610	G01-2	8	68				14:39:00	14:39:14	14	14:38:23	14:39:48	7570-7571.7599-7598.7110-7111.7165-7164	8:13
406	G01-2	8	16				14:46:31	14:46:47	16	14:45:56	14:47:13	7398-7399.7687-7686.7192-7193.7557-7556	7:31
406	G01-2	8	16							14:47:14	14:47:20	7398-7399.7687-7686.7192-7193.7557-7556	-
612	G01-2	6	68				15:03:29	15:03:46	17	15:02:57	15:04:08	3177-3176.3153-3152.3199-3198	16:58
402	G01-2	6	16				15:06:24	15:06:40	16	15:05:51	15:07:02	7388-7389.7408-7409.7449-7448	2:55
402	G01-2	6	16							15:07:05	15:07:10	7388-7389.7408-7409.7449-7448	-

Train ID 630 (reblocked to 730) located at Benning Road Station on track 2 when Smoke Incident as reported

Figure 20 - SPOTS Report for Benning Road Station, track 2.

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

IIT completed the analysis of the data collected from Train ID 617. Based on the data, Train ID 617 operated as designed, and no faults that could have contributed to the incident were identified during the analysis.

Train ID 617 departed Stadium-Armory Station, traversed through the affected area (G1 307+00), and stopped approximately at CM G1 319+98. The Heating, Ventilation, and Air Conditioning (HVAC) Circuit Breakers were dropped on lead car 7718 and the train proceeded to Benning Road Station. At Benning Road Station, Train ID 617 was offloaded. The HVAC Circuit Breakers were turned on, the Emergency HVAC Emergency Shutdown was activated, and Train ID 617 proceeded out of service.

VMDS Fault Logs

7719	VMDS	MAIN	7/22/2024	11:58:45	HVAC	HVC003	EM HVAC SHUTDOWN		1	617	'771877187719713771367740774175257524'	R
7719	VMDS	MAIN	7/22/2024	11:58:45	HVAC	HVC003	EM HVAC SHUTDOWN		1	617	'771877187719713771367740774175257524'	F
7718	VMDS	MAIN	7/22/2024	11:58:45	HVAC	HVC003	EM HVAC SHUTDOWN		1	617	'771877187719713771367740774175257524'	R
7718	VMDS	MAIN	7/22/2024	11:58:45	HVAC	HVC003	EM HVAC SHUTDOWN		1	617	'771877187719713771367740774175257524'	F
7718	VMDS	MAIN	7/22/2024	11:57:54	C/B	C/B324	LV C/B: ENVC2	Reset	2	617	'771877187719713771367740774175257524'	
7718	VMDS	MAIN	7/22/2024	11:57:54	C/B	C/B323	LV C/B: ENVC1	Reset	2	617	'771877187719713771367740774175257524'	
7718	VMDS	MAIN	7/22/2024	11:49:15	C/B	C/B324	LV C/B: ENVC2		2	617	'771877187719713771367740774175257524'	
7718	VMDS	MAIN	7/22/2024	11:49:15	C/B	C/B323	LV C/B: ENVC1		2	617	'771877187719713771367740774175257524'	

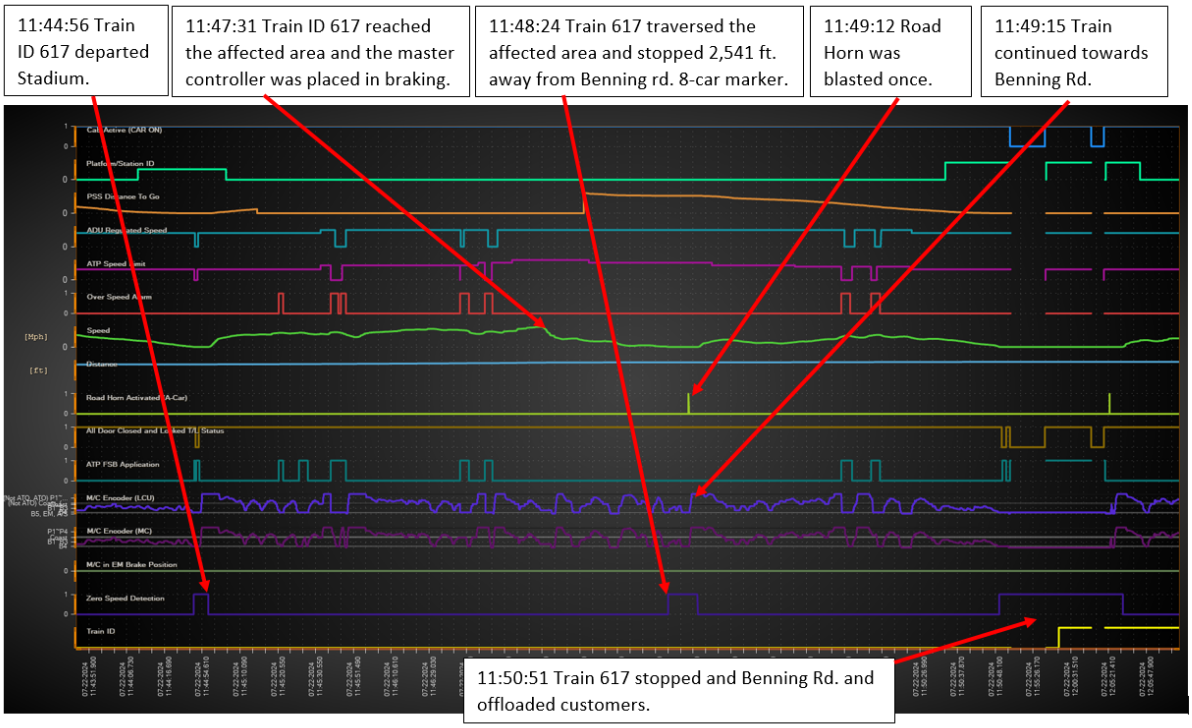
Descriptions of Events

Time	Description	Master Controller	Speed	Distance to the 8-car marker at Benning Rd
11:44:56 hours	Train ID 617 departed Stadium-Armory Station.	P5	1 MPH	12,733 feet
11:47:31 hours	Train ID 617 reached CM G1 307+00 (affected area). The Master Controller was placed in "B1-B3," and the train started slowing down.	B1-B3	53 MPH	3,841 feet
11:48:24 hours	Train ID 617 stopped 2,543 feet from the 8-car marker at Benning Road Station.	B4	0 MPH	2,543 feet
11:49:12 hours	Road Horn was blasted once.	B4	0 MPH	2,543 feet
11:49:15 hours	The HVAC Circuit Breakers were turned off on railcar 7718. The Master Controller was placed in "P5". Train ID 617 proceeded towards Benning Road Station.	P5	1 MPH	2,540 feet
11:49:15 hours 11:50:51 hours	Train ID 617 traversed from CM G1 319+98 to the 8-car marker at Benning Road Station. Traveling	Multiple power/brake rates	1-30 MPH	2540 feet - 0 feet

Time	Description	Master Controller	Speed	Distance to the 8-car marker at Benning Rd
	at speeds no higher than 30 mph. The Master Controller was placed in several brake and power rates.			
11:50:51 hours	Train ID 617 stopped at Benning Road Station and offloaded the train.	B4	0 MPH	0 feet
11:57:54 hours	HVAC Circuit Breakers were turned on in railcar 7718.	B5	0 MPH	0 feet
11:58:45 hours	The Emergency HVAC Shutdown was activated.	B5	0 MPH	0 feet

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

Graph 1: Data Analysis



Office of Systems Maintenance, Office of Radio Communications (COMR)
Adopted from the COMR Maximo Report with minor edits and grammatical changes.

COMR conducted a radio operational test at G01. Good radio transmissions were conducted from the station area, to include the platform, to the exterior section of the station. The issue with radio communications could not be duplicated.

Office of Track and Structures (TRST)
Adopted from the TRST Maximo Report with minor edits and grammatical changes.

"Personnel responded to G01 for a report of smoke in the tunnel. After inspection, an arcing insulator was found to be the cause and was removed."

Office of Rail Transportation (RTRA)
Adopted from RTRA report with minor edits and grammatical changes.

At 12:35, Train ID 716 reported smoke at Benning Road Station and was instructed to shut off the EV and proceed to Capitol Heights Station. MICC asked the operator if the train was moving. The Train Operator replied that they were moving slowly due to low visibility.

At 18:07 hours, The RTRA Supervisor was instructed by West Falls Church Management to remove the Train Operator from service.

At 19:16 hours, The Train Operator was removed from service and transported for post-incident testing.

At 21:05 hours, a post-incident interview of the Train Operator was conducted at the West Falls Church (K99) yard.

Interview Findings and Written Statements
As part of the investigation launched into the event, SAFE interviewed eight (8) people. The interviews identified the following key findings associated with this event. The findings detailed below include reported information from involved personnel and may conflict with other data sources contained in the report.

Radio RTC
- Was assigned to work as the Button RTC; however, at the start of the incident, the RTC was working the OPS 2 console alone.
- Stated that it is difficult to manage both the Radio RTC and the Button RTC duties during an emergency.
- Initially had to get confirmation if the train reporting smoke was Train ID 617 or 417
- Initially believed Train ID 617 announced customers are reporting smoke in the train. However, it was revealed that the Train Operator reported smoke in front of the train in approach to the station inside of the tunnel.
- The RTC did not ask for a CM, direct the Train Operator to stop, or ask the Train Operator to repeat their message.
- The Train Operator reported no visibility as they moved towards the Station.
- Logs stating that breakers in the Traction Power Substations were tied into another Substation caused the delay in de-energized third rail power. This reconfiguration caused the breakers in the incident location to change.
- Unsure if an emergency fan activation phone number is programmed to the RTCs' console phone.
- Unsure if RTCs can activate emergency fans.

Train ID 617 Train Operator
- Observed smoke in the tunnel towards Benning Road Station.
- Stopped the train, reported smoke, and awaited further instructions.
- Was instructed by the RTC to continue to the 8-car marker at Benning Road Station.
- Customers on the train reported smoke entering the consist.
- Was instructed to turn off the EV.

- Reported poor visibility to the RTC.
- Offloaded customers at Benning Road Station.

Power Desk Superintendent

- The initial fan configuration was requested for the Benning Road Station platform limits.
- The FLO requested that the fan configuration be changed as per the Incident Commander.
- The current power configuration at the D&G Junction (D98) is to compensate for a tiebreaker that is offline for maintenance construction.
- The previous configuration at the D&G Junction had Benning Road Station, tracks 1 and 2 conjoined utilizing the same traction power source and breaker.
- With the current configuration, there is no redundancy. Each track at Benning Road Station utilizes its own traction power source and breaker.
- There is a playbook for the D&J Junction power reconfiguration.
- The Power Re-energization Verification form is supposed to be signed by the PDAS, Rail 1 and Police 1 prior to third rail power being restored.

PDAS

- Stated that the reconfiguration at the D&G Junction did not affect the power de-energization where the incident took place.
- Was notified by Rail 1 that power was to be restored on track 1 at Benning Road Station.
- Stated that the Power Re-energization Verification Form process is currently being reviewed.
- Stated Metro 1 informed them that they were not aware that third rail power was being restored at Benning Road Station, track 1.
- Miscommunication and or conflicting information received from Rail Section personnel.

OM/ Rail 1

- Notified DCFEMS about the smoke/fire at Benning Road Station.
- Does not believe the Emergency Tunnel Fan operation phone number is programmed to the RTCs' console phones.
- Communicated a game plan to restore third rail power on track 1 at Benning Road Station.
- Did not authorize third rail power re-energization.

Rail Supervisor #1

- Assisted the Station Manager Supervisor until Incident Command was transferred.
- Was the Liaison between ERT personnel on the platform and the MICC.

WMATA Incident Commander (WIC)

- Radio communications during the incident were poor.
- Transferred Incident Command to the Rail Supervisor #1 once the incident was determined to be a maintenance issue.

Maintenance Controller

- Was notified by Rail 2 of a report of smoke between the D&G Junction and Benning Road Station (G01).
- Was not provided a CM.
- Activated Emergency Ventilation Play G10.
- Play G10 is specifically for smoke within the station.

- ERT requested a fan reconfiguration at Benning Road Station due to smoke. The request was denied. Informed ERT that the request for fan reconfiguration had to be authorized by Rail 1 or Command Line staff.
- The FLO notified the Maintenance Desk Superintendent to request Benning Road Station Tunnel activation. The request was approved.
- RTCs do not have access to activate fans.
- There is a dedicated phone line for emergency fan activation requests.
- Stated Rail 1 or Rail 2 should be the individuals contacting the Maintenance Manager when requests for fan activations are made. However, this process is not always followed.

Weather

On July 22, 2024, at the time of the incident, NOAA recorded the temperature as 82.04°F, with light rain, cloudy skies, winds 6 mph, and 74.32% humidity. [Washington DC]. Weather was not a contributing factor in this incident (Weather source: NOAA) – Location: [Washington DC].

Related Rules and Procedures

Metrorail Operating Rulebook, effective September 1, 2023

1.1 Guiding Safety Principles

1.1.2 Customer safety is the responsibility of every WMATA employee; however, Rail Vehicle Operators have the ultimate and final responsibility for the safety of the customers on their trains. If any Rail Vehicle Operator is instructed by any person, regardless of rank, title, or position, to take any action which would adversely affect the safety of customers, the Rail Vehicle Operator shall stop the train, notify Rail Operations Control Center or the Interlocking Operator, and shall not continue until satisfied that it is safe to do so.

9.4 Reports of a Track or Rail Defect; Hazardous Conditions

9.4.1 A Rail Vehicle Operator who observes smoke in their immediate area are authorized and required to shut off the train's Environmental Control system and inform the Rail Traffic Controller.

Procedure: Standard Operating Procedure (SOP) 2 Third Rail Power Energization and De-energization Procedures, Revision 9, June 7, 2024

6.7 Preparing for energization of third rail power protected by a supervisory outage.

6.7.2 When an unplanned work area under the control of Unified Command is ready to be restored to normal service, the Jurisdictional IC shall confirm to the Fire Liaison Officer (FLO)/Police 1 that all emergency personnel are clear of the roadway.

6.7.2.1 The FLO or Police 1 shall contact RAIL 1 and confirm that all emergency personnel are clear of the roadway.

6.7.2.2 RAIL 1 shall contact the PDAS and confirm that all emergency personnel are clear of the roadway.

6.7.2.3 RAIL 2 shall contact the RTC and confirm that all emergency personnel are clear of the roadway.

6.7.2.4 The PDAS shall complete and obtain signatures from Rail 1 and Police 1 that all WMATA and non-WMATA personnel are clear of roadway on the Power Energization Verification Form. In the absence of Police 1 presence in the MICC the FLO will be responsible for the above.

6.7.12 The RTC shall make the Power Announcement, stating: "Attention all personnel – this is a Power Energization Alert for the Third Rail at [Location]." [pause for 5 seconds] "Attention all personnel – This is a Power Energization Alert. All personnel should now consider the Third Rail Energized at [Location] hot and energized."

Note: Any personnel in the field may call the Power Desk if power should not be energized.

MICC-ALL-PRO-01 Rail Incident Management in the MICC, Revision 0, December 4, 2023

6.4.3 Rail 1 Minor/No Harm incidents

6.4.3.2 RAIL 1 shall reference SOPs, checklists, or job aids when responding to incidents.

6.4.4 RAIL 2 – Minor/No-Harm Incidents

6.4.4.1 RAIL 2 shall reference SOPs, checklists, or job aids when responding to incidents.

6.4.5 Rail Traffic Controller – Minor/No-Harm Incidents

6.4.5.1 Rail Traffic Controllers shall reference SOPs, checklists, or job aids when responding to incidents.

Procedure 678 Procedure for Managing Fire and Smoke on the Metrorail System, Revision 3, April 22, 2024

6.4 Procedures for Fire of Smoke on the Roadway

6.4.2 If the Operator was able to stop the train before reaching the reported location of the fire/smoke, the RTC shall confirm with the Operator if the conditions ahead prohibit or allow safe train movement.

6.4.2.1 If conditions prohibit train movement, the RTC shall implement an absolute block and instruct the Operator to reverse ends and proceed to next safest station.

