



WMSC Commissioner Brief: W-0084 – Customer Evacuation – near Fort Totten & Georgia Ave.-Petworth stations – December 13, 2020

Prepared for Washington Metrorail Safety Commission meeting on June 29, 2021; Revised for meeting on December 7, 2021

Safety event summary:

Third-rail power de-energized at least five times, ultimately finally de-energizing for an extended period with two revenue trains on the Green and Yellow Line in the area of Georgia Ave.-Petworth and Fort Totten Station at 9:03 p.m. on December 13, 2020 when breakers in Georgia Ave.-Petworth Traction Power Substation (TPSS) and Fort Totten Tie-Breaker Station (TBS) #2 that had been repeatedly opening and closing tripped and could not be restored remotely. In the eventual customer evacuation, Metro Transit Police Department (MTPD) personnel, who Metrorail has designated as responsible for the safety of customers in emergencies, ignored safety procedures including Roadway Worker Protection (RWP) procedures, and evacuated customers without placing Warning Strobe and Alarm Devices (WSADs) on the roadway. MTPD and Metrorail also did not follow incident command protocols. Due to MTPD not using these safety devices, D.C. Fire and EMS did not assist with the evacuation.

Metrorail had been conducting power work in this area and had restored Fort Totten TBS #2 to service the day before this event with new DC Switchgear. At Georgia Ave.-Petworth Traction Power Substation (TPSS) a DC Overcurrent Protective Relay (Type 176 DC overcurrent solid-state relay) had failed on breaker 32, causing the high activity of intermittent tripping and closing. The relay appears to be more than 20 years old, putting it near the end of its expected life. When the breaker tripped, it automatically tripped breaker 36, which is a gap breaker. The load was then instantly shifted to the tie-breaker station breaker 64, which is suitable to handle a full 100% 8-car train load without redundancy, but the sensitivity of the IDTM1 (Inverse Definite Minimum Time Overcurrent protection) protective function on the new DC switchgear feeder breakers at Fort Totten TBS #2 was set too low for the new Secheron switchgear (set at the same level as VG control relays – original digital relays installed on WMATA systems), preventing the TBS from keeping power energized to the third rail. It was found that the algorithm for the IDTM1 function on the VG control relays and the IDTM1 function on the Secheron relays differs and hence the nuisance tripping. This caused a premature tripping of breaker 64, which de-energized the third rail. The Load Measuring Relay (182 Type 82 DC recloser) also lost its negative reference, preventing the remote and manual closing of the breakers to re-energize the third rail. TRPM replaced the bad 176 relay on breaker 32, restored the negative reference to the 182 relay on breaker 32 which allowed for the breakers to be closed, and disabled the IDTM1 function temporarily on all feeder breakers in the Fort Totten TBS #2 to prevent nuisance tripping as the proper relay settings at the time were still being investigated.

At approximately 7:30 p.m., the ROCC had de-energized third rail power on Track 2 between Fort Totten and Georgia Ave.-Petworth stations for a cat reported on the tracks.

At approximately the time this appeared to be resolved, the Fire Liaison who was on duty left the ROCC at the Jackson Graham Building (JGB) to travel to the ROCC at the Carmen Turner Facility (CTF) due to an upcoming scheduled shift transfer of WMATA operations from the JGB ROCC facility to the CTF ROCC facility. An alternate Fire Liaison was present at JGB, but was not inside the ROCC for the entire time the second incident developed due to the lack of space



for the Fire Liaison in the JGB ROCC, which left the Fire Liaison in another room off of the ROCC. The second incident delayed the transfer of control from JGB to ROCC.

The ROCC attempted to restore power at approximately 8:40 p.m., however breakers 36 and 34 in the Georgia Ave.-Petworth TPSS remained open and would not close.

At 8:44 p.m., while southbound Green Line Train 501 on Track 2 was servicing the platform at Fort Totten Station, third-rail power de-energized for approximately 5 seconds when breakers 32, 36, 64 and 66 opened uncommanded. This had previously occurred several times as other trains were leaving the station platform. The controllers on duty did not recognize all of these occurrences, as they prepared documentation related to the prior delays due to the cat on the roadway.

A northbound train (Train 307) on Track 1 entered Fort Totten Station at 8:45 p.m. At 8:47 p.m., as the train departs, power again de-energized on Track 2 due to breakers 36, 32, 64 and 66 opening uncommanded, this time for 55 seconds. The ROCC remotely closed breakers 64 and 66 at 8:48 p.m., briefly re-energizing third rail power.

At 8:48 p.m., a Traction Power Maintenance Crew was dispatched to the Georgia Ave.-Petworth TPSS. When they arrived at 9:21 p.m., they found breaker 32 was not reacting to any commands. This bad 176 relay had been frequently tripping and closing breaker 32, eventually burning out that relay. The re-closing of breaker 32 was prevented because relay 182 which is a reclosing/load measuring device lost its negative reference. This negative reference is required in order for relay 182 to measure track voltage and perform load measuring. The crew was instructed to leave the room at 9:40 p.m. due to the plans to evacuate customers. A TRPM Preventive Maintenance Inspection (PMI) crew arrived at 10:04 p.m., was allowed to access the room at 10:50 p.m., and restored power at 11:05 p.m.

At 8:57 p.m., with power restored in the area of the platform, Train 502 departed southbound from Fort Totten Station. Approximately 10 seconds later, third rail power de-energized again on Track 2, bringing Train 502 to a stop. Power briefly re-energized, and another southbound train, Yellow Line Train 308, approached Fort Totten Station. Power then de-energized again when breakers 64 and 66 tripped (opened) uncommanded at Fort Totten TBS #2. Southbound trains 502 and 308 stopped due to the loss of power.

The Train Operator of Train 308 told the rail controller that their train said it had no dynamic braking and reduced propulsion. The rail controller instructed the Train Operator to operate in P3 power mode. A few seconds later, the Train Operator of Train 502 reported that their train was slowly coming to a stop on emergency lighting, with no third-rail power. The rail controller asked Train 502's operator to operate in P3 power mode, but the operator reiterated that the train had no power.

ROCC controllers attempted to remotely close the breakers to restore power, but the breakers remained open.

At 9 p.m., a Rail Transportation (RTRA) Supervisor at Fort Totten Station looked down the tracks toward Train 308 which was just outside the station. At 9:16 p.m., the ROCC Assistant Superintendent provided the first notification of the event to Metro Transit Police (MTPD). At 9:24 p.m., two MTPD employees passed beyond the handrail at Fort Totten Station without required Roadway Worker Protection (RWP) in place and without the related required communication with the ROCC to walk a short distance to Train 308. At approximately 9:36 p.m., two other MTPD employees went beyond the end gate. These employees entered these areas based solely on the direction of an MTPD



supervisor, and without authorization or protection from the ROCC. MTPD did not communicate as required with the ROCC, and therefore did not have required protections to be on the roadway safely. This also meant the ROCC did not immediately have all information required to maintain full situational awareness.

Metrorail did not immediately call for D.C. Fire and EMS assistance.

There is no documentation that Metrorail communicated the details of the event to the outgoing Fire Liaison, which contributed to an incomplete handoff to the incoming Fire Liaison. MTPD staff also participated in a non-work related conversation with the Fire Liaison during the event. The outgoing (covering) Fire Liaison left JGB at 9:24 p.m. when the incoming Fire Liaison was in place at CTF. The transfer was further complicated by the handling of other events earlier in the evening that disrupted the typical handoff process.

At 9:32 p.m., a Rail Operations Information Center (ROIC) Specialist asked the ROIC Assistant Superintendent if a call should be made. At 9:34 p.m., the ROIC Assistant Superintendent asked an MTPD Dispatcher if FEMS was needed, and MTPD said they had not requested it. At 9:38 p.m., the outgoing Maintenance Operations Center (MOC) Assistant Superintendent stated that a determination had been made to evacuate a train, and that the ROCC Assistant Superintendent had stated that the ROIC Specialist had called for D.C. FEMS assistance.

At 9:38 p.m. D.C.'s Office of Unified Communications (OUC) dispatched a full response to Fort Totten Station for a report of a train stuck on the tracks. It is not clear whether Metrorail fully communicated that there were two trains stuck in different locations.

At 9:40 p.m., Traction Power personnel informed MOC that radio communication was bad in the Tie-Breaker Station. MOC instructed that Traction Power employee to notify other personnel not to energize the breakers.

At 9:47 p.m., a DC Fire and EMS Battalion Chief stated they had established a unified command with MTPD. However, MTPD later made decisions, such as not properly placing WSADs, that were outside of the incident command process.

At 9:51 p.m., after the arrival of D.C. Fire and EMS (DC FEMS), the RTRA Supervisor entered the roadway to confirm that third rail power was de-energized.

At 9:53 p.m., MTPD notified MOC that their radios were unable to transmit in the tunnels. At approximately 9:55 p.m., passengers from Train 308 were evacuated without Warning Strobe and Alarm Devices (WSADs) in place as required by Metrorail procedures. The seven customers proceeded onto the roadway, then onto the catwalk into Fort Totten Station, with the evacuation completed at approximately 9:56 p.m.

Metrorail had not dispatched MTPD or requested D.C. Fire and EMS response to Georgia Ave.-Petworth Station at this point. MTPD and D.C. Fire and EMS departed Fort Totten Station following the conclusion of Train 308's evacuation. MTPD and D.C. Fire and EMS arrived outside of Georgia Ave.-Petworth Station at approximately 10:16 p.m.

At 10:21 p.m., D.C. Fire and EMS were on the platform inside the station with their WSAD. MTPD did not use that or any other WSAD, and an MTPD Office of Emergency Management employee who arrived on the platform with a WSAD at 10:28 p.m. left that WSAD on the platform. That employee also had a hot stick and high voltage gloves, but did not use the hot stick. Without proper safety equipment on the roadway, D.C. Fire and EMS remained on the platform. The OEM employee, an MTPD Sergeant who was acting as incident commander, and an RTRA Supervisor entered the roadway.



At approximately 10:42 p.m., 13 customers reached the Georgia Ave.-Petworth Station platform.

D.C. Fire and EMS departed the station at approximately 10:44 p.m.

The MTPD officers were not removed from service for post-event testing as specified by WMATA's Drug and Alcohol Policy/Instruction 7.7.3/6, despite contributing to an evacuation conducted outside of safety procedures and clear safety rules violations that were known at the time of the incident.

Probable Cause:

The probable cause of these stranded trains and customer evacuation was Metrorail's failure to properly complete maintenance to fully maintain a state of good repair and a failure to monitor and immediately prioritize safety to respond to power issues, such as the solid-state relays that were at the end of their useful life that caused the breakers to trip and prevented the breakers from being restored.

The probable cause of the evacuation occurring without proper safety precautions for passengers and employees was Metrorail's insufficient training, oversight and exercises for personnel responsible for safety and emergency preparedness and response, including Metro Transit Police, which led to these safety-sensitive Metrorail personnel ignoring safety procedures and incident command processes even when safety concerns were raised by other first responders.

Contributing to response challenges were deficiencies in WMATA's radio communication systems.

Corrective Actions:

Metrorail's Office of Emergency Management reviewed the Fire Liaison turnover process, and the Fire Liaison Program Manager reviewed the need to verify handoffs from one ROCC location to another.

MTPD is developing an incident response and incident command checklist identifying responsibilities, required equipment and processes.

TRPM re-established negative connection for 182 reclosing/load measuring relay in order to be able to close breakers and replaced the bad 176 relay.

TRPM disabled the IDTM1 protective function on all breakers in Fort Totten TBS #2 pending further engineering review. TRPM later determined that the VG control relay IDTM settings (IDTM1) were not appropriate for new relays being installed in the Metrorail system, and new settings will be tested offline on the Green Line in this area at the end of this summer's shutdown. The settings provided by the manufacturer of the new relays include an IDMT2 setting for cathode breakers and IDMT3 setting for feeder breakers.

WMSA staff observations:

The WMSA has assessed Metrorail's emergency preparedness, management and fire & life safety programs, processes, procedures and assets through ongoing audit work (draft report being finalized).

The WMSA has observed similar deficiencies to those in this event in MTPD response in connection with the response to the October 9, 2020 train pull-apart near Union Station and, preliminarily, in the response to a March 26, 2021 disabled train that later resulted in a runaway train event. This event also suggests that MTPD personnel do not fully



understand operations in the rail system, including the need to hot stick and confirm power is down and to coordinate with the ROCC to ensure proper roadway worker protection is in place. Metrorail provides some RWP training to MTPD personnel, but MTPD personnel are not generally RWP certified in the same way as all other Metrorail employees who work on or around the roadway. Metrorail RWP Cardinal Rule 1 requires all personnel, regardless of rank or title to be RWP “trained and qualified before entering the Authority’s roadway”. The rule covers training for “all personnel”, which includes MTPD. Rule 5.9 further specifies that employees are required to attend training every year to maintain RWP qualification.

MTPD did not follow procedures requiring MTPD personnel in the ROCC during emergencies. The WMSC has identified that this response procedure is regularly not being followed.

The WMSC has identified recurring power problems on the Green and Yellow Lines between Georgia Ave.-Petworth and Greenbelt, with power flickering on and off. The use of eight car, 7000 Series trains in this area as well as the existing power infrastructure may contribute to these issues when multiple trains are in the same area. Metrorail is in the process of upgrading breakers throughout the system meant to mitigate this issue.

Metrorail’s ineffective emergency response to this event included a lack of required urgency.

The evacuation took approximately 55 minutes.

The WMSC has raised Metrorail’s repeated lack of clear and accurate information in calls to dispatchers at 911 communications centers, and to clearly identify the locations of events to ensure first responders are sent to required locations with required urgency in recent discussions with WMATA ROCC and Safety Department leadership. WMATA met with leadership from D.C.’s Office of Unified Communications (OUC), the 911 call center, to re-establish dedicated phone lines in OUC and to lay the groundwork for improvements. The WMSC is further assessing this in ongoing audit work.

Metrorail appears to have solely used the AIM screen to determine whether one train was closer to Fort Totten Station or to Georgia Ave.-Petworth Station. Had the ROCC or other personnel utilized the information provided by the Train Operator about the actual chain marker location, they could have more quickly identified that the train was closer to Georgia Ave.-Petworth Station than it was to Fort Totten Station. Even after identifying the two separate locations required for evacuations, Metrorail did not dispatch or request separate personnel to the other location in order to provide for the most effective response and to limit risks to customers, including self-evacuation. In interviews, MTPD stated that they did not have personnel to send to both locations at the same time.

MTPD and TRPM personnel reported communications issues that were so significant cell phones and train operator radios were used rather than radio systems to provide updates during the event, yet Metrorail’s Communication Section (COMM) closed out the work order by stating that they spoke with several individuals who said there were no issues. This does not reflect the systematic safety approach WMATA has committed to under its agency safety plan that requires the full evaluation and mitigation of hazards. This also led to employees, including an MTPD Sergeant, not having all required information. This created significant challenges even with the evacuation of a very small number of customers.



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This event also demonstrates the hazards posed by obstructions and narrowed pathways on the emergency catwalk. The blocked paths (by materials or by built-in items) contributed to the need for MTPD officers and customers to be on the roadway, and could impede emergency egress in other circumstances.

Metrorail does not have clear communication procedures with the Fire Liaison, which is an issue exacerbated by the setup in the (soon to be replaced) backup ROCC facility at JGB.

Metrorail exempted MTPD from its fatigue management and hours of service policies, even though they serve similar important safety purposes as other WMATA employees.

This event occurred around the time of a ROCC shift change, which was also scheduled to shift operations from the Jackson Graham Building (JGB) backup ROCC facility back to the Carmen Turner Facility (CTF).

Related to the power issue, WMATA has scheduled preventive maintenance, but the relays are at the end of their useful life. While the WMSC understand difficulties in some cases in obtaining replacement relays, it is important to prioritize and fund the state of good repair of safety-critical systems including traction power systems.

Staff recommendation: Adopt final report.



Washington Metro Area Transit Authority

Department of Safety and Environmental Management (SAFE)

FINAL REPORT OF INVESTIGATION A&I E20488

Date of Event:	December 13, 2020
Type of Event:	Customer Evacuation
Incident Time:	21:03 hrs.
Location:	Fort Totten Station, Track 2
Time and How received by SAFE:	21:03 hrs. – SAFE On-Call Phone
WMSC Notification Time:	22:41 hrs.
Responding Safety Officers:	WMATA SAFE: No WMSC: No Other: No
Rail Vehicle:	Train ID 308 and Train ID 502
Injuries:	None
Damage:	None
Emergency Responders:	DCFEMS, MTPD, RTRA, TRPM
SMS I/A Incident Number:	SMS 20201213#90755

Fort Totten Station – Customer Evacuation
December 13, 2020
TABLE OF CONTENTS

Executive Summary -----	4
Incident Site -----	5
Field Sketch/Schematics -----	6
Purpose and Scope -----	6
Investigation Process and Methods -----	6
Investigative Methods -----	6
Investigation -----	7
Chronological Event Timeline -----	19
Metro Transit Police Department -----	26
Traction Power Maintenance -----	26
Office of System Maintenance -----	28
Interview Findings -----	28
Findings -----	30
Immediate Mitigation to Prevent Recurrence -----	31
Weather -----	31
Human Factors -----	31
Fatigue -----	31
Post-Incident Toxicology Testing -----	31
Training Issues -----	31
Probable Cause Statement -----	32
Recommendations -----	32
Appendix A – Interviews -----	33

Abbreviations and Acronyms

AIMS	Advanced Information Management System
ARS	Audio Recording Service
CM	Chain Marker
COMM	Communication Section
CCTV	Closed Circuit Television
DCFEMS	District of Columbia Fire Emergency Management Service
IC	Incident Commander
ICP	Incident Command Post
MOC	Maintenance Operations Center
MSRPH	Metrorail Safety Rules Procedures Handbook
MTPD	Metro Transit Police Department
OSC	On-scene Commander
PPE	Personal Protective Equipment
ROCC	Rail Operations Control Center
ROIC	Rail Operations Information Center
RTC	Rail Traffic Controller
RTRA	Office of Rail Transportation
SOP	Standard Operating Procedure
SMNT	Office of System Maintenance
TB	Tie-Breaker
TBS	Tie-Breaker Station
TPSS	Traction Power Substation
TRPM	Office of Traction Power Maintenance

Executive Summary

On Sunday, December 13, 2020, at 21:03 hrs., the Advanced Information Management System (AIMS) indicated breakers #66 and #64 opened [tripped] un-commanded at Fort Totten Station [lower level – Green/Yellow Line], Track 2, resulting in third-rail power to de-energize. Train ID 308 [Yellow Line] traveling to Huntington stopped in approach to Fort Totten Station, Track 2, and Train ID 502 [Green Line] traveling towards Branch Avenue stopped after leaving Fort Totten, Track 2, after losing propulsion due to a de-energized third-rail. Train ID 308 and Train ID 502 did not have any portion of the consists within the platform limits. The Rail Operations Control Center (ROCC) attempted to close the open breakers remotely to no avail.

The ROCC implemented Standard Operating Procedure (SOP) 1A Command, Control, and Coordination of Emergencies on the Rail System. The Incident Command Post (ICP) was established at the Fort Totten Station Bus Bay at 37th Street and Georgia Ave-Petworth Station. ROCC instructed the Train Operators of Train ID 308 and Trains ID 502 to get a headcount and move the customers to their respective lead cars. District Of Columbia Fire Emergency Management Services (DCFEMS) arrived at Fort Totten Station at 21:07 hrs.

The Office of Traction Power Maintenance (TRPM) personnel on location notified ROCC that third-rail breakers would not close manually, and troubleshooting efforts were ongoing. ROCC later instructed TRPM personnel to suspend troubleshooting efforts to allow emergency personnel access to the roadway and to confirm that third-rail power was de-energized. ROCC granted a Rail Transportation (RTRA) Supervisor Foul Time to access the roadway to ensure third-rail power was de-energized. The RTRA Supervisor confirmed third-rail power was de-energized at CM E2-265+00. ROCC granted Metro Transit Police Department (MTPD) and DCFEMS personnel Foul Time protection to escort customers from Train ID 308 to the Fort Totten Station platform.

ROCC implemented SOP #2 Emergency Removal and Restoration of Third-Rail Power Mainline and de-energized third-rail power at Fort Totten Station, Track 1, as a safety precaution. ROCC suspended service and established a shuttle bus service between Georgia Ave-Petworth Station and West Hyattsville Station. ROCC granted an RTRA Supervisor positioned at Georgia Ave-Petworth Station with DCFEMS Foul Time to hot-stick and confirmed if third-rail power was de-energized. The RTRA Supervisor confirmed third-rail power was de-energized at CM at E2-175+00.

MTPD personnel evacuated seven customers from Train ID 308 to the Fort Totten Station and 13 customers from Train ID 502 to Georgia Ave-Petworth Station platform utilizing the roadway and platform. The evacuation of customers from Train ID 308 and Train 502 took approximately 55 minutes. The RTRA Supervisor positioned at Georgia Ave-Petworth Station notified ROCC that all personnel/equipment are clear of the roadway between Georgia Ave-Petworth Station and Fort Totten Station.

Third-rail power was restored at approximately 23:05 hrs at Fort Totten Station, Track 1, and Track 2. TRPM personnel was unable to close the breakers manually due to a defective relay. Third Rail Power was restored after replacing the defective breakers.