Procedure MICC-ALL-PRO-04 Emergency and Maintenance Tunnel Fan Ventilation Procedures, Revision 0, January 4, 2024

6.1 Tunnel Fan Ventilation Operation

6.1.3 Once a notice is received by a Rail Traffic Controller (RTC) on an affected line or station, the RTC shall verbally confirm with repeat back the following incident information and complete the RTC Emergency Tunnel Fan Operation Form, MICCROC-FRM-09:

- 6.1.3.1 Incident Description (for example: arcing insulator, trash fire, etc.)
- 6.1.3.2 Nearest Station (for example: Metro Center A01)
- 6.1.3.3 Chain Marker (for example: xxx + xx)
- 6.1.3.4 Track Number
- 6.1.3.5 Train ID
- 6.1.3.6 Proposed Evacuation Route (towards which station)
- 6.1.3.7 Date
- 6.1.3.8 Name (of the person filling out the form)

6.1.4 The RTC, or other MICC personnel, shall contact the Fan Controller via dedicated telephone line (301-955-7223 extension 5-7223) to relay the incident information, per 6.1.3.

- 6.1.4.1 The Fan Controller shall recite the incident information with repeat back to the caller. The caller shall confirm the information is accurate or correct information as needed.

6.1.5 The RTC, or other MICC personnel, shall contact RAIL 2, MTPD, and the Communications Agent to inform them of the incident as per Rail Incident Management in the MICC, MICC-ALL-PRO-01.

6.1.6 RAIL 2 to inform RAIL 1 and MAINT 1 of the incident and RAIL 1 shall keep METRO 1 appraise of the real-time information as received throughout the incident.

6.1.7 METRO 1 will provide information to the Senior Leadership Team accordingly until the conclusion of the incident.

6.1.8 RAIL 2 shall provide a copy of the RTC Emergency Tunnel Fan Operation Form, MICC-ROC-FRM-09 to RAIL 1.
6.1.9 RAIL 1 shall distribute the copies to COMMS 1, METRO 1, and FLO.
6.1.10 RAIL 2 shall scan the RTC Emergency Tunnel Fan Operation Form, MICC-ROCFRM-09, and save the file in line with the MICC Record Retention Process outlined in MICC-ADM-PRO-01 SOP.

Human Factors

Radio RTC

Fatigue

Signs and Symptoms of Fatigue

SAFE evaluated conditions during the incident to distinguish whether evidence of fatigue was present. The video of the incident was reviewed for signs of the Radio RTC's fatigue. No signs or symptoms of fatigue were evident from the video. The employee reported feeling fully alert at the time of the incident and experiencing no symptoms of fatigue in the time leading up to the incident.

Fatigue Risk

SAFE evaluated incident data for fatigue risk factors. No significant risk was identified. The incident time of day did not suggest an increased risk of fatigue-related impairment. The Radio RTC reported keeping a regular sleep schedule in the days leading up to the incident. The employee worked AM shifts in the days leading up to the incident. The employee was awake for 8.13 hours at the time of the incident The employee reported 7.75 hours of sleep in the 24 hours preceding the incident. The off-duty period was 15.67 hours which provides an opportunity for 79 hours of sleep. This was more than the employee's usual workday sleep durations. The employee reported no issues with sleep. The employee worked AM shifts in the days leading up to the incident.

Train Operator - Train ID 617

Signs and Symptoms of Fatigue

SAFE evaluated conditions during the incident to distinguish whether evidence of fatigue was present. No video of the involved person was available to ascertain whether signs of fatigue were present. The Train Operator reported feeling fully alert at the time of the incident. The employee reported experiencing no symptoms of fatigue in the time leading up to the incident.

Fatigue Risk

SAFE evaluated incident data for fatigue risk factors. No significant risk was identified. The incident time of day did not suggest an increased risk of fatigue-related impairment. The Train Operator reported keeping a regular sleep schedule in the days leading up to the incident. The employee worked AM shifts in the days leading up to the incident. The employee was awake for 4.87 hours at the time of the incident. The employee reported 10 hours of sleep in the 24 hours preceding the incident. The off-duty period was 15.1 hours, which provided an opportunity for 7-9 hours of sleep. This was more than the employee's usual workday sleep durations. The employee reported no issues with sleep. The employee worked AM shifts in the days leading up to the incident.

Post-Incident Toxicology Testing

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

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

Findings

- The Radio RTC instructed Train ID 617 to proceed towards Benning Road Station after reporting heavy smoke in front of their train.
- Emergency Ventilation Fan activation play G10, which calls for the tunnel fans to be turned off, was used despite reports of smoke present in the tunnel between Benning Road Station and the D&G Junction.
- Third rail power de-energization at Benning Road Station, track 2 was delayed due to the Power Desk Superintendent reporting an outdated power reconfiguration that would have affected the D&G Junction turnback.
- There was a miscommunication between the OM and the PDAS when power restoration was requested for Benning Road Station on track 2, which prevented power restoration announcements from being made in a timely manner.
- The process for signing Power Restoration forms when separate track power is restored at a station at different times needed to be revisited.
- Radio communication issues during the incident were poor. • Incident Management Framework procedures were in effect during this incident.
- The RTC did not complete an RTC Emergency Tunnel Fan Operation Form, MICC-ROCFRM-09 for this incident.

Immediate Mitigation to Prevent Recurrence

- Third Rail power was de-energized on tracks 1 and 2 at Benning Road Station.
- DCFEMS was dispatched to the location to address any smoke/fire/life safety concerns.
- The Radio RTC was removed from service and sent for refresher training.
- A Lessons Learned document regarding the incident was drafted and disseminated to MICC personnel.
- All Power Desk personnel were instructed to read and acknowledge Power Energization Verification Form must be created for all unplanned power outages.
- An ERT crew was dispatched to the location to perform a track inspection.
- The ERT crew identified an insulator near CM 307+00 and removed the hazard.

Probable Cause Statement

The probable cause of the smoke incident on July 22, 2024, near Benning Road Station was electrical arcing resulting from an insulator near Chain Marker (CM) G1-307+00. This triggered the smoke observed in the tunnel and at the station.

Recommended Corrective Actions

Corrective Action Code	Description	Responsible Party	Estimated Completion Date
118534MX_SAFECAPS_RTRA/SAFE_001	RTRA and Safety partnered to conduct a Safety Standdown with all rail train operators to discuss the safe operation of rail vehicles. (CF-1)	RTRA/SAFE	Completed
118534MX_SAFECAPS_MICC_002	A MICC Lessons Learned to be distributed to all MICC Staff regarding this event. (CF-2)	MICC	Completed
118534MX_SAFECAPS_MICC_003	The Radio RTC to be sent for refresher training to review customer safety and the standard operating procedures with regards to the movement of rail vehicles when smoke or fire is present at their location. (CF-3)	MICC	Completed
118534MX_SAFECAPS_POC_004	A Power Desk correspondence to be sent revising how Power Energization Verification forms are completed. (CF-4)	POC	Completed
118534MX_SAFECAPS_MICC/IT_005	Program the Emergency Fan Desk telephone number to all RTC telephones. (RC-1)	MICC/IT	Completed
118534MX_SAFECAPS_MICC/OSO_006	A six (6) month compliance review on the completion of the RTC Emergency Tunnel Fan Operation Form for smoke/fire incidents. (RC-2)	MICC/OSO	Ongoing

Appendices

Appendix A – Interview Summaries

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

RTRA

Train ID 617 Train Operator

The Train Operator is a WMATA employee with two (2) years of service and two (2) total years of experience as a Train Operator. The Train Operator holds a Roadway Worker Protection (RWP) Level 2 certification that expires in April 2025. Prior to the interview, Train Operator responded to OSI fatigue assessment questions.

During the formal interview, the Train Operator stated that on the day of the event, they started to operate the train [Train ID 617] at 9:26 a.m. at Court House Station. The Train Operator explained everything was fine until they got into the tunnel. They stated that they had traveled through more than half of the tunnel when they started to see the smoke. They stopped the train and contacted Central to let them know about the situation.

The Train Operator advised Central that it was hard to see. Central advised that Train Operator had a permissive block to the 8-car marker at Benning Road Station. Train Operator stated that they moved slowly because it was hard to see. Central asked, “Are you moving 617?” Train Operator replied, “Yes, but it’s hard to see.” The Train Operator was instructed to turn off the EV system.

When asked, the Train Operator stated that while they were moving toward the 8-car marker, they were instructed to turn off the EV system because customers were hitting the emergency intercom button and reporting smoke coming into the train. The Train Operator explained that they went through the smoke, and then it cleared as they entered the station.

The Train Operator stated that when they stopped at the station, they took the train out of service, and made sure all customers got off safely. They walked through the consist and verified that it was clear of customers. The Train Operator returned to the lead cab and waited for further instructions.

When asked, the Train Operator replied that no one came in person to speak with them. They stated that by the time customers got off the train, smoke had begun entering the station. The Train Operator could not recall the length of the wait time but believed they were there for a while before they were instructed to continue to Capital Heights Station and then to Downtown Largo Station. The train remained out of service.

The Train Operator believed that, in hindsight, they should not have gone through the smoke, following RTC’s instruction. The Train Operator added that Central should have done their best to keep everyone safe. They explained that they were “nervous” at the time of the incident. They mentioned how another train on track 2 was instructed to reverse ends and go back, away from the smoke, but when they reported that they could not see due to the smoke, the RTC instructed them to go through it.

Rail Supervisor #1

The Rail Supervisor is a WMATA employee with 21 years of service and 3.5 total years of experience as an Rail Supervisor. The Rail Supervisor holds a Roadway Worker Protection (RWP) Level 2 certification that expires in May 2025. Prior to the interview, the Rail Supervisor responded to OSI fatigue assessment questions.

During the formal interview, the Rail Supervisor stated that on the day of the event, they were traveling from Downtown Largo Station to Stadium-Armory Station when it was announced a report of smoke/fire on track 1 at Benning Road Station. The train that the Rail Supervisor was riding was instructed to hold their location at Addison Road Station. The Rail Supervisor then began assisting trains that were being turned at Addison Road Station back to Downtown Largo Station. Shortly thereafter, Central requested an MTPD escort to bring the Rail Supervisor from Addison Road Station to Benning Road Station.

Once arriving on location the Rail Supervisor stated their initial role was to assist the Station Manager Supervisor. They stated that they did not go down to the platform. Once the Fire Department transferred Incident Command to MTPD, they released the scene and the RTRA Supervisor assumed Incident Command. As the Incident Commander, they relayed requests from personnel on the roadway to Central Command. The Rail Supervisor stated that hot-sticking was performed before Incident Command was transferred to them.

When asked about challenges that were faced, the Rail Supervisor stated that the radio communication was poor; however, the entire incident was handled properly. During the incident, the Rail Supervisor utilized the OPS 2 radio channel.

MICC

Operations Manager (OM) / Rail 1

The OM is a WMATA employee with 7.5 years of service and 0.58 total years of experience as an OM. The OM holds a Roadway Worker Protection (RWP) Level 4 certification that expires in September 2024.

During the formal interview, the OM stated that their duties as Operations Managers are to oversee the entire rail system. They supervise the Assistant Operations Managers and Rail Traffic Controllers. Prior to each shift, there is a briefing to update staff on important news and any standard operating procedure updates. The duties of an OM are also to communicate with the Command Line, which consists of Police 1, Metro 1, Bus 1, Comms 1, and the FLO.

At the start of the incident at Benning Road Station, the OM stated they were notified by the AOM of a report of smoke/fire between the D&G Junction and Benning Road Station. They received information that Train ID 617 reported the smoke/fire. They looked at the AIMS display, and it appeared that Train ID 617 was in approach to Benning Road Station. However, they did not appear to be moving. The OM then informed the Command Line personnel of the reported smoke/fire. The OM then began to monitor the OPS 2 radio channel and heard Train ID 617 report heavy smoke at their location. The OM walked over to the Radio RTC to assist. At this time an RTC from another console and the AOM also came over to assist. When the OM arrived it was reported that Train ID 617 had already passed the smoke and was at Benning Road Station. The OM then began to direct service adjustments and provided an update to the Command Line staff. The OM then notified the DCFEMS of the incident.

When asked if Tunnel Fan phone numbers are programmed in each RTC console phone, it was stated that the phones at the previous facility had the Tunnel Fan number programmed, however they were uncertain if they had been programmed to the phones at the new facility. Typically, if an RTC was requesting fan activation they would contact the MOC PLNT Desk Controller to make their request.

When asked if they were aware of a delay on fan reconfiguration requested by the Incident Commander. The OM stated they recalled hearing ERT request fan reconfiguration over the radio and they were informed that the request had to come from the Incident Commander.

When asked if fan configurations are checked by anyone once requested. The OM stated that the MOC Desk Controller configures the fan based on the Emergency Ventilation Fan playbook. Once the play has been selected the MOC Assistant Superintendent verifies that the fans are configured according to the play selected.

When asked about power reconfiguration challenges faced during this incident, the OM stated that third rail power was de-energized by the RTC on track 1 once Train ID 617 was at the platform. However, the smoke in the tunnel was not dissipating. Additionally, smoke followed Train ID 617 into the station platform. The Power Desk Superintendent then informed the Command Line staff that there was a power reconfiguration that may have some sections of rail energized even though third rail power has been brought down. To address the issue, additional circuit breakers would have to be tripped, which would affect additional stations and turnbacks. The rail staff was attempting to clear the area of trains before bringing down the additional power.

Shortly thereafter, they received additional information from the PDAS, who stated that reconfiguration did not affect Benning Road Station and no additional power needed to be deenergized.

When asked about any challenges when restoring power, the OM stated there was a miscommunication, possibly due to a shift change, where the game plan for power restoration was discussed. However, it was restored prior to final authorization from Rail 1 and Police 1. They stated that when any unplanned power de-energizations are performed, Rail 1 and Police 1 must verify that all personnel and equipment are clear of the roadway and sign off on the Power Energization Verification form before third rail power is restored. The OM stated this procedure has been in place for approximately four (4) months.

Radio Rail Traffic Controller (RTC)

The RTC is a WMATA employee with 19 years of service and nine (9) total years of experience as an RTC. The RTC holds a Roadway Worker Protection (RWP) Level 4 certification that expires in December 2024.

During the formal interview, the RTC stated that on the day of the event, they were assigned to work as a Button RTC. RTC explained the role of Button RTC, describing their overall responsibilities. They stated that normally two (2) RTCs work together at a console. One (1) operates the Radio, and the other operates the Buttons. The Radio RTC communicates with Train Operators and others on the radio.

On occasion, one (1) RTC would be required to perform both roles as the Radio and Button RTC. The RTC stated that at the time of the event, they were performing both roles. They stated that they received refresher training on managing various emergencies as an RTC. They stated that during an emergency, their role as the Button RTC is to isolate the incident, mitigate hazards,

keep customers safe, make notifications and canceling signals, de-energizing power, etc. Customer safety is number one.

The RTC stated that during this incident, they made appropriate decisions based on the information provided to them. When asked if they believed that performing both Button and Radio RTC roles could be done by one person, they reported that it could but was not a safe practice. RTC explained that when one RTC performs both roles, it changed the "dynamics" of their actions on how they "compartmentalize and disseminate the information." The RTC explained they did the job of Button RTC and had to communicate with the personnel in the field while simultaneously investigating the incident.

When asked, the RTC estimated that during the incident, they worked alone for about the first five (5) to 10 minutes. The manager on the floor and an RTC from another console came over to assist in picking up the radio. However, by that time, RTC stated they made decisions based on the information given.

RTC explained that when they were working alone, the first train to report observing smoke was Train ID 617. There was another train (ID 417) directly behind it. The RTC stated that their first transmission was to clarify train ID numbers: "Is this 617 or 417?" The RTC explained that this was Radio RTC's role. The next action was Button RTC's role, going straight on the radio for the train on track 1 to make sure that the train stopped and to begin canceling the signals.

The Train Operator for 617 advised the RTC that customers reported smoke in one of the cars. The RTC explained that if smoke was in the car, they could not send the train back in the direction it came from. The RTC explained Train Operator [617] called in as they entered the tunnel. RTC described the Train Operator's transmission as "convoluted." RTC was not clear whether the Train Operator stated that there was smoke in the train or that they saw smoke in the tunnel. The RTC stated they heard the Train Operator state, "I'm in approach to Benning Road Station." The RTC believed the Train Operator was already there. RTC stated that they were not fully clear whether transmission came from 417 or 617.

The RTC admitted that at that point, they mistakenly did not ask the Train Operator [617] to stop their train, ask for a chain marker, or ask them to repeat back their transmissions. The RTC stated they were expediting the process.

When asked, the RTC stated they were aware of their Standard Operating Procedures regarding smoke/fire being reported including verifying the Train ID and nearest chain marker. The RTC stated that once the Train Operator reported customers seeing smoke in the train, their thought was about getting the train out of the smoke. The RTC stated that looking back, they should have asked the Train Operator, "Do you see it in front of you? Have you passed it? What's your chain marker? Or repeat."

The RTC was asked if they believed the Train Operator felt it was unsafe to go through the smoke. RTC recalled the Train Operator saying that there was "no visibility" and the train was moving. The RTC said it sounded like the Train Operator saw the smoke and they kept moving. Last transmission from Train Operator was about smoke in the car. The RTC instructed the operator to turn off the EV and continue toward the platform at that point.

When asked, the RTC believed that Train Operator should know to turn off the EV when there is smoke in the tunnel. The RTC was asked about a delay in dropping the third rail power. They stated the delay was due to ongoing work on reconfiguring breakers. They needed to make sure and follow the specific log, not just looking on the configuration that was seen on the screen. The initial attempt to drop power failed.

The RTC was asked if the fan emergency phone number was programmed in their phone. RTC was not aware if the number was programmed to their phone. When asked, the RTC replied that at some point during the incident, they did call about the fans. They stated that regarding the process, they would call MOC and that it has been a while since they used an RTC Emergency Tunnel Fan Operation Form.

The RTC was asked if they had the ability to manipulate the fans. RTC replied that they probably attempted to do it a few times before but did not know whether they had the ability now. They were asked if the power reconfiguration involving this incident was identified on the turnover log. They did not recall seeing it, but they saw the reconfiguration on the AIMS screen. They did not recall if they had signed anything to acknowledge a reconfiguration in the area.

The RTC was asked if they realized there was a reconfiguration, and the power was not down. RTC explained that their immediate supervisor instructed them to ensure the configuration was correct before anyone was sent to the roadway. They stated that they made a request for the fans and called MOC. They were informed that MOC had to call Rail 1 or one of the managers to make that request. When asked, the RTC replied that they never had to go through another route and expressed their concerns about the new, extra step in the process.

The RTC explained that ERT knew how the tunnels worked and were not going down when smoke was present, waiting for the request to be executed.

MTPD

WMATA Incident Commander (WIC)

The MTPD Sargent is a WMATA employee with 12 years of service and nine (9) total years of experience as a Sergeant. The Sargent holds a Roadway Worker Protection (RWP) Level 2 certification.

During the formal interview, the Sergeant was informed of the purpose of the interview regarding the incident at Benning Road Station on July 22, 2024. When asked, the Sergeant explained that upon receiving the initial call, they first responded to and cleared the Capitol Heights Station. The Sergeant did not notice any smoke there.

The Sergeant then went to the Benning Road Station where they assumed the role of WIC. The Sergeant stated that they checked in with the Incident Command Post and Battalion Chief. The Sergeant provided MTPD Dispatcher phone numbers. They received a briefing from Police 1 who advised them that the Station had been evacuated already and that they requested for fans due to report of smoke.

When asked, the Sergeant replied that they did not recall whether power was still energized on both tracks. The Sergeant stated that they did not observe whether Fire Department personnel were on the roadway because they were at the command post. Based on conversation, the Sergeant was aware Fire Department personnel were on the roadway. The Sergeant stated that first Officer on the scene responded to the platform to assume the role of Forward Liaison.

The Sergeant explained the biggest challenges faced during the incident was radio transmissions. Radio transmissions were “extremely difficult” and a lot of delays on the scene came from the radios not being operable. The Sergeant explained because handheld portable radios were unable to transmit out and/or receive messages, they used a phone application as the primary

radio system. An MTPD Lieutenant responded to the scene to assist with communication by making landline calls.

The Sergeant was asked about a request to have fans reconfigured. The Sergeant replied that their understanding was smoke from the station had already been cleared. However, when they got the update from ERT that smoke was still in the tunnel, the Sergeant requested the fans get turned on for the tunnels. The Sergeant stated there was a delay but was not certain how long it took to activate the fans. They estimated approximately five (5) minutes between the time of the request and the fan activation. The Sergeant stated that they requested several times for the fans and that the challenge was again with radio transmission.

The Sergeant stated that ETS boxes can mitigate communication issues in the tunnel, contacting the RTC and others directly. ETS boxes are located every 800 feet. The Sergeant described the situation where personnel lost “all communication” after walking approximately 300 feet into the tunnel at Benning Road Station.

The Sergeant explained that they had to request several times to de-energize power. The Sergeant believed poor radio transmission was again the issue. The Sergeant explained that ERT identified the cause of the smoke on track one CM 307+00. The Sergeant recalled that at this time, they had communication with personnel in the tunnel to restore power.

The Sergeant explained they used separate channels during an incident; however, they believed that would not have made much of a difference during this particular incident. They used the phone app for most of their communication. When asked, the Sergeant explained MTPD radio communication problems generally can occur depending on their location.

MOC

Power Desk Superintendent

The Power Desk Superintendent is a WMATA employee with 12 years of service and 1 total year of experience as a Power Desk Superintendent. The Power Desk Superintendent holds a Roadway Worker Protection (RWP) Level 4 certification that expires at the end of August 2024.

During the formal interview, the Power Desk Superintendent stated that they received a report of smoke from a Train Operator as they approached Benning Road Station. DCFEMS personnel and Power crews were dispatched to the location. Emergency Fan activation configured for the Benning Road Station platform limits was initiated as requested. Third Rail power was deenergized initially on track 1, and eventually, both track 1 and 2. Once on scene, DCFEMS requested that the Emergency Ventilation Fans be reconfigured to disperse any remaining smoke. ERT located and removed an insulator and requested third rail power be restored on track 1. Rail 1 directed the PDAS to restore third rail power to track 1 only. ERT then inspected track 2 for any additional insulators with arcing damage before power was restored on track 2.

The Power Desk Superintendent stated that they currently oversee all maintenance control desks in the MICC in addition to the Power Desk.

When asked why the decision to configure the Emergency Ventilation Fans for the platform limits was made when smoke was reported between Benning Road Station and the D&G Junction, the Power Desk Superintendent stated that the RTCs are mandated to provide the nearest Chain Markers (CM). The RTCs did not have the CM for this incident and informed the Maintenance Controller to configure the fans as if the incident location was within the platform limits. In the

absence of a CM, the Maintenance Controller must make every attempt to obtain the CM to avoid sending smoke into areas where customers or trains are located.

When asked about the power reconfiguration at the D&G Junction, the Power Desk Superintendent stated there have been several reconfigurations at that location. The current configuration is to compensate for a tie-breaker that is off-line for maintenance construction. The previous configuration had Benning Road Station, tracks 1 and 2 conjoined utilizing the same traction power[1] source and breaker. With the current configuration, there is no redundancy. Each track at Benning Road Station utilizes its own traction power source and breaker.

It was initially thought that de-energizing power at Benning Road Station would affect the D&G Junction. This information was shared with the Metro 1. However, after further review, the Power Desk Superintendent noted no issues and provided Metro 1 with an update. The RTC de-energized third rail power at Benning Road Station due to the presence of smoke/fire. No additional power needed to be de-energized at the incident location.

When asked, the Power Desk Superintendent stated that when Rail 1 was ready to have power restored, they were instructed to contact the PDAS as per the protocols. They did not recall a game plan to restore power.

When asked about the Power Re-energization Verification form, the Power Desk Superintendent stated that it is used when emergency supervisory outages, because emergency switch orders cannot be created in the General Orders and Track Rights System (GOTRS)[2]. This form documents which breakers were opened and closed during the outage. The document is also used to verify power re-energization announcements are made and all personnel and equipment are clear of the roadway. This form is supposed to be signed before power is restored.

The Power Energization Verification form previously documented the room the opened breakers were associated with. However, since this incident, the form additionally separates the associated breakers by track in case track power is re-energized separately.

When asked if the Power Desk Superintendent received any fan operation training since the transition to overseeing all maintenance control desks, they stated that they did not. However, they are an active participant in the fan configuration process and Emergency Ventilation Playbook revisions. They do not exercise the fan.

When asked if the Maintenance Controllers' AIMS screens show the location of trains in addition to the fans they are controlling, the Power Desk Superintendent stated that their screen only showed fans. However, they could open a secondary screen to observe the location of a train.

[1] Traction Power is described as the +750 Volt Direct Current (VDC) third rail power system used for train propulsion.
[2] GOTRS is a mainframe computer application used solely by WMATA employees to enter track right requests.

Power Desk Assistant Superintendent (PDAS)

The PDAS is a WMATA employee with 4.5 years of service and 0.5 total years of experience as a PDAS. The PDAS holds a Roadway Worker Protection (RWP) Level 4 certification that expires in July 2025.

During the formal interview, the PDAS described their duties as a PDAS to include monitoring Power Desk Controllers (PDC), dispatching emergency personnel to incidents, monitoring alarms, and working as the liaison between the RTCs and PDCs when de-energizing or energizing power. During this incident the PDAS states when they arrived, they received a briefing from the previous PDAS regarding the smoke incident at Benning Road Station (G01). Third rail power was deenergized on tracks 1 and 2. The PDAS stated that a Power Energization Verification form was filled out separated by rooms. The PDAS created another form separating the form by rail tracks in the event power was restored on one track before the other track was re-energized.

As the incident was being investigated by personnel on scene, the PDAS discussed the process for the Power Energization Verification form should be completed throughout the MICC with other Power Desk Managers.

Shortly thereafter, Rail 1 informed the Power Desk Superintendent that they were requesting power to be restored on track 1. The Power Desk Superintendent informed Rail 1 to call the PDAS. The Power Desk Superintendent walked over to the PDAS to advise them that Rail 1 was about to call and request power restoration on track 1 at Benning Road Station. Shortly thereafter, Rail 1 call to request power restoration on track 1 only at Benning Road Station. The PDAS read the request back to Rail 1, and then contacted the PDC to restore power. The MICC Assistant Director (Metro 1) then informed the PDAS that they were unaware that power was being restored.

The PDAS stated that that information is usually conveyed to Metro 1 from Rail 1. It is not necessarily reported by the PDAS.

When asked if the PDAS was aware if power re-energization announcements were made, the PDAS stated the procedure before contacting the PDAS to restore power is that the roadway is to be clear (of personnel and equipment) and power announcements are to be made. The PDAS is not responsible for verifying that announcements are made. The PDAS stated Rail 1 is supposed to verify that all procedures have been completed prior to contacting the PDAS.

When asked if the power reconfiguration at the D&G Junction delayed power de-energization or restoration at Benning Road Station, the PDAS stated that it did not affect Benning Road Station. When asked to elaborate, the PDAS stated that the breakers associated with the section of track where the incident occurred were not affected by the reconfiguration.

When asked, the PDAS stated they had not seen and did not have a playbook on their console regarding the reconfiguration. When asked about the Power Re-energization Verification Form, the PDAS stated that the Power Operations Center Managers were discussing the form challenges in design that it does not address various power re-energization scenarios. The PDAS has been working on revising the form and or process.

The PDAS stated that some of the challenges they face include miscommunication and conflicting information received from Rail Section staff due to multiple sources of information being provided.

When asked if it was possible because of the shift change the previous PDAS believed the reconfiguration at the D&G Junction (D98) affected the power de-energization near the incident location, the PDAS stated it was possible. Earlier this year there was a previous reconfiguration

at the D&G Junction that prevented Benning Road Station power from being de-energized one track at a time. The most recent configuration allows form power to be de-energized or restored separately or jointly.

When asked the PDAS stated they did not recall any work being performed in any power rooms near the incident location.

Maintenance Controller/ Fan Desk Controller

The Maintenance Controller is a WMATA employee with 11 years of service and 8 total years of experience as a Maintenance Controller. The Maintenance Controller holds a Roadway Worker Protection (RWP) Level 4 certification that expires in February 2025.

During the formal interview, the Maintenance Controller stated that their duties include creating work orders, logging Equipment Mechanics, and assisting Fan Operators with Preventative Maintenance Inspections (PMI). On the date of the event, they were notified by Rail 2 of a report of smoke between the D&G Junction and G01 (Benning Road Station). Rail 2 was unable to provide the nearest chain marker to the location. They asked the AOM a second time, and believe they stated the smoke was at the station. The Maintenance Controller then activated the fans according to the playbook for G01 (Benning Road Station).

When asked, the Maintenance Controller stated that they receive Fire Alarm notifications through AIMS. However, they do not recall a fire alarm at Benning Road Station. They stated that the exact location of fire/smoke could not always be determined through AIMS. When asked, the Maintenance Controller stated that ERT requested to have the fan configuration changed. However, they notified ERT that the request had to be made by Rail 1 or someone on the Command Line to make any changes outside of the playbook.

The Maintenance Controller stated they received a request from the Power Desk Superintendent, by way of the FLO, to have the fan configuration changed. The Maintenance Controller stated that during an emergency, there is a dedicated fan hotline that is supposed to be used. However, during this incident, it was not used. All communications came through the PLNT desk phone.

When asked, the Maintenance Controller stated that requests for fan activation are supposed to come from Rail 1 or Rail 2 to the Maintenance Manager. However, this is not always how the process occurs.

The Maintenance Controller stated that RTCs no longer have access to activate fans. If the Maintenance Controller is away from their desk, the Maintenance Supervisor has access to operate the fans.

When asked if there was a way to determine which fan activation play should be used, given an approximate location, if chain markers were unable to be obtained, the Maintenance Controller stated that there are zones set up; however, without a chain marker to identify the location, it would not be accurate.

Appendix B – RTRA Supervisor's Report

RTRA SUPERVISOR REPORT

Date	Incident Time	Incident Location (Station Mezzanine #)	Track/Mezzanine #
7-22-2024	1235	Benning Road	Track 1

Equipment Number (Train ID & Car Numbers; Escalator/Elevator #): Train ID 617

Incident Description: TRAIN MOVEMENT THROUGH SMOKE

WMATA Personnel Involved	Employee #	Rule Violation?	Home Division	Post Incident
[redacted]	[redacted]	N/A	WFC	YES

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

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

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

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

Chronological Account of Incident

1235PM TRAIN OPERATOR [redacted] REPORTED SMOKE AT BENNING RD. STATION AND WAS INSTRUCTED TO SHUT OFF EV AND PROCEED TO CAPITOL HEIGHTS. MICC ASKED OPERATOR [redacted] IF THE TRAIN WAS MOVING AND [redacted] REPLIED THAT [redacted] WAS MOVING SLOWLY BECAUSE [redacted] WAS HAVING A HARD TIME SEEING.

607PM I WAS INSTRUCTED BY WFC MANAGEMENT TO REMOVE OPERATOR [redacted] FROM SERVICE.

716PM OPERATOR [redacted] WAS REMOVED FROM SERVICE AND TRANSPORTED FOR POST INCEDENT TESTING.

905PM POST INCIDENT INTERVIEW WAS CONDUCTED AT K99 YARD.

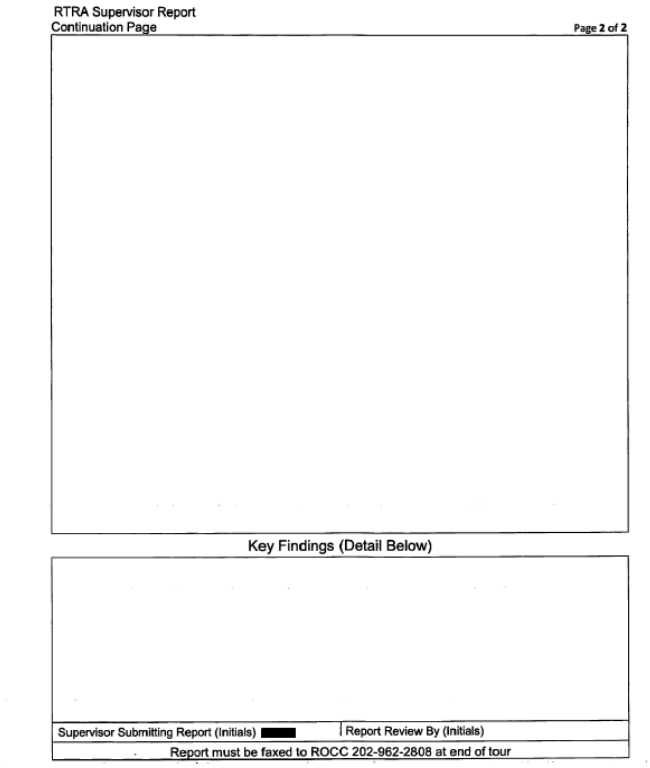
(Note time for each entry; Include statement of Employee or Witness at conclusion)

Your Arrival Time: 607PM

Supervisor Submitting Report	(Payroll #)	Date	Report Reviewed By	Date
[redacted]	[redacted]	7-22-2024		

Report must be faxed to ROCC 202-962-2808 at end of Tour

Figure 21 - RTRA Supervisor's Report, page 1 of 2.