MTPD officers entered the roadway and conducted a train evacuation of customers from both stranded trains to the Fort Totten Station and Georgia Ave-Petworth Station platforms without

proper Personal Protective Equipment (PPE) Warning Strobe and Alarm Device (WSAD). This action was not in compliance with MSRP Section 5 RWP, which states, "*the WSAD must be used whenever third-rail power is de-energized to monitor for the inadvertent restoration of power. WSADs will be properly installed in a work zone so all Roadway Workers within the work zone can see the strobe light and hear the siren, should it be activated.*"

The probable cause of the breaker's opening un-commanded at breakers 32 and 36 was due to a defective SMC 176 relay on breaker 32. This SMC 182 relay failure prevented the remote closing command and on-site manual closing of the affected breakers. This failure extended the delay resulting in a customer evacuation from Train ID 308 and Train ID 502 to Fort Totten Station and Georgia Ave-Petworth Station platforms via the roadway.

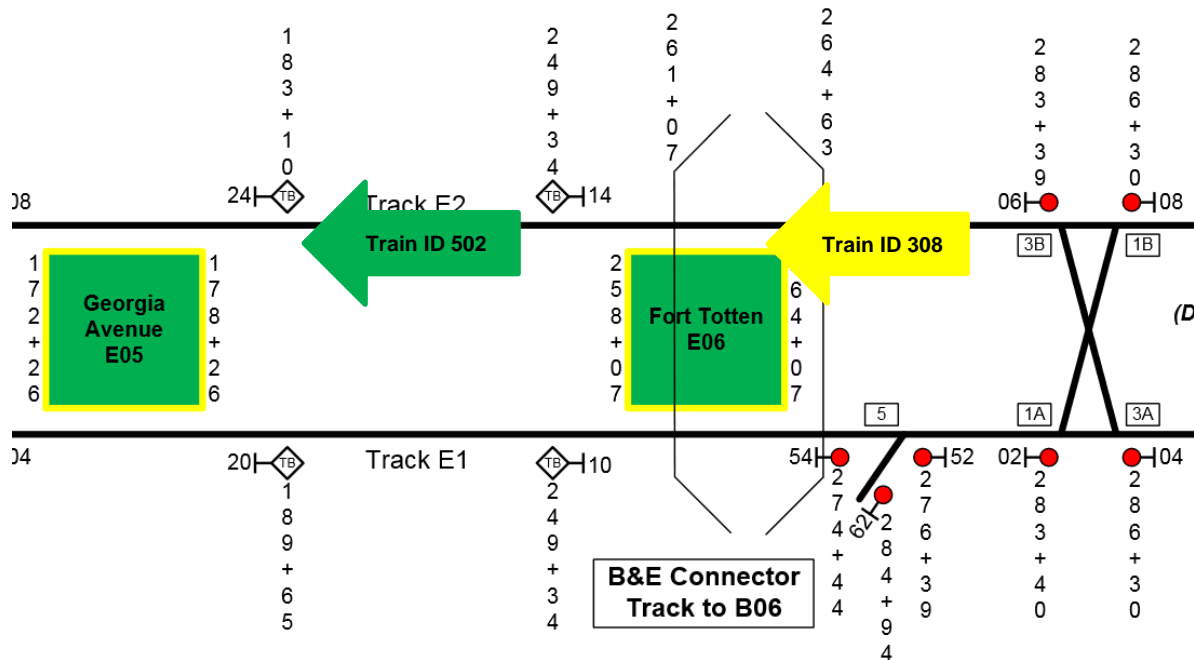
An analysis of data collected from systems of record and the results of interviews with staff, multiple human factors failures occurred in response to this incident. MTPD IC did not ensure WSAD devices were installed at both locations before granting MTPD permission to enter the roadway. MTPD IC granted MTPD permission to evacuate customers from the train onto the roadway back to Georgia's platform, limiting Georgia Ave-Petworth and Fort Totten Stations.

The departing Fire Liaison Officer 1 was waiting for Fire Liaison Officer 2 to travel from Jackson Graham Building to Carmen Turner Facility due to COVID cleaning restrictions. Fire Liaison 1 did not oversee operations of the un-commanded loss of the third rail power event. In contrast, Fire Liaison 2 traveled towards the Carmen Turner Facility to transfer over operations. Therefore, Fire Liaison Officer 2 did not communicate with DCFEMS upon arrival to provide updates and assistance. Additionally, MTPD experienced communication issues within the tunnels reducing response times and updates to MTPD officers. The DCFEMS did not assume the IC upon arrival.

Incident Site

Fort Totten Station, Track 2.

Field Sketch/Schematics



Purpose and Scope

The purpose of this incident 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.

Investigation Process and Methods

Upon receiving a customer evacuation notification at Fort Totten Station, Track 2, on December 13, 2020, SAFE conducted a cross-functional investigation into the incident. SAFE team members worked with relevant WMATA subject matter experts to review the incident's facts and data.

Investigative Methods

The investigative methodologies included the following:

- Physical Site Assessment
- Formal Interviews – SAFE interviewed multiple individuals as part of this investigation. Interviews included persons present at, during, and after the incident, directly involved in the response process. SAFE interviewed the following individuals:
 - Four (4) MTPD Officer(s)
 - One (1) Fire Liaison
- Documentation Review – A collection of relevant work history information and process documentation in WMATA systems of record. These records include:
 - Training Records review

- Certifications review
- The all the employees' 30-Day work history review
- Metrorail Safety Rules and Procedures Handbook (MSRPH)
- National Oceanic Atmospheric Administration (NOAA)
- System Data Recording Review – A collection of information contained in Metro Data Recording Systems. This data includes:
 - Audio Recording System (ARS) playback [Radio and Landline Communications]
 - Closed-Circuit Television (CCTV)
 - Automated Information Management System (AIMS) Playback
 - SMNT COMM review
 - TRPM Maximo data review

Investigation

On Sunday, December 13, 2020, at a Time frame from approximately 20:42:55 hrs. to 20:44:15 hrs., the Train Operator of Train ID 501 [Green Line] serviced Fort Totten Station. During this time frame, AIMS playback indicated breakers 36, 32, 64, and 66 opened uncommanded and de-energized third-rail power briefly from 20:44:05 – 20:44:10 hrs., before Train ID 501 departed Fort Totten Station, Track 2.

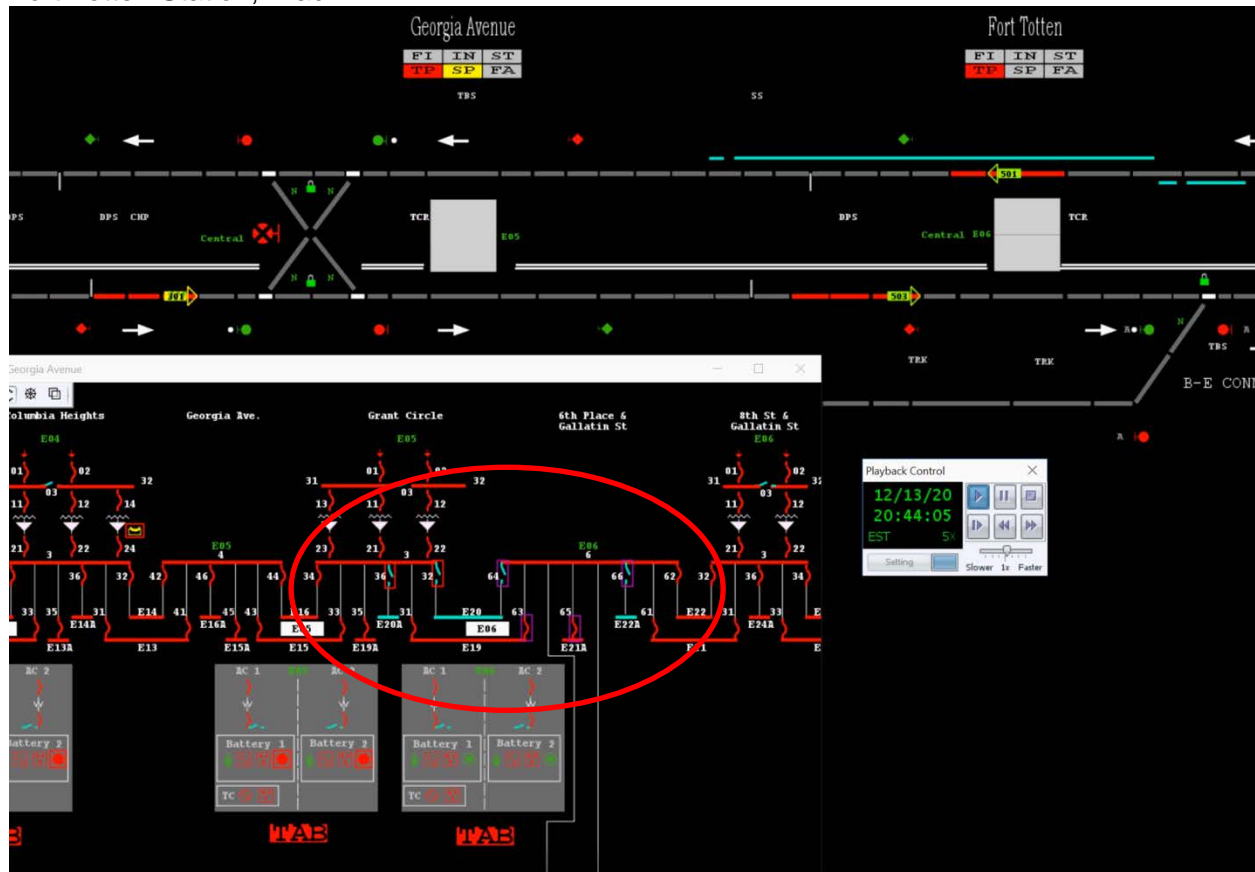


Photo 1 – Time Frame from 20:42:55 hrs. to 20:44:15.

At a time frame from approximately 20:45:00 hrs. to 20:47:15 hrs., the Train Operator of Train ID 307 [Yellow Line] serviced Fort Totten Station and at 20:47:10 hrs. During this time frame, AIMS playback indicated breakers 36, 32, 64, and 66 opened uncommanded third-rail power de-energized again for a duration of 55 seconds from 20:47:20 hrs. - 20:48:05 hrs.]

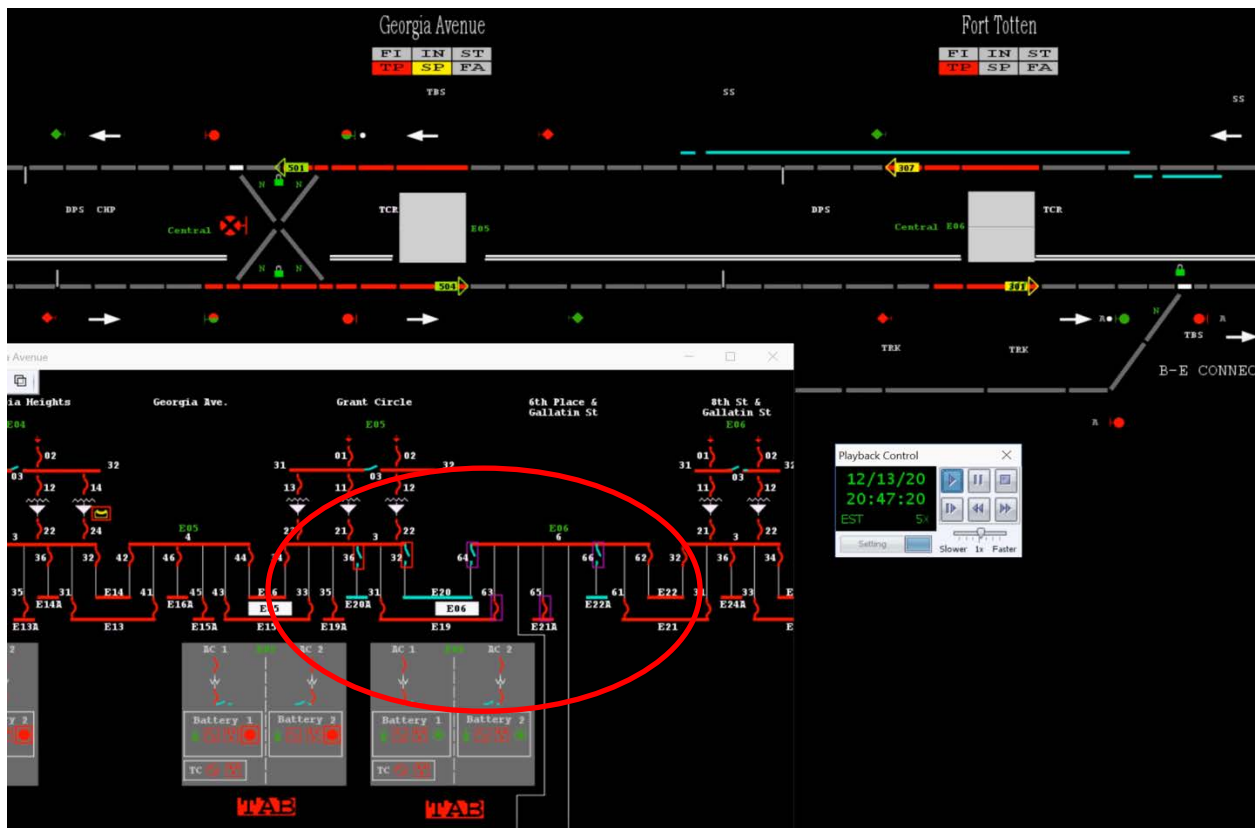


Photo 2 - 20:45:00 hrs. to 20:47:20 hrs.

At approximately 20:48:05 hrs., ROCC remotely commanded Breakers 66 and 64 closed remotely, and third-rail power was reenergized.



Photo 3 – Power reenergized within Fort Totten platform limits

At approximately 20:57:55 hrs., breaker #36, 32, 64, and 66 open uncommanded and Third-rail power de-energized at Fort Totten Station, Track 2. After Train ID 502 [Green Line,] Train Operator departed Fort Totten Station, and Train ID 308 [Yellow Line] Train Operator approached Fort Totten Station, Track 2. Breaker #66 opened and de-energized a third-rail section before Fort Totten Station, Track 2.

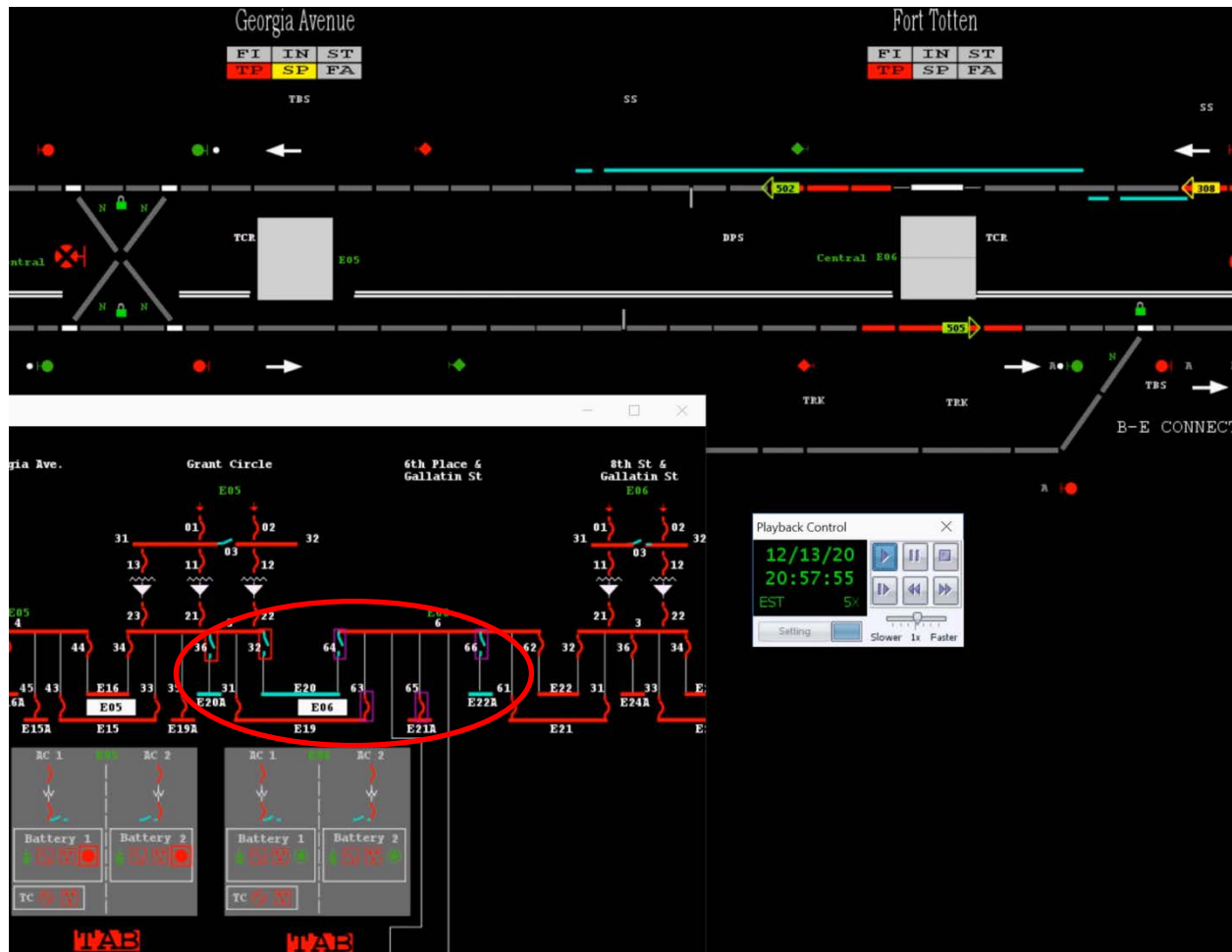


Photo 4 – Breaker #36, 32, 64, and 66 showed open as Train ID 502 Train departed Fort Totten Station.

At approximately 20:58:25 hrs., ROCC remotely commanded breakers #64 and #66 closed, and third-rail power was reenergized briefly.

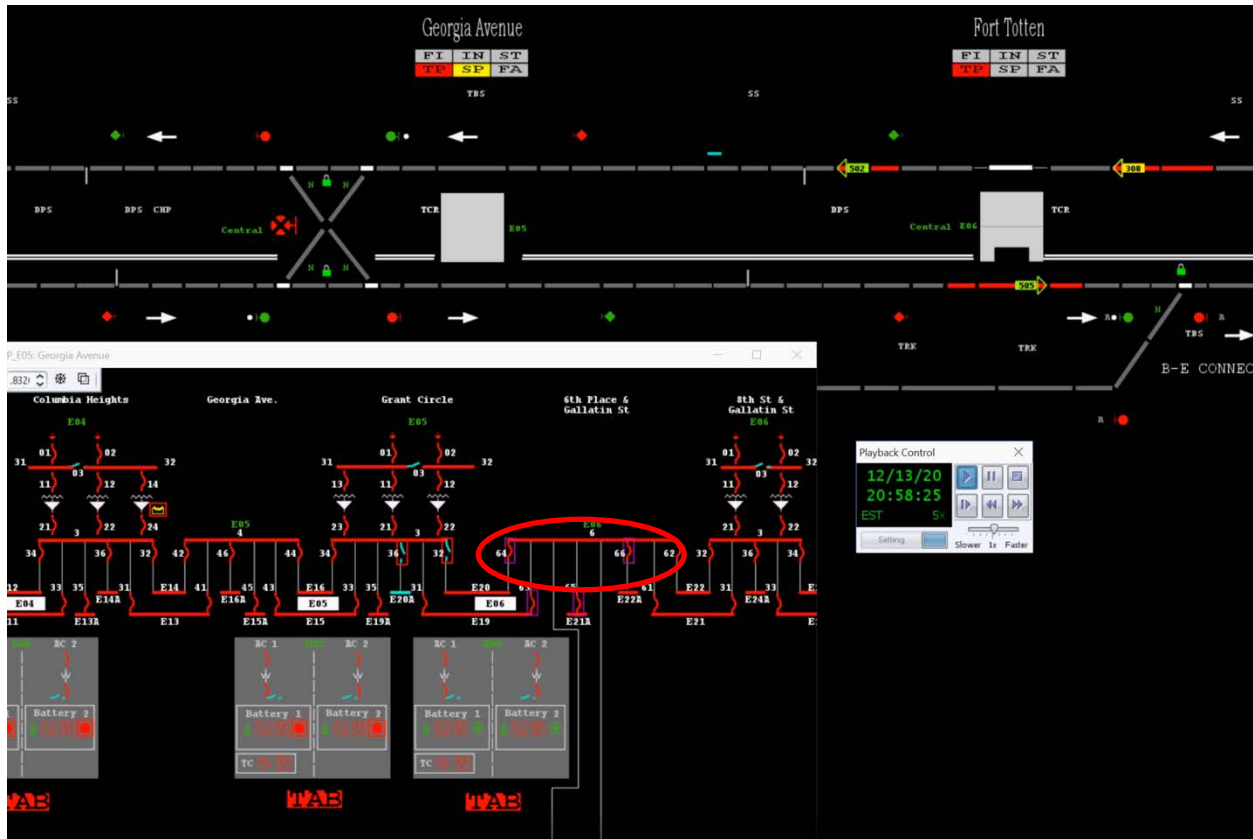


Photo 5 – Breakers #64 and #66

At approximately 20:58:40 hrs., the AIMS indicated breakers #66 and #64 opened [tripped] uncommanded at Fort Totten Station, TBS #2 resulting in third-rail power to de-energize once again. Train ID 502 [Green Line] and Train ID [Yellow Line] 308 moved slightly and stopped.