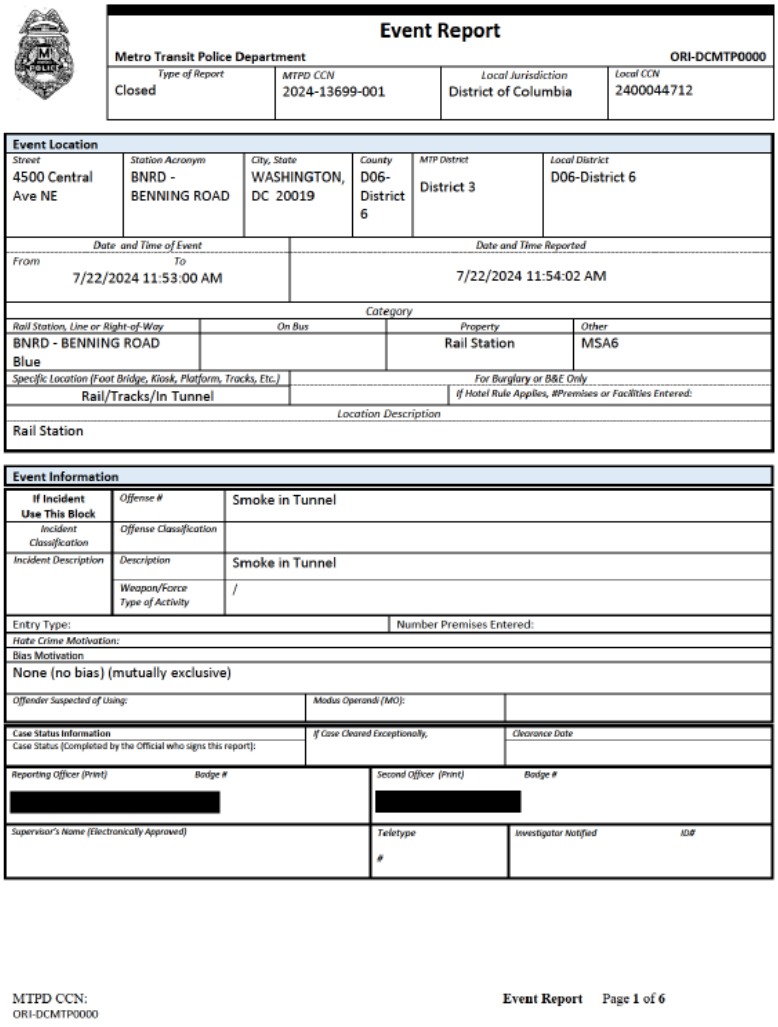
RTRA Supervisor Report
Continuation Page
Page 2 of 2

Key Findings (Detail Below)

Supervisor Submitting Report (Initials) [redacted]
Report Review By (Initials)
Report must be faxed to ROCC 202-962-2808 at end of tour

Figure 22 - RTRA Supervisor's Report, page 2 of 2.

Appendix C – MTPD Event Report



Event Report

Metro Transit Police Department — **ORI-DCMTP0000**

Type of Report	MTPD CCN	Local Jurisdiction	Local CCN
Closed	2024-13699-001	District of Columbia	2400044712

Event Location

Street	Station Acronym	City, State	County	MTP District	Local District
4500 Central Ave NE	BNRD - BENNING ROAD	WASHINGTON, DC 20019	D06-District 6	District 3	D06-District 6

Date and Time of Event	Date and Time Reported
From / To: 7/22/2024 11:53:00 AM	7/22/2024 11:54:02 AM

Category

Rail Station, Line or Right-of-Way	On Bus	Property	Other
BNRD - BENNING ROAD Blue		Rail Station	MSA6

Specific Location (Foot Bridge, Kiosk, Platform, Tracks, Etc.)	For Burglary or B&E Only	If Hotel Rule Applies, #Premises or Facilities Entered:
Rail/Tracks/In Tunnel		

Location Description: Rail Station

Event Information

If Incident Use This Block		
	Offense #	Smoke in Tunnel
Incident Classification	Offense Classification	
Incident Description	Description	Smoke in Tunnel
	Weapon/Force Type of Activity	/

Entry Type: | Number Premises Entered:

Hate Crime Motivation:

Bias Motivation: None (no bias) (mutually exclusive)

Offender Suspected of Using:	Modus Operandi (MO):	

Case Status Information	If Case Cleared Exceptionally,	Clearance Date
Case Status (Completed by the Official who signs this report):		

Reporting Officer (Print) / Badge #	Second Officer (Print) / Badge #	
[redacted]	[redacted]	

Supervisor's Name (Electronically Approved)	Teletype #	Investigator Notified / ID#

MTPD CCN: ORI-DCMTP0000

Event Report Page 1 of 6

Figure 23 - MTPD Event Report, page 1 of 6.

Figure 24 - MTPD Event Report, page 2 of 6.

Has a DVR been requested?
Has a DVR been requested?
Narrative Information

-BWC Activated-

On 07/22/2024 at 1154 hours ROCC reported heavy smoke in the tunnels between Benning Rd Metro tunnels towards the D&G Junction.
Emergency personnel responded to Benning Rd parking lot and Battalion Chief [redacted] set up Command Post next to Engine #17.
Trains were stopped, traveling from Stadium and turned around at the D&G Junction.
Trains traveling from Downtown Largo were turned around at Addison Rd to avoid the incident location.

Sgt [redacted] set up Benning Rd incident Command and coordinated ERT, Power and Bus Transportation assets. Exhaust fans were turned on to remove residual smoke.
Once in place ERT [redacted] and forward liaison Officer [redacted] entered Benning Rd Track #1 side in the direction of Stadium Armory to investigate the source of the smoke.

Despite a breakdown in radio communications, ERT [redacted] was able to locate an arching insulator on mile marker G1 307+00 and remove the damaged equipment at 1340 hours.
Power was restored and test train successfully traversed track #1 from Stadium Armory to Benning Rd.
Train #643 picked up myself [redacted] and ERT Team [redacted] in the roadway and transported us back to Benning Rd platform.

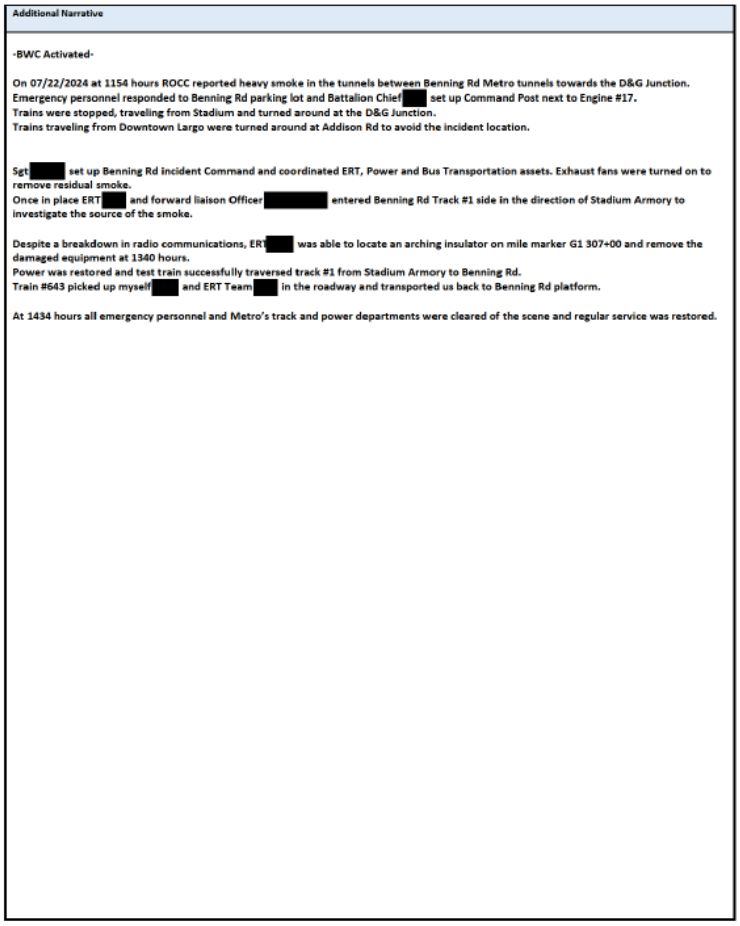
At 1434 hours all emergency personnel and Metro's track and power departments were cleared of the scene and regular service was restored.

If second CCN is available, insert here:	Additional Narrative on Supplemental Report

MTPD CCN:
ORI-DCMTP0000

Event Report Page 3 of 6

Figure 25 - MTPD Event Report, page 3 of 6



Additional Narrative

-BWC Activated-

On 07/22/2024 at 1154 hours ROCC reported heavy smoke in the tunnels between Benning Rd Metro tunnels towards the D&G Junction.
Emergency personnel responded to Benning Rd parking lot and Battalion Chief [redacted] set up Command Post next to Engine #17.
Trains were stopped, traveling from Stadium and turned around at the D&G Junction.
Trains traveling from Downtown Largo were turned around at Addison Rd to avoid the incident location.

Sgt [redacted] set up Benning Rd incident Command and coordinated ERT, Power and Bus Transportation assets. Exhaust fans were turned on to remove residual smoke.
Once in place ERT [redacted] and forward liaison Officer [redacted] entered Benning Rd Track #1 side in the direction of Stadium Armory to investigate the source of the smoke.

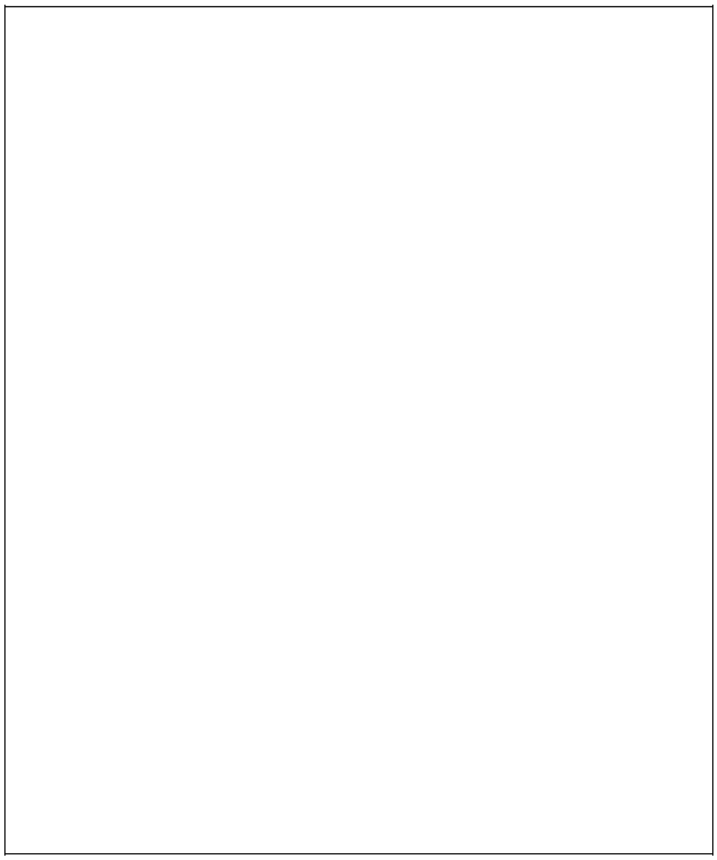
Despite a breakdown in radio communications, ERT [redacted] was able to locate an arching insulator on mile marker G1 307+00 and remove the damaged equipment at 1340 hours.
Power was restored and test train successfully traversed track #1 from Stadium Armory to Benning Rd.
Train #643 picked up myself [redacted] and ERT Team [redacted] in the roadway and transported us back to Benning Rd platform.

At 1434 hours all emergency personnel and Metro's track and power departments were cleared of the scene and regular service was restored.

MTPD CCN:
ORI-DCMTP0000

Event Report Page 4 of 6

Figure 26 - MTPD Event Report, page 4 of 6



MTPD CCN:
ORI-DCMTP0000

Event Report Page 5 of 6

Figure 27 - MTPD Event Report, page 5 of 6

Figure 28 - MTPD Event Report, page 6 of 6.

Metro Transit Police Department Hot Wash Summary

ADMINISTRATION HANDLING INSTRUCTIONS

This report will be completed after a debriefing or "hot wash" in accordance with applicable department policies/directives and procedures; at the request of the Chief of Police or designee or following any incident or event requiring the activation of the Incident Command System (ICS). The purpose of the report is to provide information, assess response, identify training, equipment needs, and to identify areas that may require improvement. After completion of this report, it should be forwarded to the Deputy Chief through the chain of command for review.

This report and any attachments are classified as For Official Use Only. This report may be used for emergency incidents, special events, and exercises. **Items marked with an asterisk (*) will be completed by the last official designated as the Incident Commander (IC) as there may be more than one IC during the incident.**

INCIDENT SUMMARY

Incident Requiring ICS Activation:	Fire/Smoke Local Alarm		
***Incident Commander (IC):**	SGT [redacted]		
MTPD CCN:	2024-13669	**Local CCN:**	
***Date ICS Initiated:**	7/22/2024	***Time ICS Initiated:**	12:05:00 PM
***Date ICS Terminated:**	7/22/2024	***Time ICS Terminated:**	1:50:00 PM
***Duration of Incident:**	1h 55m	***Service Disrupted** **Disrupted Type:** **Disrupted Time:**	Y - Yes 7/22/2024 12:08:00 PM
Incident Location:	4500 Central Ave NE	**Command Post Location:**	Kiss & Ride
MTPD On-Scene Commander (OSC):	[redacted]	**Command Aid for OSC:**	[redacted]
Forward Liaison:	[redacted]	**Unified Command:**	
OCC Liaison:		**Alternate Channel:**	Y - Yes MTP-2X
Single Tracking **Track No.:** **Time Started:** **Time End:**	N - No	**Bus Bridge Established** **From:** **To:**	Y - Yes ESTM CHEV/ADRD
Inner and/or Outer Perimeter:		**Power De-energized:** **De-energized Time:**	Y - Yes 7/23/2024 12:08:00 PM

Figure 29 - MTPD Hot Wash Summary, page 1 of 7

OSC Relinquished Scene Command to Name **Dept:**	Y - Yes [redacted]	**Medical Attention Required/Requested:**	N - No
		CID Response: N - No	

For Official Use Only

The information in this document marked FOUO is the property of the Washington Metropolitan Area Transit Authority's Metro Transit Police Department (MTPD) and may be distributed within the Federal Government (and its contractors) to law enforcement, public safety and protection, intelligence officials and individuals with a need to know. Distribution to other entities without prior MTPD authorization is prohibited. Precautions shall be taken to ensure this information is stored and destroyed in a manner that precludes unauthorized access. Information bearing the FOUO marking may not be used in legal proceedings without prior authorization from the originator. Recipients are prohibited from posting information marked FOUO on a website or unclassified network.

Metro Transit Police Department
Hot Wash Summary

WMATA and EXTERNAL ON-SCENE PERSONNEL

Name	Department/Office	Title/Role
[redacted]		Watch Commander
[redacted]		Command Scribe and Secondary Source for communcation broadcasting
[redacted]		Initial On Scene Command
[redacted]		Forward Liaison
[redacted]	OEP	Command Post Assistant
[redacted]	RAIL	Archer Supervisor/Final Scene Command
[redacted]	ERT	
[redacted]	DC FIRE DEPT	Battalion Chief

Figure 30 - MTPD Hot Wash Summary, page 2 of 7

[redacted]	MPD Police Dept	
[redacted]	DC Fire Dept	Battalion Chief
[redacted]	MPD Police Dept	
[redacted]	RAIL	Rail Supervisor
[redacted]	TRACK	
[redacted]	POWER	
[redacted]	COMM	
[redacted]	POWER	
[redacted]	SAFE	
[redacted]	SAFE	
[redacted]	SAFE	
[redacted]	RAIL	Rail Superintendent
[redacted]	OEP	
[redacted]	ERT	
[redacted]	SAFE	Investigations

Figure 31 - MTPD Hot Wash Summary, page 3 of 7

Use separate sheet if additional space is required.

MTPD-OSP-TMPL-009-00

Metro Transit Police Department
Hot Wash Summary

REQUESTS	
***Radio Run Requested (Yes/No):**	N - No
If "Yes," location where tape is stored:	
***Digital Video Evidence Unit (DVEU) Video Requested (Yes/No):**	N - No
If "Yes," location where video is stored:	

OBSERVATIONS

On July 22, 2024 at approximately 1154 hours, MTPD communications was notified the report of smoke in the tunnel at Benning Road Metro Station (BNRD) located at 4500 Central Ave NE and dispatched officers to respond to the location. The station evacuation proceeded at 1155 hours with assistance from the station manager due to smoke entering the station. Resources from WMATA, Fire, MPD, and MTPD responded to the station to render assistance. Officer [redacted] was the first MTPD Officer on scene and established the initial command at 1205 hours topside of the station with the Battalion Chief. Additional MTPD units responded to the D&G junction where updates were provided for the source of the smoke was reported. In addition, Capitol Heights Metro was checked for smoke as it was broadcasted by communications the smoke was travelling through the tunnels. The station was checked which had no visible signs or odor of burned material. Sergeant [redacted] responded to BNRD and assumed the command (BNRD Command) from Officer [redacted] and appointed him as the initial liaison and to start an entry/exit log for personnel on scene. Officer [redacted] set up at the bottom on the entrance escalators to the station. While at the command post information was being relayed through Sergeant [redacted] who was the incident commander to Police 1.

Sergeant [redacted]; callsign "Police 1", facilitated in the bus bridge request and all communication with rail and bus at the MICC. The bus bridge setup was from Eastern Market Metro Station (ESTM) to Cheverly & Addison Road Metro Stations (CHVY & ADRD) with officers assigned to assist with crowding and directions. Rail Supervisor

Figure 32 - MTPD Hot Wash Summary, page 4 of 7

[redacted] was escorted from Addison Rd and transported to the command post by MTPD Officers. The command post included the follow representatives: MTPD, Fire, Officer of Emergency Preparedness (OEP), Rail Supervisor (Archer), Emergency Response Team (ERT), SAFE, POWER, and BUS. . Power was requested to track one and eventually track two along with the tunnel fans. Police 1 was able to fulfill all requests. Once Police 1 provided confirmation the tracks were de-energized BNRD command granted ERT access to hot stick the tracks to ensure power was brought down. ERT did confirm power was down and was then given permission to access track one for the tunnel inspection by BNRD command. At marker G1 307+00 ERT was able to locate the source of the smoke which was an insulator which was impacted from the arching. ERT deemed the incident a maintenance issue and command was relinquished to Supervisor [redacted]. ERT was able to remove the faulty insulator and schedule replacement for a later time. All personnel return the the platform from the track one side after the issue was resolved and power was brought up for reservice. Supervisor [redacted] coordinated efforts to run test trains before fully putting all impacted stations back in service. TSOC was contacted and TSA Agent [redacted] was notified by Sergeant [redacted] who classified the incident as a maintenance delay.

A hot wash was conducted after the scene was secured. In the findings Officer [redacted] first and established command, OEP [redacted] advised radio communications mentioned a train leaving the D&G junction which created some confusion on train movement. OEP [redacted] also noted maintaining platform personnel especially giving all the communication issues. OEP [redacted] mentioned similar information regarding the communication issues and the transmissions were not clear which also added to some on the scene confusion. ERT [redacted] mentioned there were absolute dead spots in the tunnel which made communication to the resources inspecting the track difficult. This included cell communication. Fire Battalion Chief highlighted the same communication issues which were being discussed. Overall radio communications did not allow for the scene to move swifter than expected. Transmissions were able to send from the command post but, not able to receive from Police 1. Permission was granted to switch from Ops 6 to Ops 2 for ERT to attempt to reach the ground units with limited success. Motorola Wave PTX app was the best form for communication MTPD communications as well as Police 1 though intermitted. Discuss was made regarding the use of the ETS boxes in the tunnels if communication is lost to the command post. Setting the command post with the need personnel went well. MTPD was able to escort essential personnel to the post per request of the incident commander. All personnel at the command post channeled information through the incident commander who relayed the information out. Fire was able to stage all resources until no longer needed as well as MPD. The incident was able to move swifter as communication status improved.

BWC activated for the incident.

Figure 33 - MTPD Hot Wash Summary, page 5 of 7

On Scene Commander's Title, Printed Name, and Signature/Date

Watch Commander's Title, Printed Name and Signature/Date

Patrol Operations Bureau Commander's Printed Name and Signature/Date

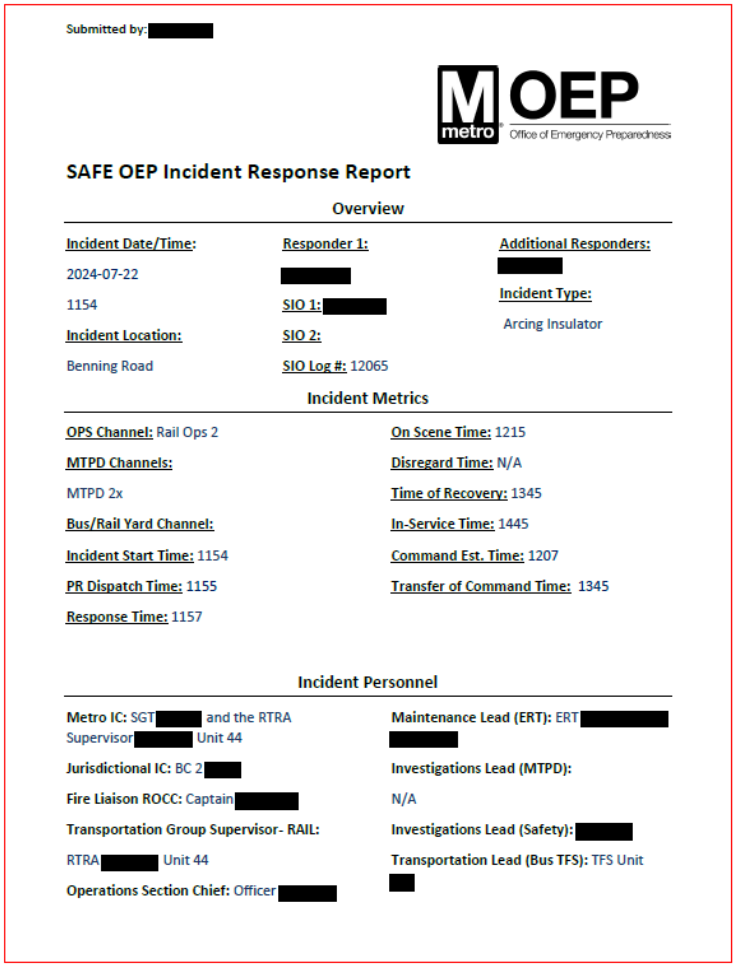
Office of Emergency Management Director's Printed Name and Signature/Date

Figure 34 - MTPD Hot Wash Summary, page 6 of 7.

MTPD-OSP-TMPL-009-00

Figure 35 - MTPD Hot Wash Summary, page 7 of 7.

Appendix E – OEP Incident Response Report



Submitted by: [redacted]

metro OEP Office of Emergency Preparedness

SAFE OEP Incident Response Report

Overview

Incident Date/Time:
2024-07-22
1154

Incident Location:
Benning Road

Responder 1:
[redacted]

SIO 1: [redacted]

SIO 2:

SIO Log #: 12065

Additional Responders:
[redacted]

Incident Type:
Arcing Insulator

Incident Metrics

OPS Channel: Rail Ops 2

MTPD Channels:
MTPD 2x

Bus/Rail Yard Channel:

Incident Start Time: 1154

PR Dispatch Time: 1155

Response Time: 1157

On Scene Time: 1215

Disregard Time: N/A

Time of Recovery: 1345

In-Service Time: 1445

Command Est. Time: 1207

Transfer of Command Time: 1345

Incident Personnel

Metro IC: SGT [redacted] and the RTRA Supervisor [redacted] Unit 44

Jurisdictional IC: BC 2 [redacted]

Fire Liaison ROCC: Captain [redacted]

Transportation Group Supervisor- RAIL:
RTRA [redacted] Unit 44

Operations Section Chief: Officer [redacted]

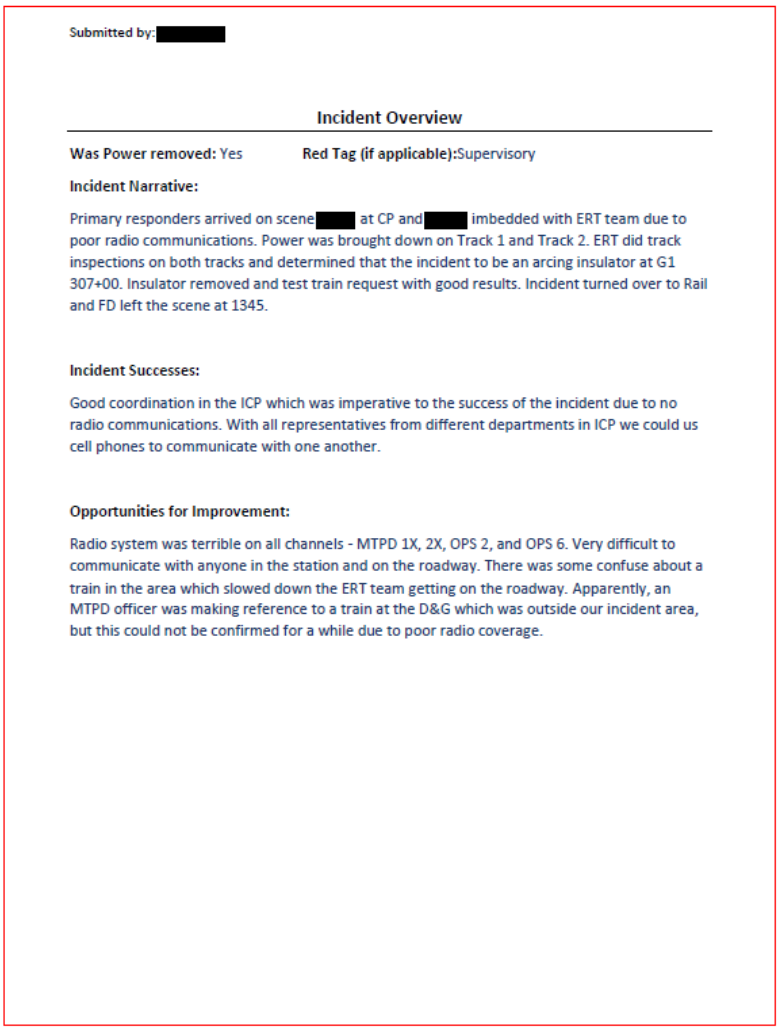
Maintenance Lead (ERT): ERT [redacted]

Investigations Lead (MTPD):
N/A

Investigations Lead (Safety): [redacted]

Transportation Lead (Bus TFS): TFS Unit [redacted]

Figure 36 - OEP Report, page 1 of 2



Submitted by: [redacted]

Incident Overview

Was Power removed: Yes **Red Tag (if applicable):** Supervisory

Incident Narrative:

Primary responders arrived on scene [redacted] at CP and [redacted] imbedded with ERT team due to poor radio communications. Power was brought down on Track 1 and Track 2. ERT did track inspections on both tracks and determined that the incident to be an arcing insulator at G1 307+00. Insulator removed and test train request with good results. Incident turned over to Rail and FD left the scene at 1345.

Incident Successes:

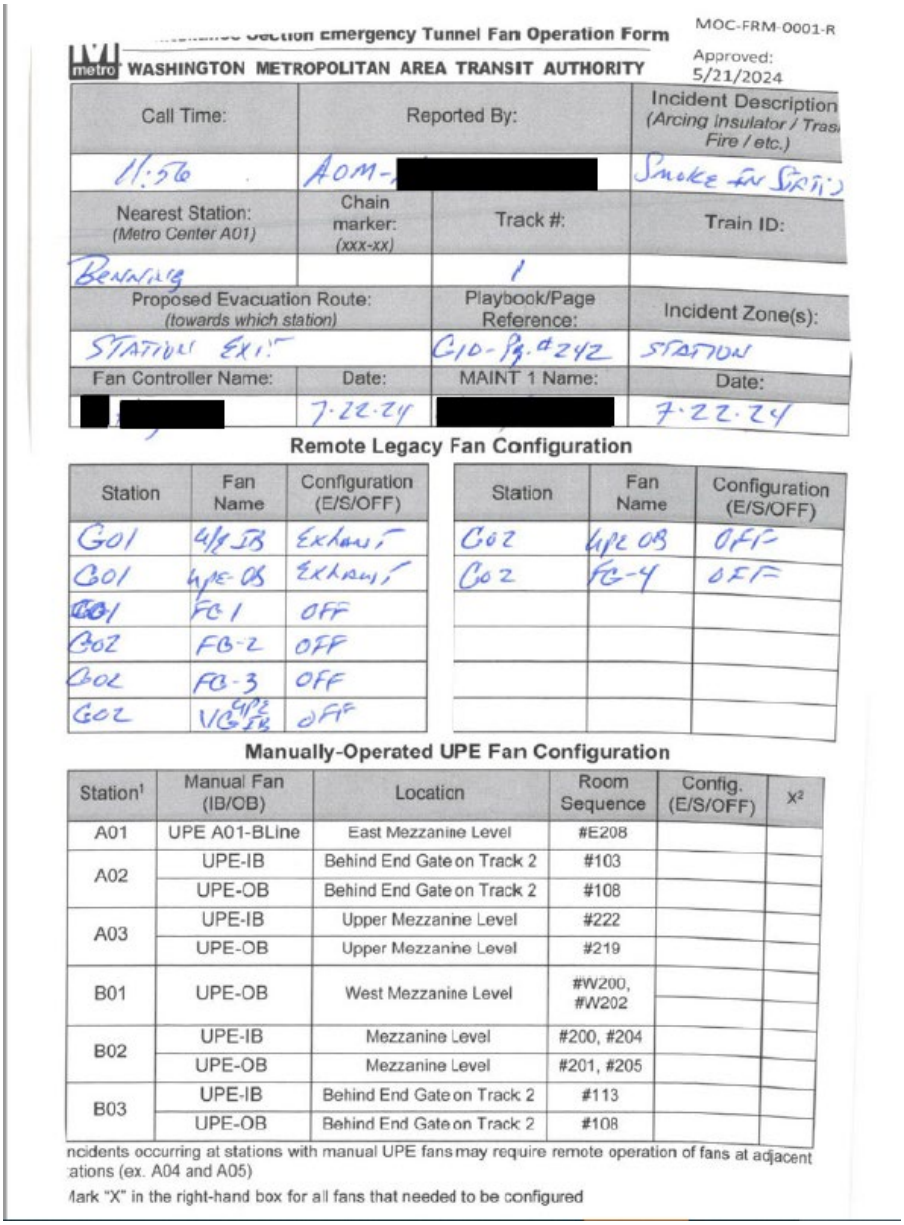
Good coordination in the ICP which was imperative to the success of the incident due to no radio communications. With all representatives from different departments in ICP we could us cell phones to communicate with one another.

Opportunities for Improvement:

Radio system was terrible on all channels - MTPD 1X, 2X, OPS 2, and OPS 6. Very difficult to communicate with anyone in the station and on the roadway. There was some confuse about a train in the area which slowed down the ERT team getting on the roadway. Apparently, an MTPD officer was making reference to a train at the D&G which was outside our incident area, but this could not be confirmed for a while due to poor radio coverage.

Figure 37 - OEP Report, page 2 of 2.