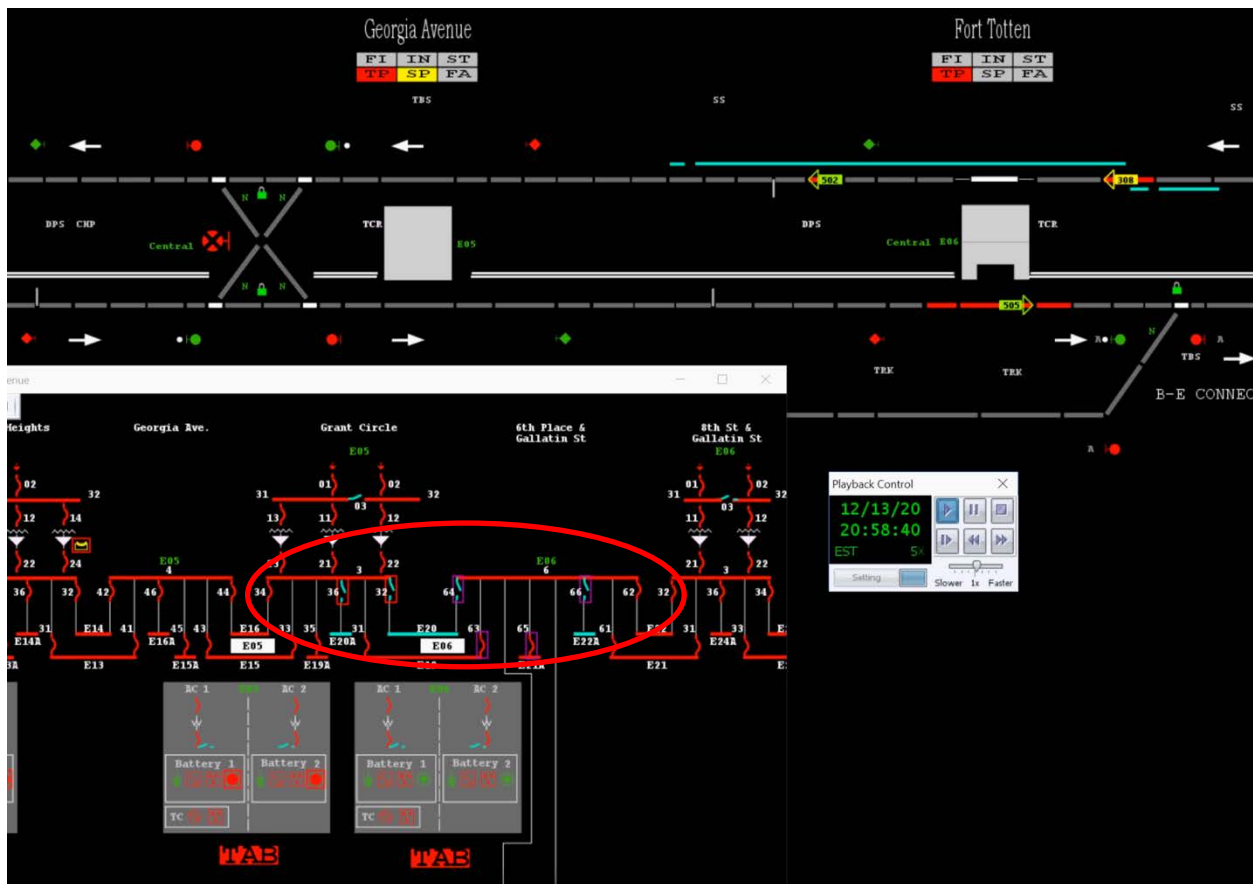


Photo 6 – Breakers #64 and #66 tripped uncommanded, and trains became stranded.

Train ID 308 [Yellow Line] traveling to Huntington stopped in approach to Fort Totten Station, Track 2, and Train ID 502 [Green Line] traveling towards Branch Avenue stopped after leaving Fort Totten, Tack 2, after losing propulsion due to a de-energized third-rail. Train ID 308 and Train ID 502 did not have any portion of the consists within the platform limits. The ROCC attempted to close the open breakers remotely to no avail.

A review of Fort Totten and Georgia Ave-Petworth Station CCTV platform playback verified the MTPD Officials statements:

On December 13, 2020, CCTV footage showed an RTRA Supervisor approach the end gate at Fort Totten and observed the tunnel area.

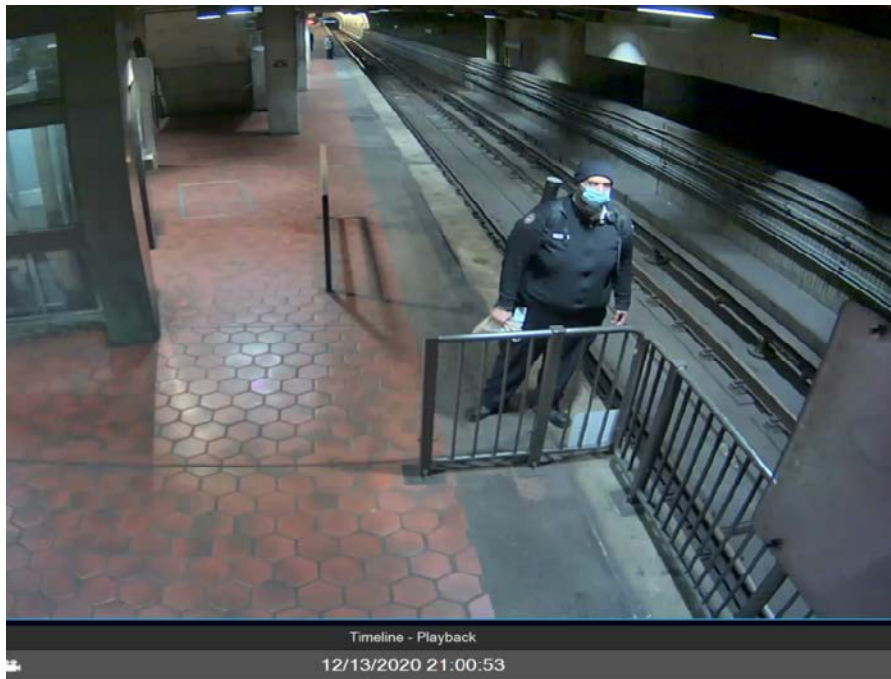


Photo 7 – At 21:00:53 hrs, an RTRA Supervisor was observing the disabled train.

The RTRA Supervisor then is observed removing their high visibility vest from their book bag and put on the vest. The RTRA Supervisor appeared equipped with the proper PPE, a Hot Stick, and High Voltage Gloves from the previous event (cat on the roadway).

MTPD Sergeant #1 arrived at Georgia Ave-Petworth Station and assumed Incident Command. MTPD Forward Liaison and MTPD officer arrived at Georgia Ave-Petworth Station and went beyond the end gate towards the down train. Upon arrival to the down train, MTPD Forward Liaison and MTPD Officer went beyond the handrail [positioned in close proximity to the train]. They boarded Train ID 308 outside of Fort Totten Station.

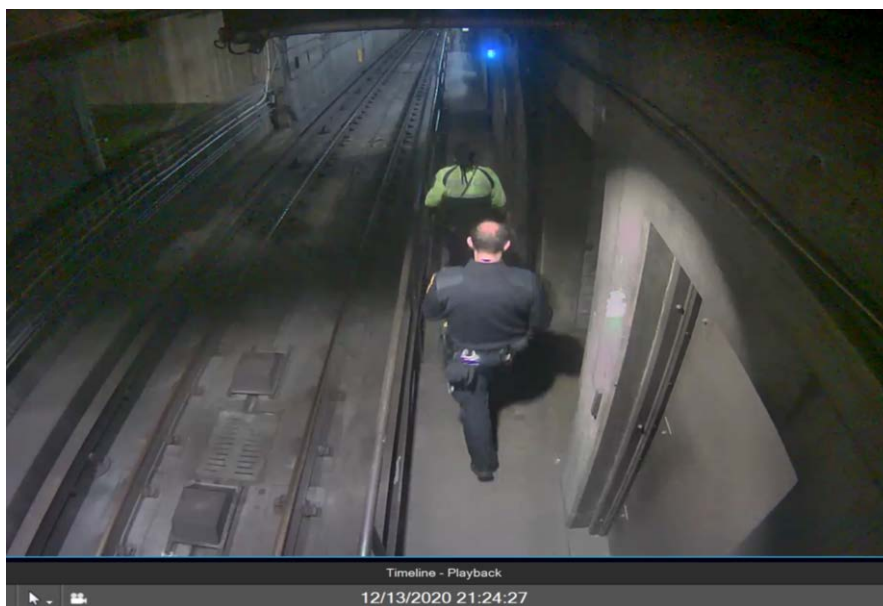


Photo 8 –At 21:24:27 hrs., MTPD Forward Liaison and MTPD Officer Fort Totten Station

The RTRA Supervisor went beyond the end gate to hot stick and confirmed the third rail was de-energized. DCFEMS arrived on the scene with WSAD but remained on the platform.

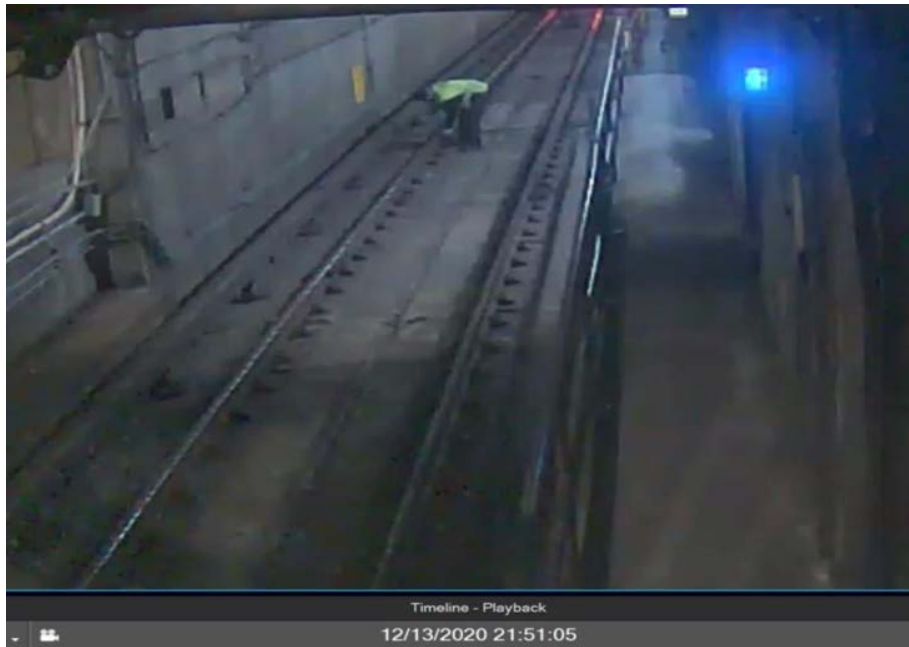


Photo 9 – at 21:51:05 hrs., an RTRA Supervisor Hot Stick and confirming third rail power was de-energized Fort Totten Station.