Appendix F – MOC Fan Activation Logs



...Section Emergency Tunnel Fan Operation Form

MOC-FRM-0001-R

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

Approved: 5/21/2024

Call Time:	Reported By:		Incident Description (Arcing Insulator / Trash Fire / etc.)
11:56	AOM-[redacted]		Smoke in Station
Nearest Station: (Metro Center A01)	**Chain marker:** (xxx-xx)	**Track #:**	**Train ID:**
Benning		1	
Proposed Evacuation Route: (towards which station)		**Playbook/Page Reference:**	**Incident Zone(s):**
Station Exit		G10-Pg. #242	Station
Fan Controller Name:	**Date:**	**MAINT 1 Name:**	**Date:**
[redacted]	7.22.24	[redacted]	7.22.24

Remote Legacy Fan Configuration

Station	Fan Name	Configuration (E/S/OFF)
G01	4/8 IB	Exhaust
G01	UPE OB	Exhaust
G01	FG-1	OFF
G02	FG-2	OFF
G02	FG-3	OFF
G02	VG [illegible]	OFF

Station	Fan Name	Configuration (E/S/OFF)
G02	UPE OB	OFF
G02	FG-4	OFF

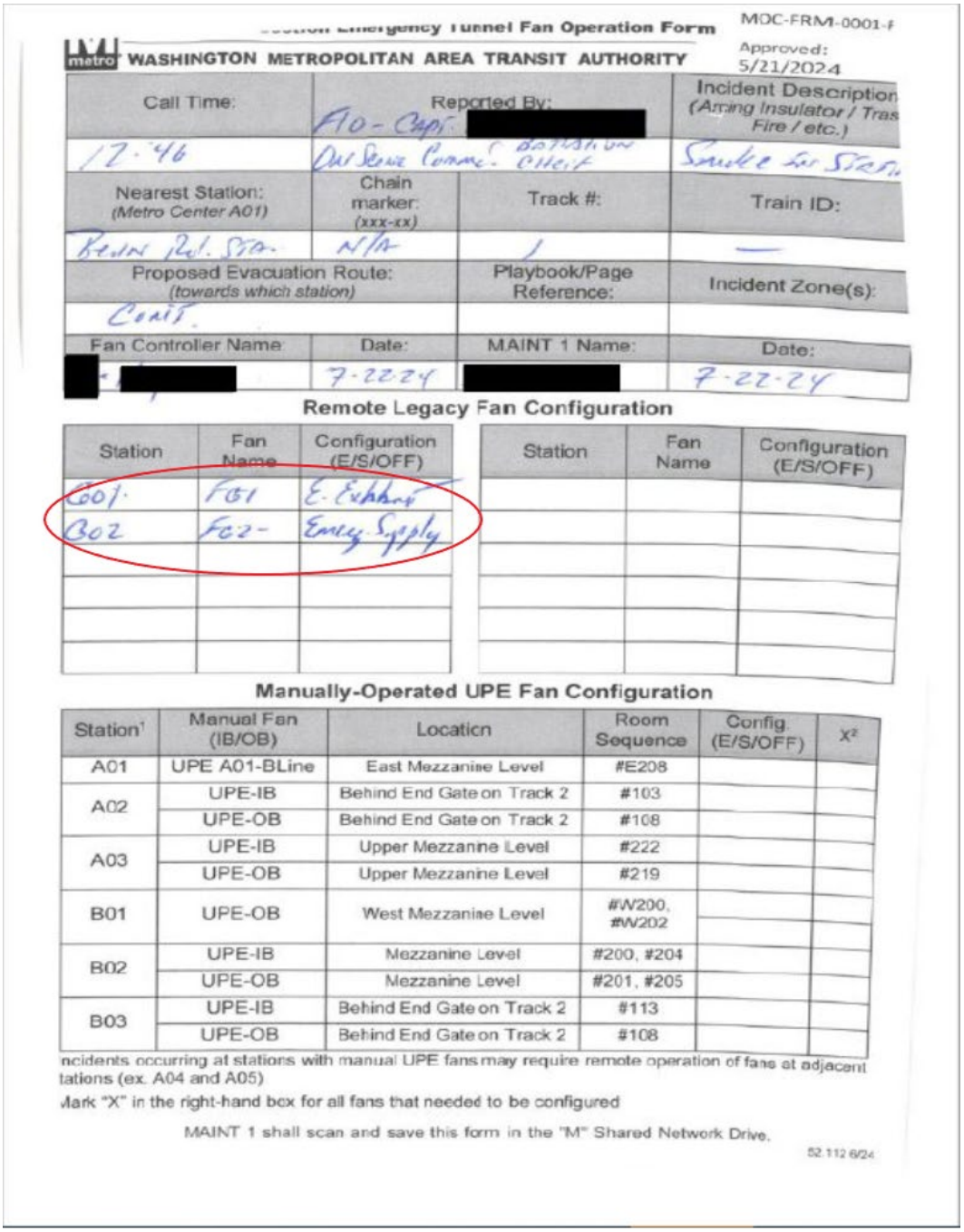
Manually-Operated UPE Fan Configuration

Station[1]	Manual Fan (IB/OB)	Location	Room Sequence	Config. (E/S/OFF)	X[2]
A01	UPE A01-BLine	East Mezzanine Level	#E208		
A02	UPE-IB	Behind End Gate on Track 2	#103		
	UPE-OB	Behind End Gate on Track 2	#108		
A03	UPE-IB	Upper Mezzanine Level	#222		
	UPE-OB	Upper Mezzanine Level	#219		
B01	UPE-OB	West Mezzanine Level	#W200, #W202		
B02	UPE-IB	Mezzanine Level	#200, #204		
	UPE-OB	Mezzanine Level	#201, #205		
B03	UPE-IB	Behind End Gate on Track 2	#113		
	UPE-OB	Behind End Gate on Track 2	#108		

ncidents occurring at stations with manual UPE fans may require remote operation of fans at adjacent ations (ex. A04 and A05)

Mark "X" in the right-hand box for all fans that needed to be configured

Figure 38 - Fan Activation for Benning Road Station called in at 11:56 hours. Tunnel Fans FG01 and FG02 were turned off.



Emergency Tunnel Fan Operation Form

MOC-FRM-0001-F

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

Approved: 5/21/2024

Call Time:	Reported By:	Incident Description (Arcing Insulator / Trash Fire / etc.)
12:46	FIO - Capt. [redacted] Duty Station Comm. Officer	Smoke in Station

Nearest Station: (Metro Center A01)	Chain marker: (xxx-xx)	Track #:	Train ID:
Benning Rd. Sta.	N/A	1	—

Proposed Evacuation Route: (towards which station)	Playbook/Page Reference:	Incident Zone(s):
Conn.		

Fan Controller Name	Date:	MAINT 1 Name:	Date:
[redacted]	7-22-24	[redacted]	7-22-24

Remote Legacy Fan Configuration

Station	Fan Name	Configuration (E/S/OFF)	Station	Fan Name	Configuration (E/S/OFF)
B01	FG1	E-Exhaust			
B02	FG2	Emcy. Supply			

Manually-Operated UPE Fan Configuration

Station[1]	Manual Fan (IB/OB)	Location	Room Sequence	Config (E/S/OFF)	X[2]
A01	UPE A01-BLine	East Mezzanine Level	#E208		
A02	UPE-IB	Behind End Gate on Track 2	#103		
	UPE-OB	Behind End Gate on Track 2	#108		
A03	UPE-IB	Upper Mezzanine Level	#222		
	UPE-OB	Upper Mezzanine Level	#219		
B01	UPE-OB	West Mezzanine Level	#W200, #W202		
B02	UPE-IB	Mezzanine Level	#200, #204		
	UPE-OB	Mezzanine Level	#201, #205		
B03	UPE-IB	Behind End Gate on Track 2	#113		
	UPE-OB	Behind End Gate on Track 2	#108		

ncidents occurring at stations with manual UPE fans may require remote operation of fans at adjacent tations (ex. A04 and A05)

Mark "X" in the right-hand box for all fans that needed to be configured

MAINT 1 shall scan and save this form in the "M" Shared Network Drive.

52.112 6/24

Figure 39 - Fan Activation for Benning Road Station called in at 12:46 hours. Tunnel Fan FG01 was placed in Emergency Exhaust, and Tunnel Fan FG02 was placed in Emergency Supply.

		G Route Title Page	
G2		Legend	
G3	Portal G1, G01 Benning Road	Portal G1 to G01 Benning Road	G290+00 to G350+00
G10	G01 Benning Road	G01 Benning Road	G339+41 to G345+41
G14	G01 Benning Road, G02 Capitol Heights	G01 Benning Road to G02 Capitol Heights	C335+00 to C425+00
G26	G02 Capitol Heights	G02 Capitol Heights	G417+20 to G423+20

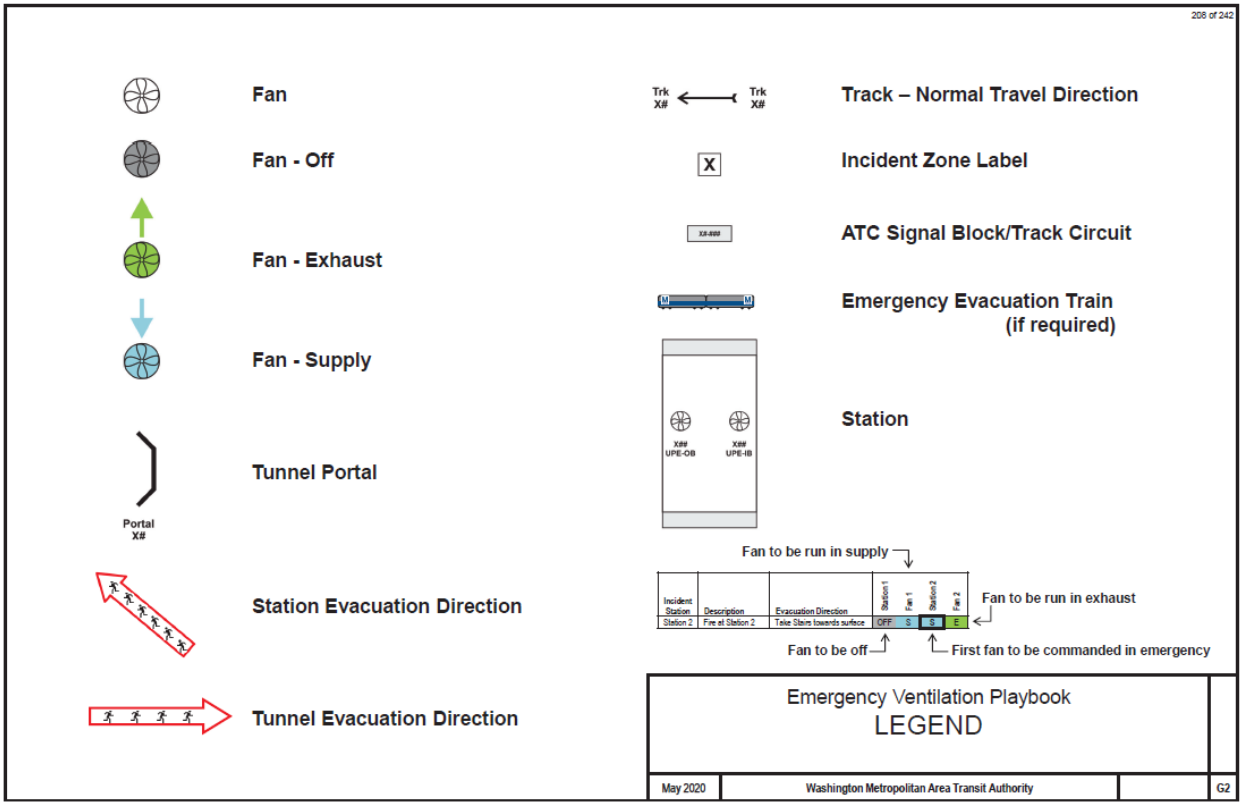


Figure 40 - Emergency Ventilation Playbook Legend.

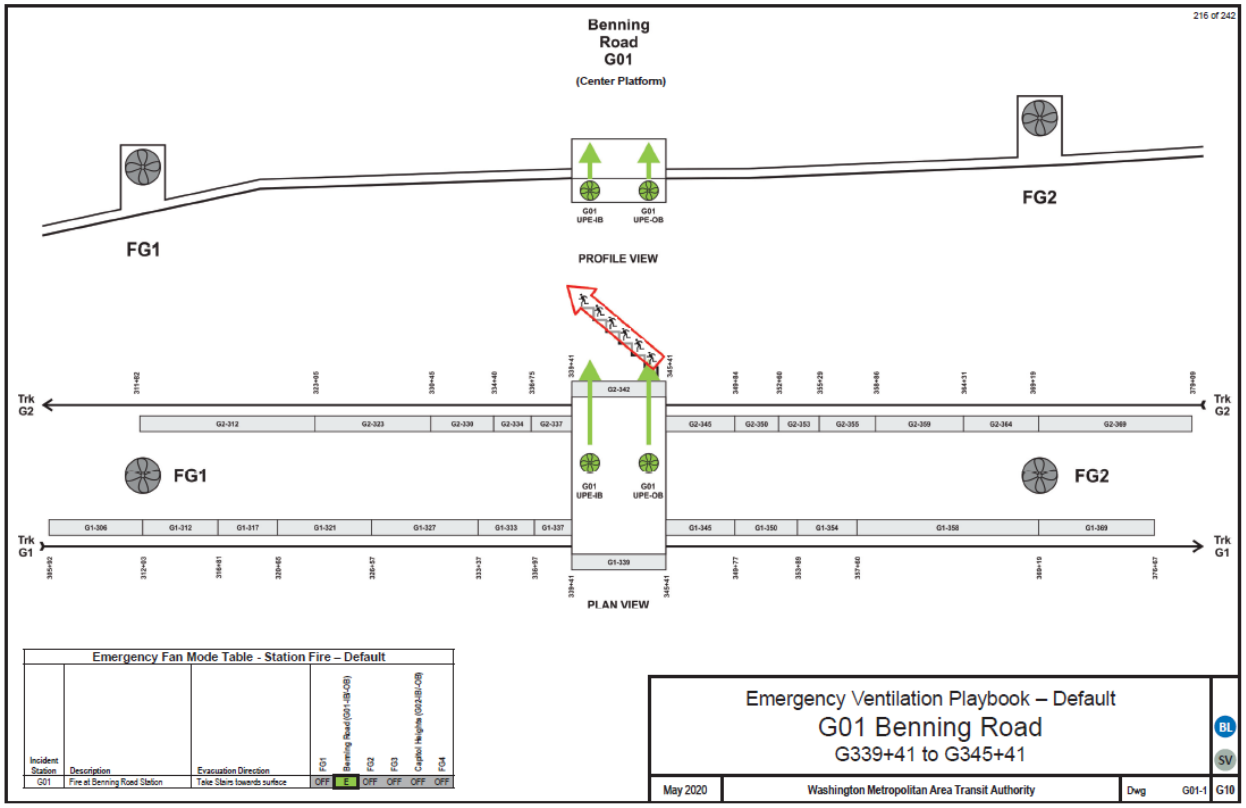


Figure 41 - Emergency Ventilation Playbook G10, used during the incident at Benning Road Station.

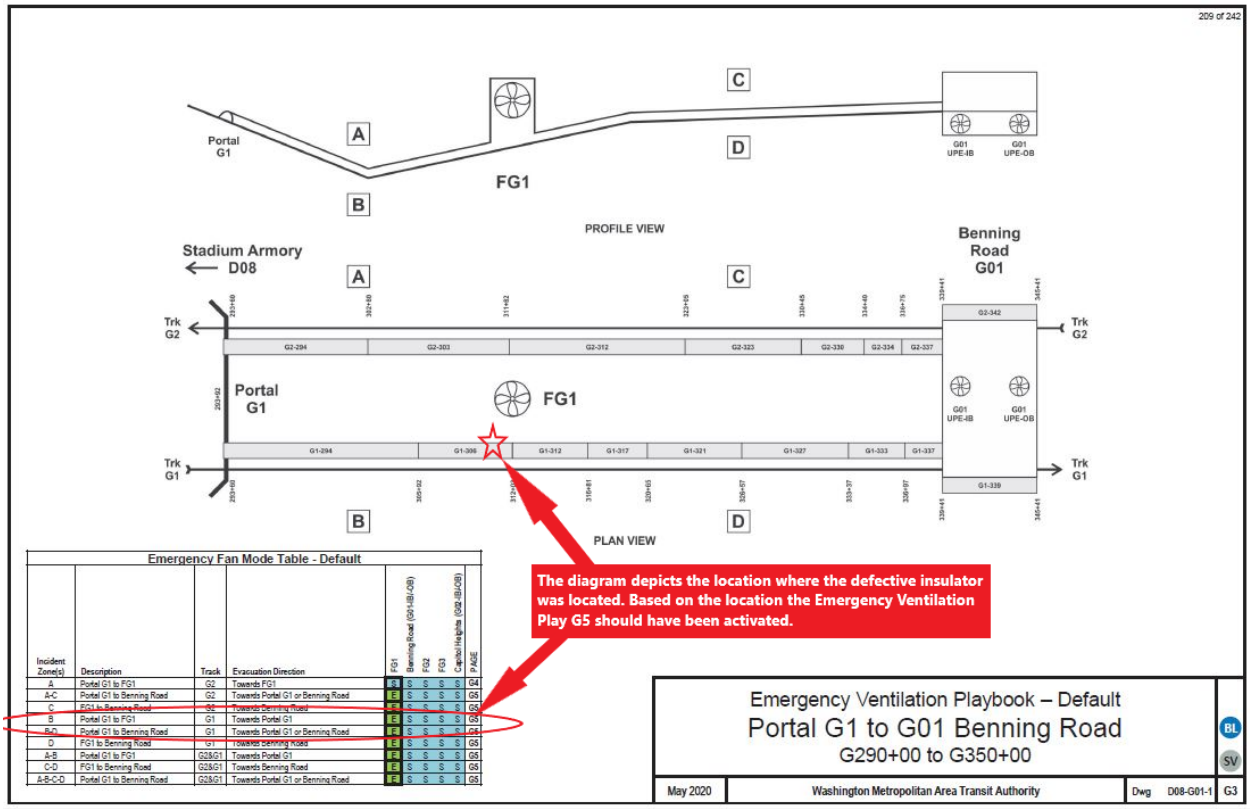


Figure 42 - Emergency Ventilation Playbook G3 Portal G1, G01 Benning Road Station, CM G290+00 to G350+00.

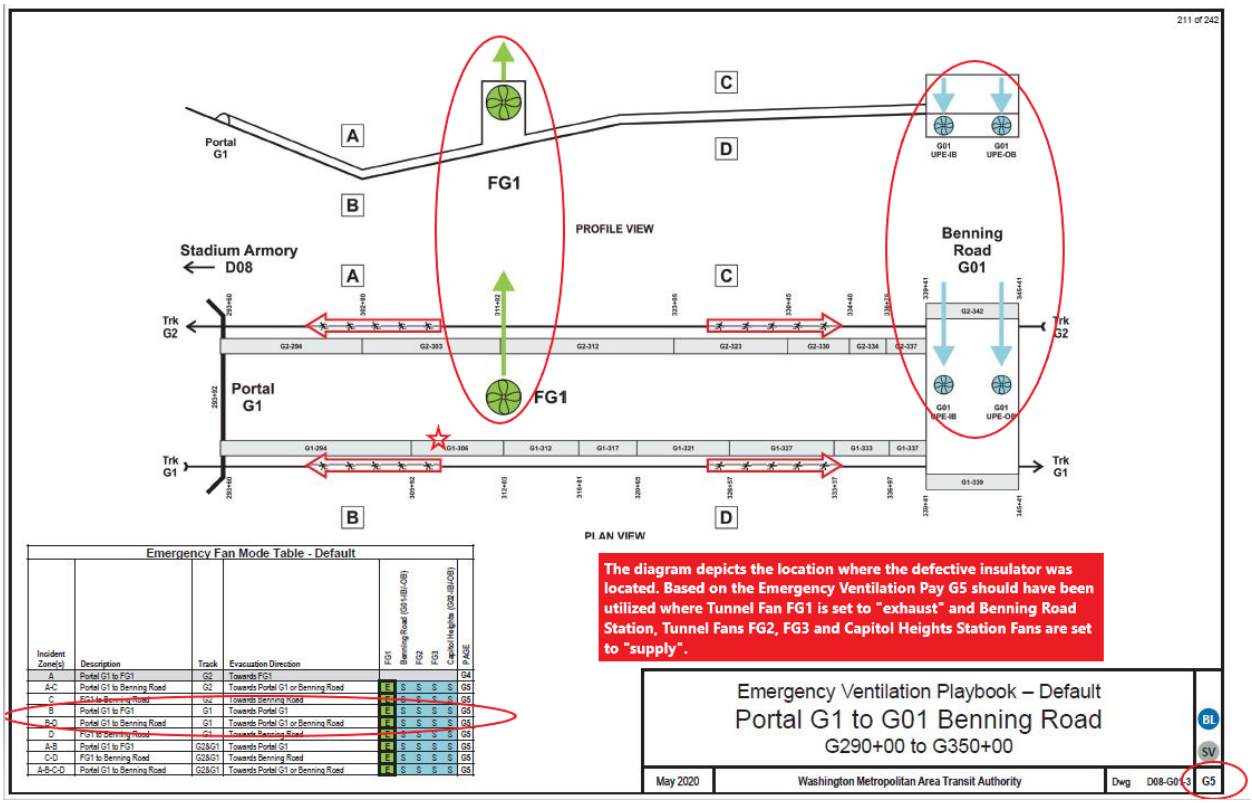
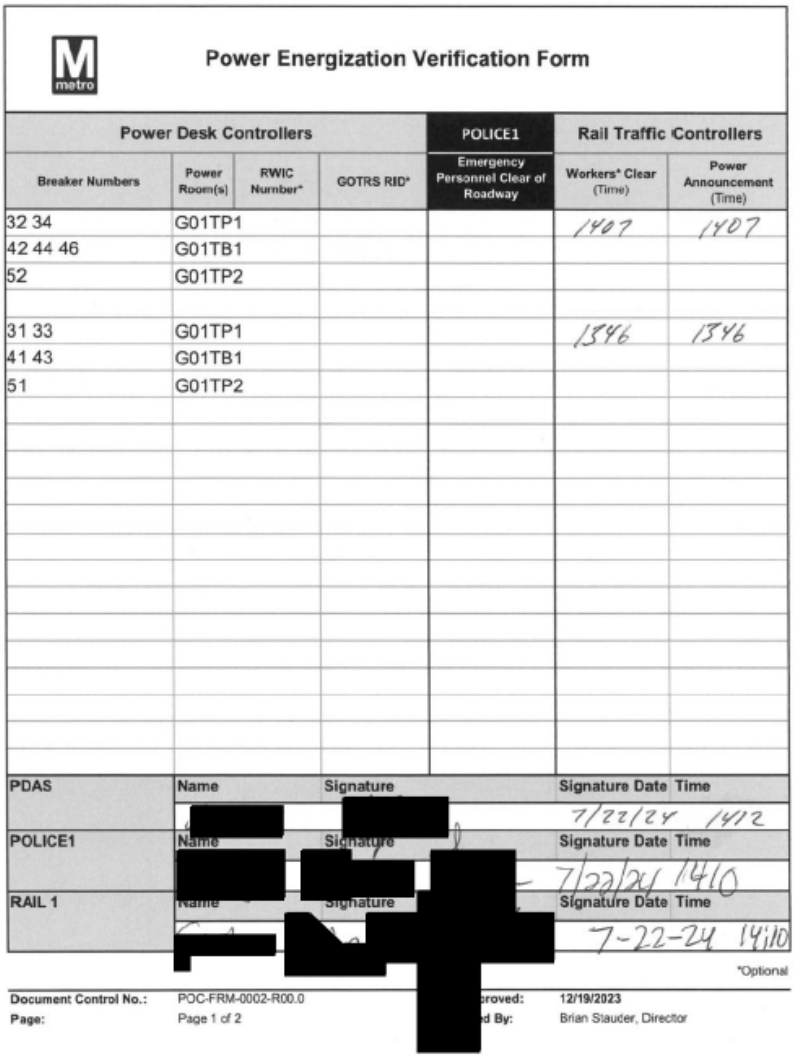


Figure 43 - Emergency Ventilation Playbook G5.

Appendix H – Power Energization Verification Form



Power Energization Verification Form

Power Desk Controllers				POLICE1	Rail Traffic Controllers	
Breaker Numbers	Power Room(s)	RWIC Number*	GOTRS RID*	Emergency Personnel Clear of Roadway	Workers* Clear (Time)	Power Announcement (Time)
32 34	G01TP1				1407	1407
42 44 46	G01TB1					
52	G01TP2					
31 33	G01TP1				1346	1346
41 43	G01TB1					
51	G01TP2					

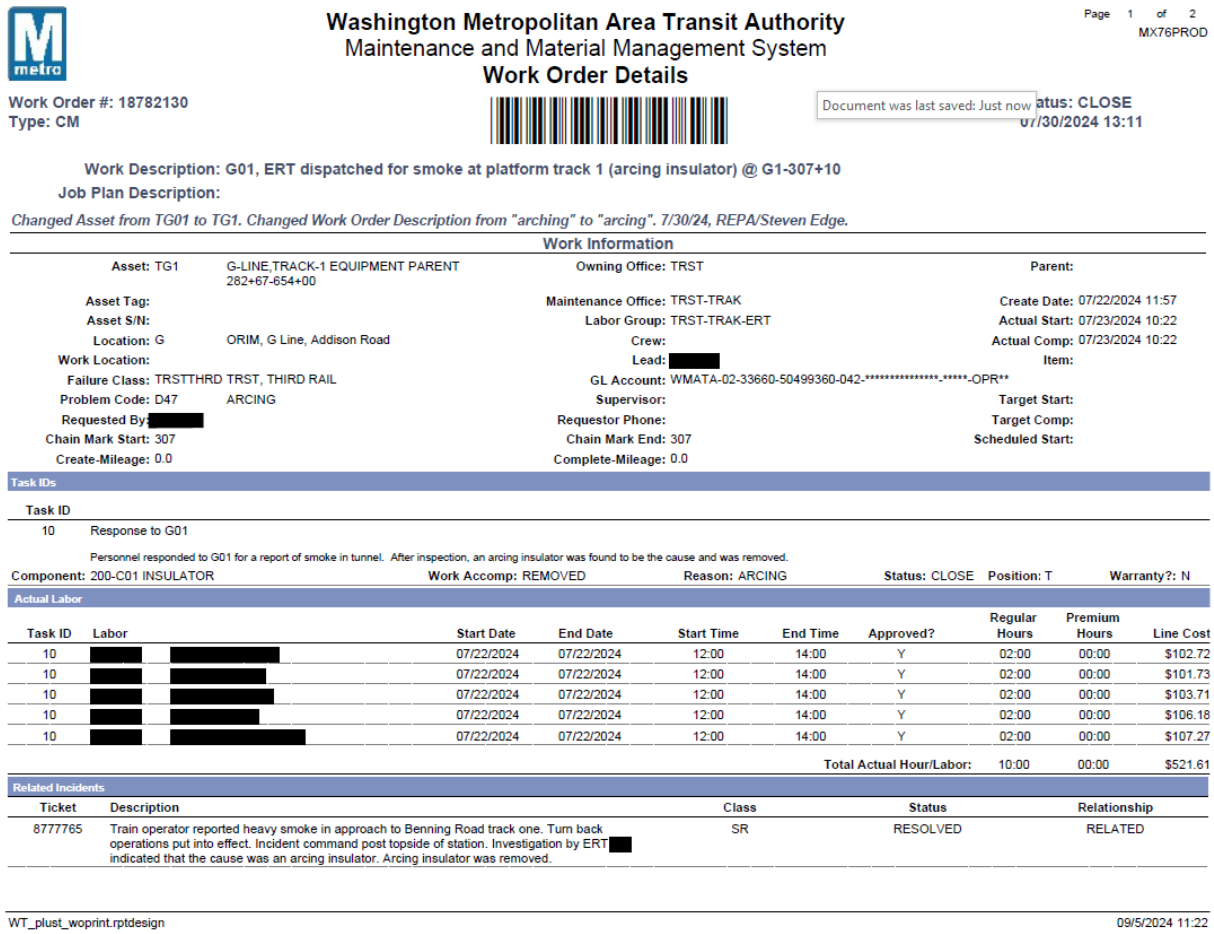
	Name	Signature	Signature Date	Time
PDAS	[redacted]	[redacted]	7/22/24	1412
POLICE1	[redacted]	[redacted]	7/22/24	1410
RAIL 1	[redacted]	[redacted]	7-22-24	14:10

*Optional

Document Control No.: POC-FRM-0002-R00.0 — Approved: 12/19/2023
Page: Page 1 of 2 — Approved By: Brian Stauder, Director

Figure 44 - Power Energization Verification Form for the incident at Benning Road Station on July 22, 2024.

Appendix I – Work Orders



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

Page 1 of 2
MX76PROD

Work Order #: 18782130
Type: CM

Document was last saved: Just now

Status: CLOSE
07/30/2024 13:11

Work Description: G01, ERT dispatched for smoke at platform track 1 (arcing insulator) @ G1-307+10
Job Plan Description:

Changed Asset from TG01 to TG1. Changed Work Order Description from "arching" to "arcing". 7/30/24, REPA/Steven Edge.

Work Information

Asset:	TG1 G-LINE,TRACK-1 EQUIPMENT PARENT 282+67-654+00	**Owning Office:**	TRST	**Parent:**	
Asset Tag:		**Maintenance Office:**	TRST-TRAK	**Create Date:**	07/22/2024 11:57
Asset S/N:		**Labor Group:**	TRST-TRAK-ERT	**Actual Start:**	07/23/2024 10:22
Location:	G ORIM, G Line, Addison Road	**Crew:**		**Actual Comp:**	07/23/2024 10:22
Work Location:		**Lead:**	[redacted]	**Item:**	
Failure Class:	TRSTTHRD TRST, THIRD RAIL	**GL Account:**	WMATA-02-33660-50499360-042-**********-*****-OPR**		
Problem Code:	D47 ARCING	**Supervisor:**		**Target Start:**	
Requested By:	[redacted]	**Requestor Phone:**		**Target Comp:**	
Chain Mark Start:	307	**Chain Mark End:**	307	**Scheduled Start:**	
Create-Mileage:	0.0	**Complete-Mileage:**	0.0		

Task IDs

Task ID	
10	Response to G01

Personnel responded to G01 for a report of smoke in tunnel. After inspection, an arcing insulator was found to be the cause and was removed.

Component: 200-C01 INSULATOR **Work Accomp:** REMOVED **Reason:** ARCING **Status:** CLOSE **Position:** T **Warranty?:** N

Actual Labor

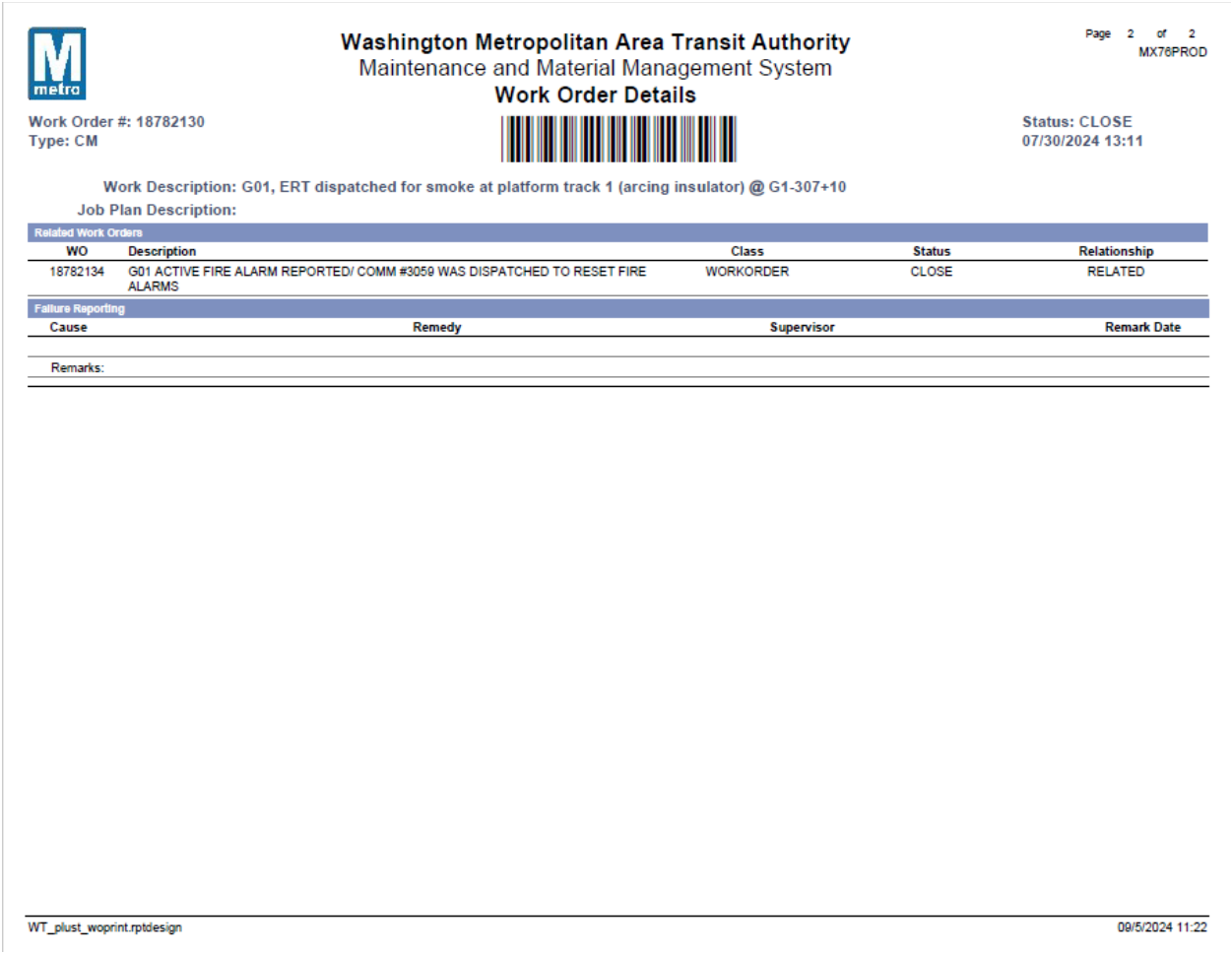
Task ID	Labor	Start Date	End Date	Start Time	End Time	Approved?	Regular Hours	Premium Hours	Line Cost
10	[redacted]	07/22/2024	07/22/2024	12:00	14:00	Y	02:00	00:00	$102.72
10	[redacted]	07/22/2024	07/22/2024	12:00	14:00	Y	02:00	00:00	$101.73
10	[redacted]	07/22/2024	07/22/2024	12:00	14:00	Y	02:00	00:00	$103.71
10	[redacted]	07/22/2024	07/22/2024	12:00	14:00	Y	02:00	00:00	$106.18
10	[redacted]	07/22/2024	07/22/2024	12:00	14:00	Y	02:00	00:00	$107.27
						Total Actual Hour/Labor:	10:00	00:00	$521.61

Related Incidents

Ticket	Description	Class	Status	Relationship
8777765	Train operator reported heavy smoke in approach to Benning Road track one. Turn back operations put into effect. Incident command post topside of station. Investigation by ERT [redacted] indicated that the cause was an arcing insulator. Arcing insulator was removed.	SR	RESOLVED	RELATED

WT_plust_woprint.rptdesign 09/5/2024 11:22

Figure 45 - Maximo Work Order (WO) for reported smoke at Benning Road Station, page 1 of 2.