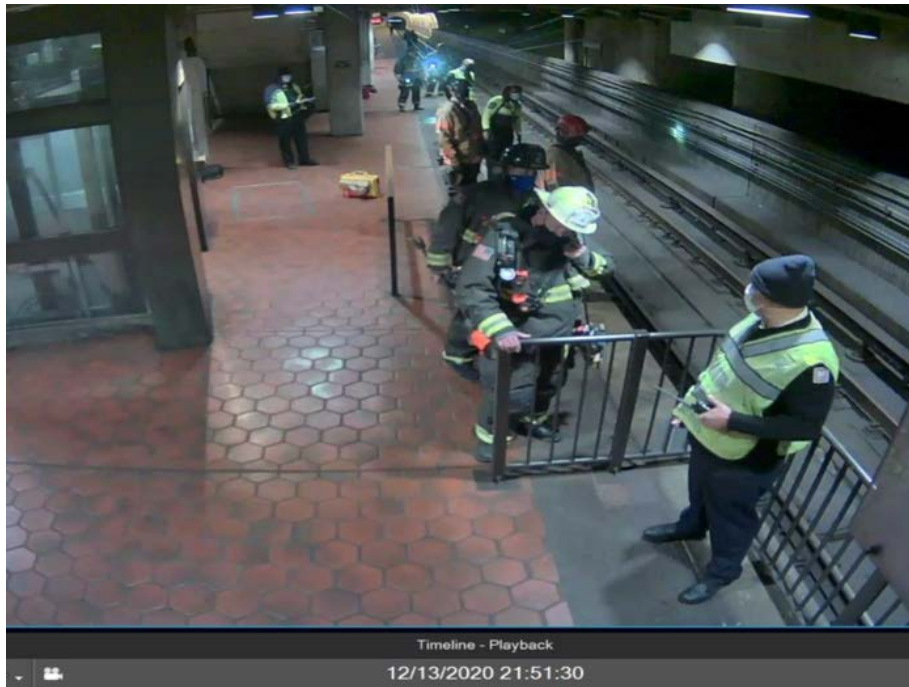


Photo 10 – DCFEMS Arrival at Fort Totten with WSAD at 21:51:30 hrs.

An MTPD Lieutenant arrived on the scene at Fort Totten Station and assumed the incident commander role from MTPD Sergeant #1. The MTPD Sergeant #1 and one MTPD Officer began walking towards Fort Totten Station's opposite end, Track 2 towards Train ID 502 stuck between Fort Totten Station and Georgia Ave-Petworth's direction. DCFEMS arrived on the scene with

WSAD but remained on the platform. The RTRA Supervisor went beyond the end gate to hot stick and confirmed the third rail was de-energized.

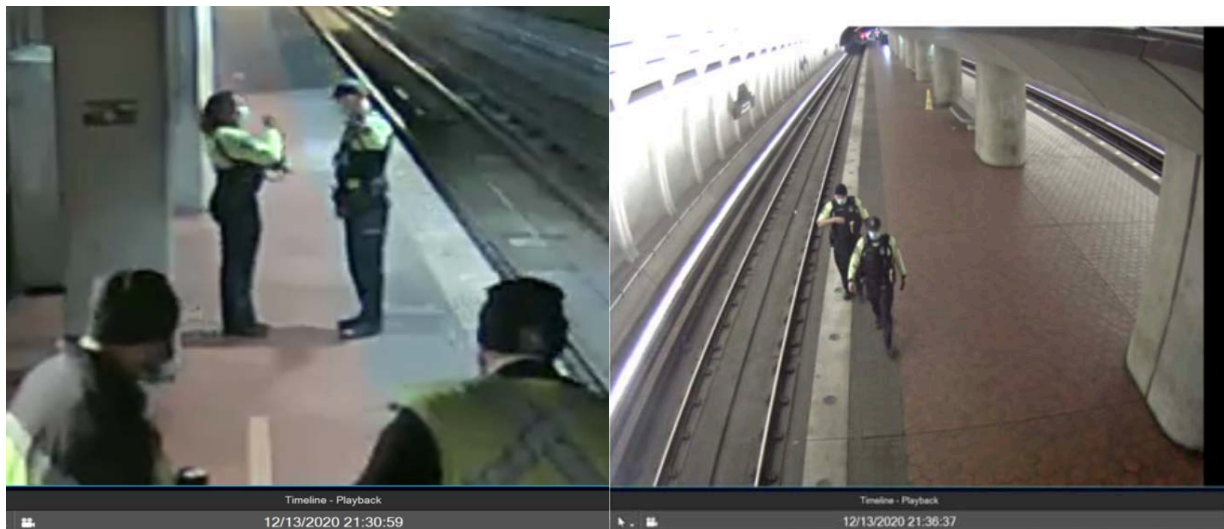


Photo 11 – MTPD Lieutenant [IC] and MTPD Sergeant #1 Photo 12 – MTPD Sergeant #1 with Officer

MTPD Sergeant #1 and the MTPD Officer go beyond the end gate. It is undetermined if they remained on the platform until the Lieutenant IC permitted Sergeant #1 and MTPD Officer to enter the roadway to conduct the evacuation. After the RTRA Supervisor confirmed the third rail was de-energized, the video shows the RTRA Supervisor walk towards Train ID 308 and position themselves in front of Train ID 308. Passengers began evacuating and walking via the catwalk to the platform limits.



Photo 13 – RTRA Supervisor walks towards the down train at 21:52:12 hrs.

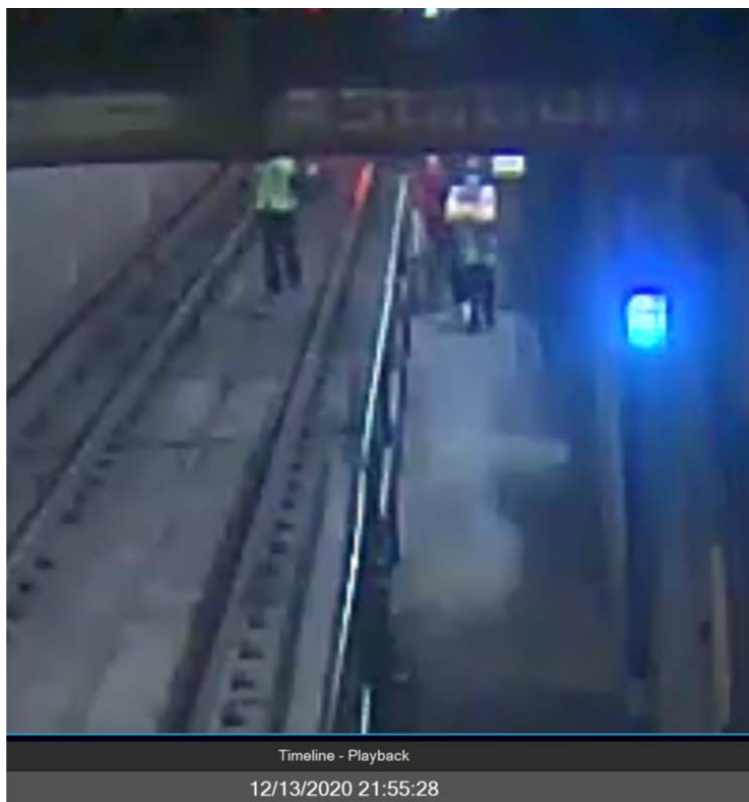


Photo 14 – Passenger evacuation began at 21:55:28 hrs.

At this time, no WSAD is deployed on the third rail. The evacuation started at approximately 21:51 hours and was completed at approximately 21:56 hours. Seven (7) Total passengers evacuated from Train ID 308, including one small child.

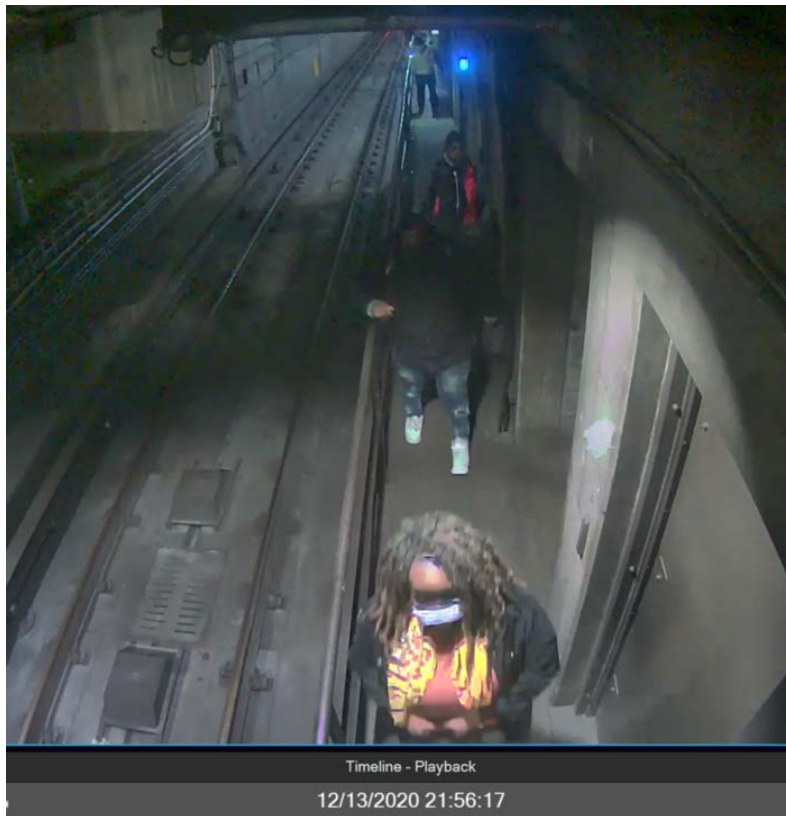


Photo 15 – At 21:56:17 hrs. Customers evacuating

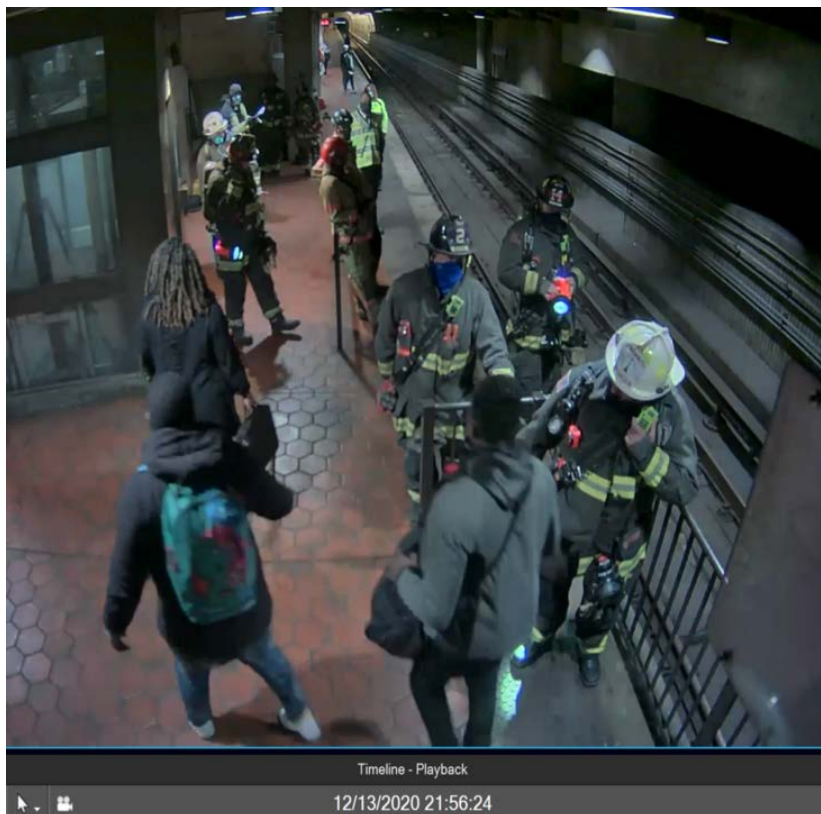


Photo 16 – At 21:56:24 hrs., the last customer evacuated to the platform limits

MTPD and DCFEMS departed Fort Totten Station to render assistance at Georgia Ave-Petworth. MTPD Sergeant #3 arrived at Georgia Ave-Petworth and assumed command at the 8-car marker on the approach end of Track 2. Shortly after, an RTRA Supervisor and DCFEMS personnel arrive. The DCFEMS is seen bringing their WSAD to the event location; the WSAD was not used by MTPD nor DCFEMS.

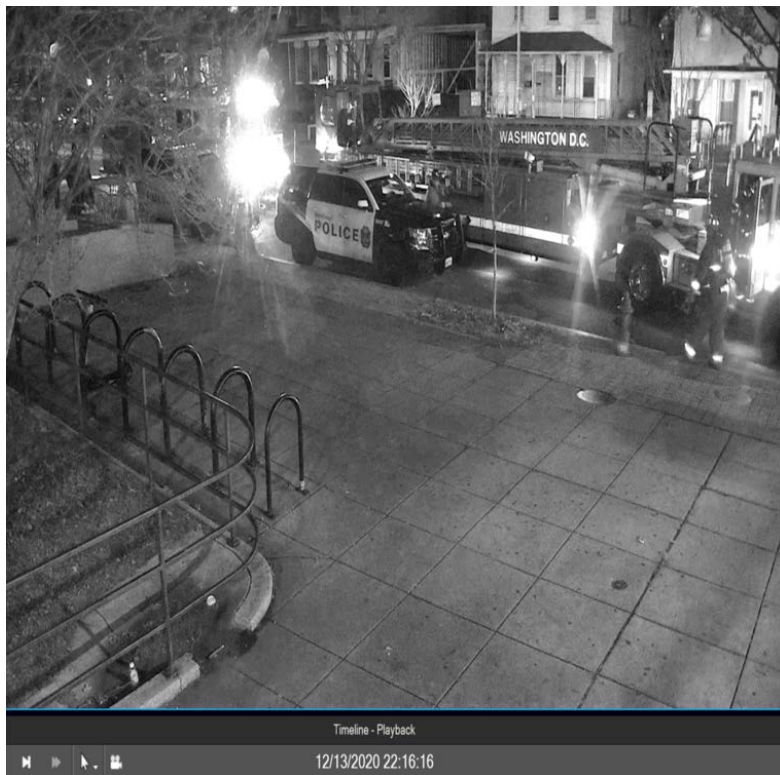


Photo 17 – DCFEMS and MTPD arrive at Georgia Ave Petworth at 22:16:16 hrs

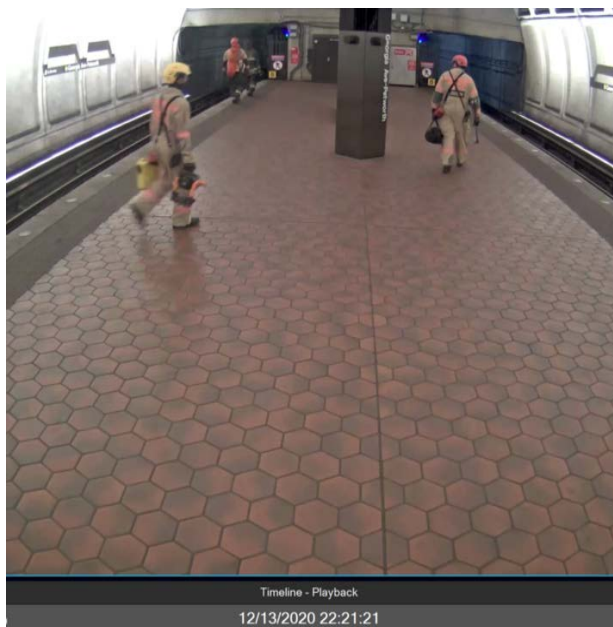


Photo 18 – DCFEMS with WSAD at 22:21:21 hrs.

The DCFEMS did not appear to assist in the evacuation process due to WMATA personnel not following safety procedures with WSADs. An OEM employee arrived on Georgia Ave-Petworth's

platform with another WSAD, hot stick, and HV Gloves. The OEM employee eventually goes beyond the end gate with HV gloves only, Sergeant IC, and one RTRA Supervisor.

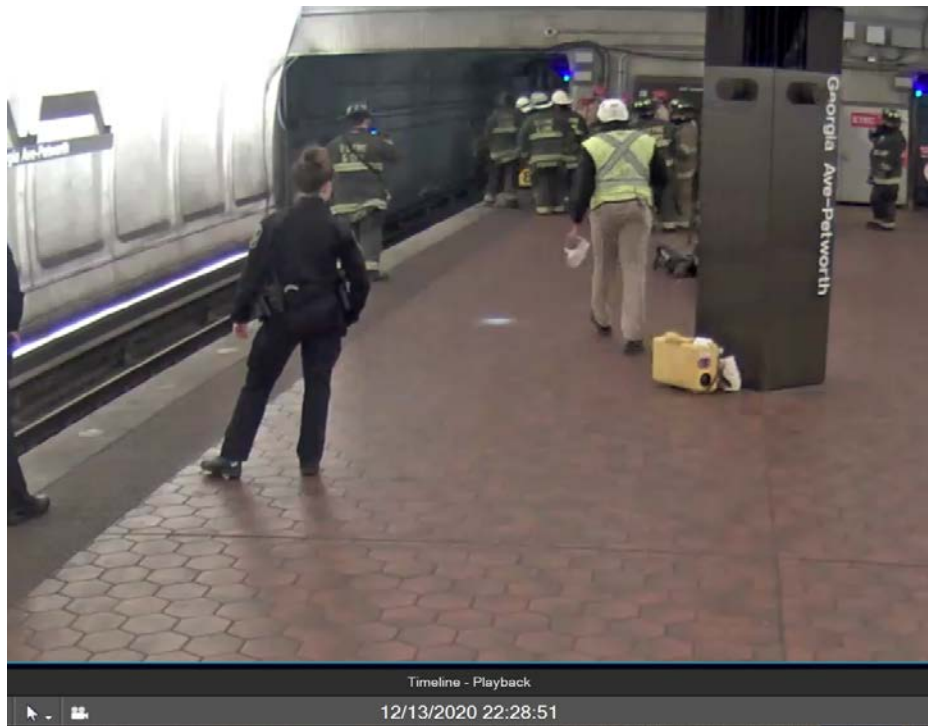


Photo 19 – At 22:28:51 hrs. OEM employee with HV gloves

Approximately 16 minutes later, 13 customers evacuate to the platform via the end gate access area. MTPD Sergeant #1 from Fort Totten, MTPD Sergeant #3 IC at Georgia Ave-Petworth, one MTPD Officer from Fort Totten, an OEM employee, and one RTRA Supervisor return to the platform limits.

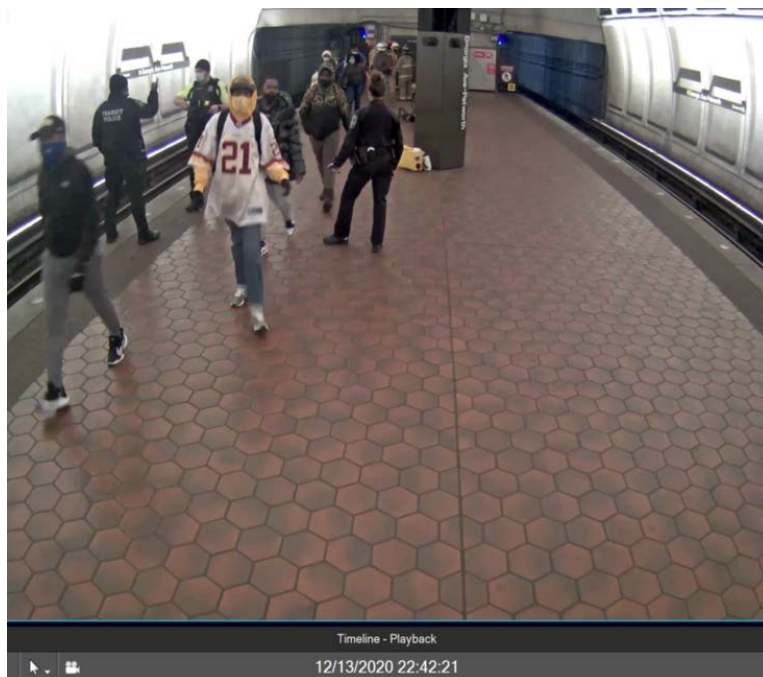


Photo 20 – At 22:42:21 hrs. Evacuated Customers

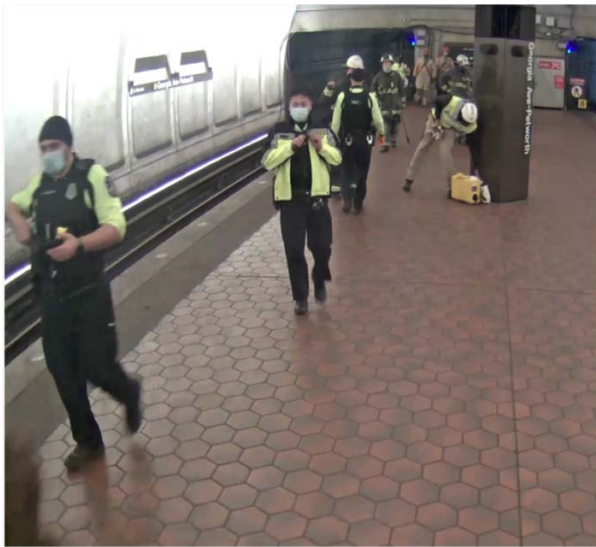


Photo 21 – Three MTPD Officers OEM and RTRA.