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

Page 2 of 2
MX76PROD

Work Order #: 18782130
Type: CM

Status: CLOSE
07/30/2024 13:11

Work Description: G01, ERT dispatched for smoke at platform track 1 (arcing insulator) @ G1-307+10
Job Plan Description:

Related Work Orders

WO	Description	Class	Status	Relationship
18782134	G01 ACTIVE FIRE ALARM REPORTED/ COMM #3059 WAS DISPATCHED TO RESET FIRE ALARMS	WORKORDER	CLOSE	RELATED

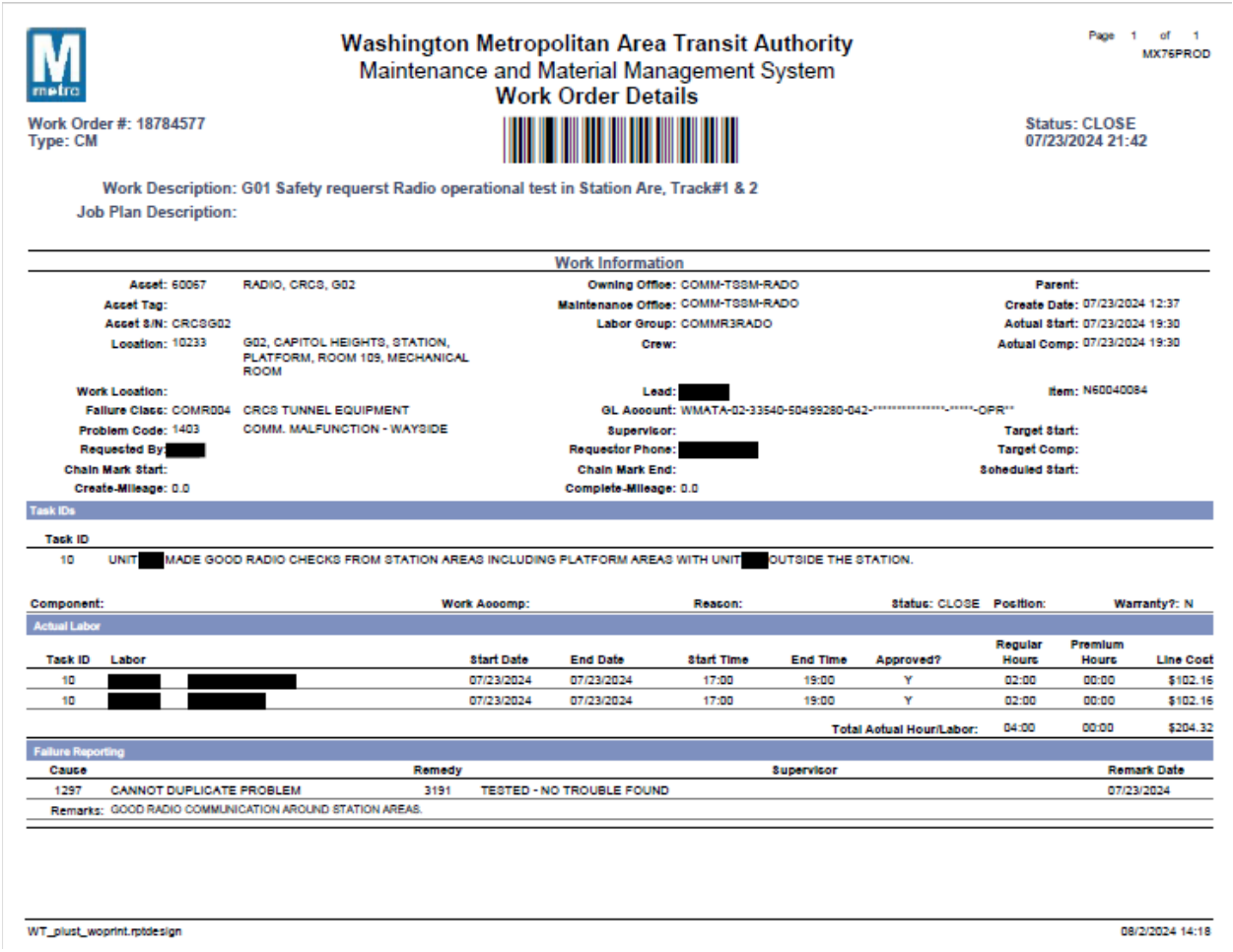
Failure Reporting

Cause	Remedy	Supervisor	Remark Date

Remarks:

WT_plust_woprint.rptdesign 09/5/2024 11:22

Figure 46 - Maximo Work Order (WO) for reported smoke at Benning Road Station, page 2 of 2.



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

Page 1 of 1
MX76PROD

Work Order #: 18784577
Type: CM

Status: CLOSE
07/23/2024 21:42

Work Description: G01 Safety requerst Radio operational test in Station Are, Track#1 & 2
Job Plan Description:

Work Information

Asset:	60067 RADIO, CRCS, G02	Owning Office:	COMM-TSSM-RADO	Parent:	
Asset Tag:		Maintenance Office:	COMM-TSSM-RADO	Create Date:	07/23/2024 12:37
Asset S/N:	CRCSG02	Labor Group:	COMMR3RADO	Actual Start:	07/23/2024 19:30
Location:	10233 G02, CAPITOL HEIGHTS, STATION, PLATFORM, ROOM 109, MECHANICAL ROOM	Crew:		Actual Comp:	07/23/2024 19:30
Work Location:		Lead:	[redacted]	Item:	N60040084
Failure Class:	COMR004 CRCS TUNNEL EQUIPMENT	GL Account:	WMATA-02-33540-50499280-042-**********-******-OPR**		
Problem Code:	1403 COMM. MALFUNCTION - WAYSIDE	Supervisor:		Target Start:	
Requested By:	[redacted]	Requestor Phone:	[redacted]	Target Comp:	
Chain Mark Start:		Chain Mark End:		Scheduled Start:	
Create-Mileage:	0.0	Complete-Mileage:	0.0		

Task IDs

Task ID	
10	UNIT [redacted] MADE GOOD RADIO CHECKS FROM STATION AREAS INCLUDING PLATFORM AREAS WITH UNIT [redacted] OUTSIDE THE STATION.

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

Actual Labor

Task ID	Labor	Start Date	End Date	Start Time	End Time	Approved?	Regular Hours	Premium Hours	Line Cost
10	[redacted]	07/23/2024	07/23/2024	17:00	19:00	Y	02:00	00:00	$102.16
10	[redacted]	07/23/2024	07/23/2024	17:00	19:00	Y	02:00	00:00	$102.16
					Total Actual Hour/Labor:		04:00	00:00	$204.32

Failure Reporting

Cause		Remedy		Supervisor	Remark Date
1297	CANNOT DUPLICATE PROBLEM	3191	TESTED - NO TROUBLE FOUND		07/23/2024
Remarks:	GOOD RADIO COMMUNICATION AROUND STATION AREAS.				

WT_plust_woprint.rptdesign 08/2/2024 14:18

Figure 47 – Maximo WO detailing the radio operational test for Benning Road Station.

Metro Integrated Command and Communications Center

Lessons Learned

Looking back, to effectively move forward

July 22, 2024

Fire & Smoke on the Roadway, Benning Road

INCIDENT SUMMARY

On July 22, 2024, at 1148, Train 617 reported track #1 in approach to Benning Road "the tunnel is full of smoke" "I have zero visibility, I can't see anything", after determining the location of train 617 and holding and communicating with other trains, the Radio RTC gave train 617 a Permissive Block to Benning Road 8 car maker. Train 617 operator then reported that [redacted] had just gotten a report that there was smoke on the train, the Radio RTC then instructed train 617 operator to "turn your EV off and move down to Benning Road" The Radio RTC asked train 617 operator if they were moving and the operator reported "I'm moving Central, I can't see anything" I copy that, properly berth and offload your train…

ROOT CAUSE

After receiving the report of smoke in the tunnel, the Radio RTC failed to utilize the Emergency SOP checklist which is located on every Rail Traffic Controller console and in electronic format in MICC MetroDocs which states:

- STOP ALL TRAINS IN BOTH DIRECTIONS
- DETERMINE IF THE TRAIN OPERATOR REPORTING THE INCIDENT WAS ABLE TO STOP; IF SO, INSTRUCT THE TRAIN OPERATOR TO REVERSE ENDS AND PROCEED TO THE NEXT STATION
- IF THE TRAIN OPERATOR REPORTING WAS NOT ABLE TO STOP, ENSURE TRACK AND STATION PLATFORM AHEAD ARE CLEAR AND THIRD RAIL POWER IS ENERGIZED

MOR RULES VIOLATED

Metrorail Operating Rulebook, General Rules 1.1.2 Customer safety is the responsibility of every WMATA employee; however, Rail Vehicle Operators have the ultimate and final responsibility for the safety of the customers on their trains. If any Rail Vehicle Operator is instructed by any person, regardless of rank, title, or position, to take any action which would adversely affect the safety of customers, the Rail Vehicle Operator shall stop the train, notify Rail Operations Control Center or the Interlocking Operator, and shall not continue until satisfied that it is safe to do so.

MICC Procedures VIOLATED

MICC-ALL-PRO-01 Rail Incident Management in the MICC
6.4.3.2 RAIL 1 shall reference SOPs, checklists, or job aids when responding to incidents.
6.4.4.1 RAIL 2 shall reference SOPs, checklists, or job aids when responding to incidents.
6.4.5.1 Rail Traffic Controllers shall reference SOPs, checklists, or job aids when responding to incidents.

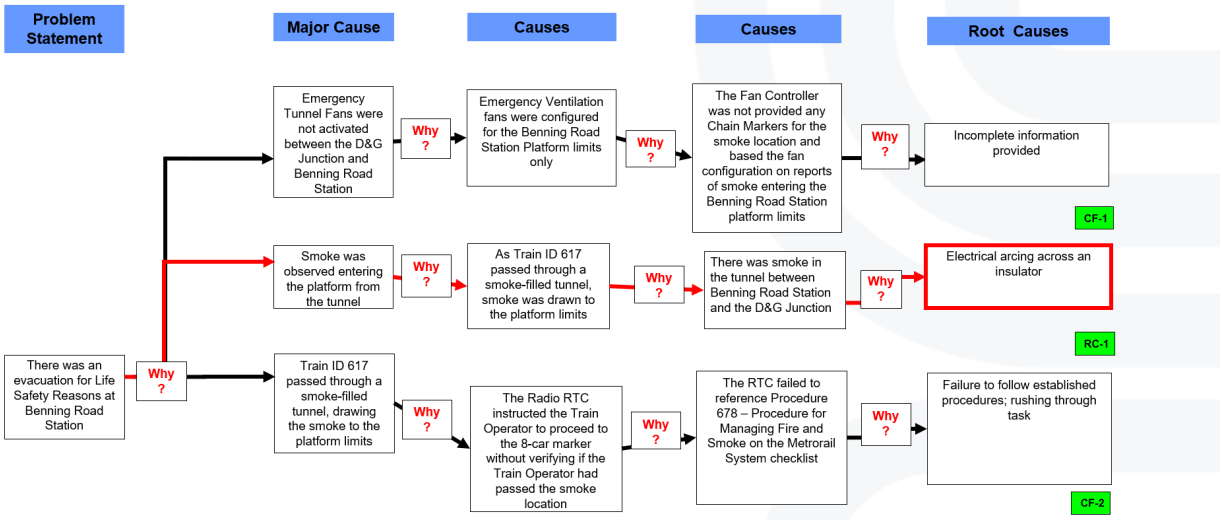
STANDARD OPERATING PROCEDURES VIOLATED

6.4.2 If the Operator was able to stop the train before reaching the reported location of the fire/smoke, the RTC shall confirm with the Operator if the conditions ahead prohibit or allow safe train movement.
6.4.2.1 If conditions prohibit train movement, the RTC shall implement an absolute block and instruct the Operator to reverse ends and proceed to next safest station.

What happened…	*What should have happened…*
Train 617 reported HEAVY smoke coming from the tunnel in approach to Benning Road Station. The Radio Rail Traffic Controller instructed train 617 operator to move the train through the smoke-filled tunnel to Benning Road station 8 car marker under a "Permissive Block" and of offload.	The Radio Rail Traffic Controller should have immediately utilized the Emergency SOP Checklist located on every RTC console. The RTC should have confirmed that the train EV system was shut off and instructed the operator to reverse ends and the train moved back to the next platform and offloaded.

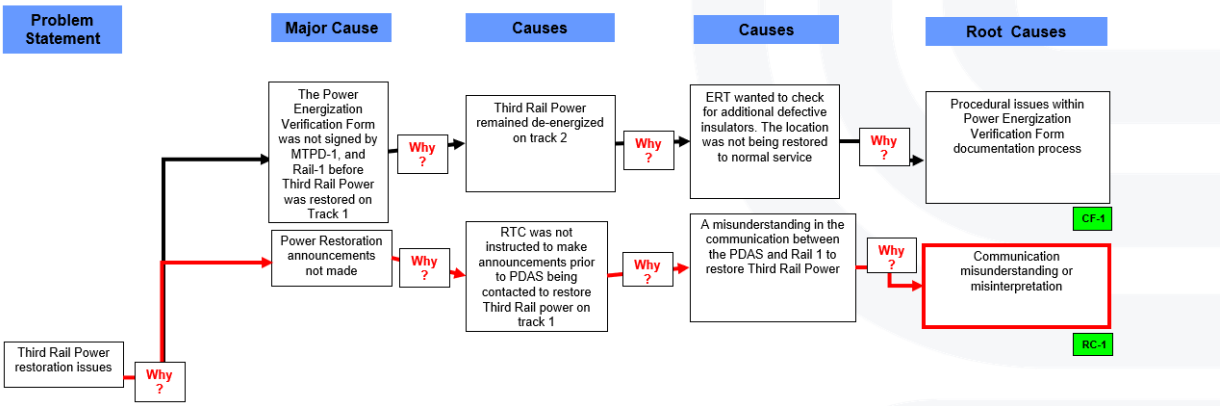
Lessons Learned

Appendix K – Why-Tree Analysis



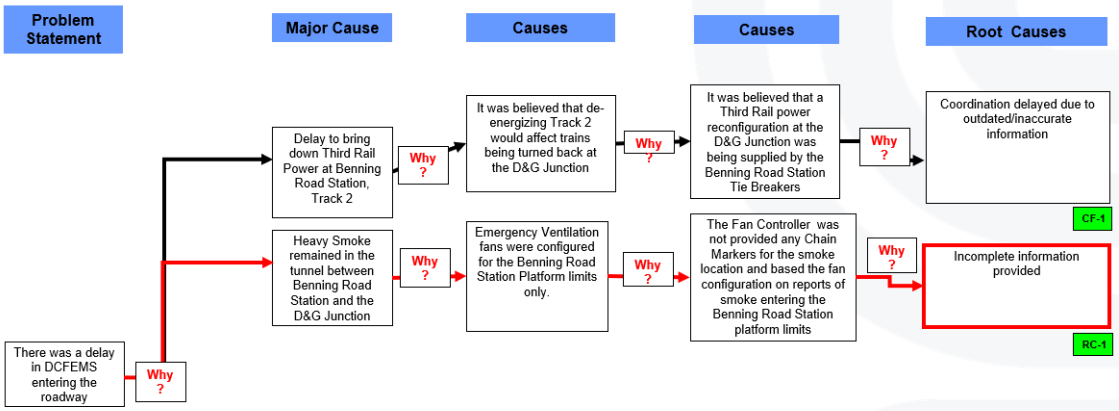
Root Cause Analysis

E24659 – Evacuation for Life Safety Reasons – Benning Road Station



Root Cause Analysis

E24659 – Evacuation for Life Safety Reasons – Benning Road Station



Root Cause Analysis

E24659 – Evacuation for Life Safety Reasons – Benning Road Station