At 22:43:50 hrs., DCFEMS departed Georgia Ave-Petworth Station.



Photo 22 – At 22.43.59 hrs. DCFEMS began their departure.

Chronological Event Timeline

ARS and Phone analysis revealed:

Time	Description
20:44:05 hrs.	<ul style="list-style-type: none"> AIMS playback indicated breakers 36, 32, 64, and 66 opened uncommanded and de-energized third-rail power briefly from 20:44:05 – 20:44:15 hrs., before Train ID 501 departed Fort Totten Station, Track 2. [AIMS].

20:57:55 hrs.	<ul style="list-style-type: none"> Breakers #36, 32, 64, and 66 open uncommanded and Third-rail power de-energized at Fort Totten Station, Track 2. Note: No radio communication occurred on OPS 3 during the time parameters of 20:44:55-20:57:55 hrs.
20:58:57 hrs.	<ul style="list-style-type: none"> <u>Radio RTC</u>: contacted the Train Operator of Train ID 308 and requested the Train Operator operate their train in power mode [P3]. [Radio]
20:59:18 hrs.	<ul style="list-style-type: none"> <u>The Train Operator of Train ID 308 stated</u>: "Copy, my Train says no dynamic braking and reduced propulsion. <u>The Radio RTC</u>: "Just P3 over." [Radio]
20:59:38 hrs.	<ul style="list-style-type: none"> <u>The Radio RTC</u>: "Train ID 502, are you moving at this time over." <u>Train Operator of Train ID 502 stated</u>: Their train was slowly coming to a stop on emergency lighting the train has no third-rail voltage. <u>The Radio RTC</u>: Copied Train ID 502 Transmission and responded, "Can you go P3 over there." <u>The Train Operator of Train ID 502 stated</u>: No third-rail on none of the cars. [Radio]
21:01:13 hrs.	<ul style="list-style-type: none"> <u>RTRA personnel</u>: Notified the Radio RTC power personnel were speaking with the Train Operator on Track 2. [Radio]
21:01:32 hrs.	<ul style="list-style-type: none"> <u>Train Operator of Train ID 502</u>: Asked the Radio RTC, "what do you want me to do?" <u>The Radio RTC</u>: Instructed the Train Operator of Train ID 502 to make good announcements to your customers. We are trying to restore third-rail power. [Radio]
21:04:00 hrs.	<ul style="list-style-type: none"> <u>MOC Power Desk</u>: "What is going on at E05?" <u>TRPM Personnel</u>: "E05, a crew is going to close breakers 32 and 36 right now." <u>MOC Power Desk</u>: "Who is it?" <u>TRPM personnel</u>: "1196 and 1308, and once they're finished, they are going to go to E06 Tie Breaker to close circuit breaker 64 and 66." <u>MOC Power</u>: "What is their ETA?" <u>TRPM Personnel</u>: "I'm saying it right now; they are going downstairs." <u>MOC Power Desk</u>: "Okay, Did central try to double trip those breakers?" <u>TRPM Personnel</u>: "Yes, they did." <u>MOC Power Desk</u>: "They locked out on both sides." <u>TRPM Personnel</u>: "Yes, I told them it does not show on my alarm." <u>MOC Power Desk</u>: "Yes, we are looking at dead rail, okay." [Phone]
21:05:27 hrs.	<ul style="list-style-type: none"> <u>Radio RTC</u>: "Advise on Train ID 308 at this time over." [Radio]
21:05:32 hrs.	<ul style="list-style-type: none"> <u>RTRA Supervisor</u>: "I am looking right at it over." [Radio]
21:05:35 hrs.	<ul style="list-style-type: none"> <u>Radio RTC</u>: "Copy that 308, you are looking at 308" [Radio]

21:05:47 hrs.	<ul style="list-style-type: none"> • <u>Radio RTC</u>: Made appropriate announcements to OPS 3, notified Train Operators of third rail power issue at Fort Totten and instructed all trains in the area to make good announcements to their customers. [Radio]
21:06:03 hrs.	<ul style="list-style-type: none"> • <u>Unknown Field Personnel at E06-06</u>: "E06-6." • <u>ROCC</u>: "They lost the Third rail, the breaker tripped, and the third rail is dead." • <u>Unknown Field Personnel at E06-06</u>: "The trains are dead." • <u>ROCC</u>: "No, the third rail." • <u>Unknown personnel</u>: "We just have to listen on the radio." • <u>ROCC</u>: "Yes, standby, they might start single tracking again." [Phone]
21:06:19 hrs.	<ul style="list-style-type: none"> • <u>ROCC Assistant Superintendent</u>: Hey, We have third rail power de-energized at Fort Totten Track two. We have trains sitting on dead Third Rail. Power is on the scene, closing breakers manually. We were unable to close them remotely from ROCC. • <u>SAFE</u>: "How did the trains get on the dead third rail? Were they already sitting, and then the breakers tripped?" • <u>ROCC Assistant Superintendent</u>: Yes, they were leaving the platform; central control did not touch anything; they call it a rate of rise. The breaker opened un-commanded." • <u>SAFE</u>: Were the trains sitting still or moving? • <u>ROCC Assistant Superintendent</u>: "It was nothing central control did; They call it a rate of rise, so the breakers pop open as a safety precaution type of thing. Typically we can close them from in here, but for some reason, it is not allowing us; that's why the power crew is on scene trying to bring them back up manually." • <u>SAFE</u>: "How long has the train been sitting?" • <u>ROCC Assistant Superintendent</u>: "Approximately seven minutes." [Phone]
21:15:52 hrs.	<ul style="list-style-type: none"> • <u>TRPM</u>: Notified MOC Power desk their ETA was two minutes to E06-06 • <u>MOC Power Desk</u>: "That is a good copy, two minutes." [Radio]
21:16:14 hrs.	<ul style="list-style-type: none"> • <u>ROCC Assistant Superintendent</u>: "You may have been notified already, but we have power de-energized at Fort Totten under two trains." • <u>MTPD Dispatch</u>: "Okay, so I do not have that call; what is it de-energized for?" • <u>ROCC Assistant Superintendent</u>: "Fort Totten yellow, green line breakers opened by themselves. I have power personnel en route to manually close the breakers because we are unable to close them from here remotely." • <u>MTPD Dispatch</u>: all right, thank you.
21:17:01 hrs.	<ul style="list-style-type: none"> • <u>ROIC</u>: "Did you start single tracking?" • <u>Buttons Controller</u>: "Yes, we are about to start now." • <u>ROIC</u>: "Okay." [Phone]
21:18:29 hrs.	<ul style="list-style-type: none"> • <u>TRPM</u>: notified MOC Power Desk they were on location at Fort Totten Station. • <u>MOC Power Desk</u>: Gave TRPM personnel permission to enter the Traction Power room.

21:20:58 hrs.	<ul style="list-style-type: none"> • <u>Carmen Turner Facility (CTF) ROIC Specialist</u>: This is central control. • <u>MTPD Dispatch</u>: "This is MPTD. Where are you guys located right now?" • <u>CTF ROIC Specialist</u>: I am at CTF, but we have a shift down at Jackson Graham Building (JGB) also • <u>MTPD Dispatch</u>: So It is going to be JGB and CTF • <u>CTF ROIC Specialist</u>: Yes, because they are still running the delay from JGB • <u>MTPD Dispatch</u>: Okay, is everyone going over to CTF or just both buildings." • <u>CTF ROIC Specialist</u>: No, what happened was the nine o'clock crew came in at CTF. We were supposed to change over from JGB to CTF at 21:00 hrs. But we are running a delay, and the RTC's have control of the AIMS screen; once they clear the delay, they will switch everything over, and we will be working from CTF. • <u>MTPD Dispatch</u>: "Okay, we just needed to know so we can send our sergeant over for Fort Totten." [Phone] • <u>CTF ROIC Specialist</u>: Transferred the Call to ROCC Assistant Superintendent. • <u>MTPD Dispatch</u>: "The only thing is we need a sergeant to respond to where you guys do you want them at CTF or JGB?" • <u>ROCC Assistant Superintendent</u>: "JGB." • <u>MTPD Dispatch</u>: "Okay."
21:27:09 hrs.	<ul style="list-style-type: none"> • <u>CTF MOC Power Desk</u>: "MOC." • <u>Unknown ROCC personnel</u>: Do we have personnel in the room at Fort Totten? • <u>CTF MOC Power Desk</u>: I know they are definitely in the room. I am trying to figure out what is going on • <u>Unknown ROCC personnel</u>: So why haven't they closed the Breaker • <u>CTF MOC Power Desk</u>: I don't know, trying to figure that out; they have been communicating with personnel still at JGB. [Phone]
21:28:42 hrs.	<ul style="list-style-type: none"> • <u>The Radio RTC</u>: Contacted the RTRA Supervisor and asked if they could evacuate the customers? • <u>The RTRA Supervisor</u>: Responded that MTPD was on location. [Radio]
21:31:07 hrs.	<ul style="list-style-type: none"> • <u>SAFE</u>: "What is going on with the trains at Fort Totten?" • <u>ROCC Assistant Superintendent</u>: Power is on the scene; they are having trouble closing the breakers. Power is troubleshooting now. MTPD is on scene getting a headcount we may need to evacuate. • <u>SAFE</u>: "Where are the trains in relation to Fort Totten?" • <u>ROCC Assistant Superintendent</u>: "One leaving the platform one in approach." • <u>SAFE</u>: "Are they in the platform limits?" • <u>ROCC Assistant Superintendent</u>: "No" • <u>SAFE</u>: "One is on the downtown end of Fort Totten, and the other one is on the other side." • <u>ROCC Assistant Superintendent</u>: "Can I give you a callback? I have transit here and everything else." • <u>SAFE</u>: "Okay."

21:32:54 hrs.	<ul style="list-style-type: none"> • <u>ROIC Specialist</u>: "Let me ask what you think I should do. They can't close the breakers; now they are talking about the evacuation of these two trains. Should we send the Fire Department? They Said MTPD would evacuate these trains." [Phone] • <u>ROIC Assistant Superintendent</u>: "I would send them for good measure." [Phone]
21:33:20 hrs.	<ul style="list-style-type: none"> • <u>The RTRA Supervisor</u>: Requested a CM for Train ID 502 from the Radio RTC per the request of MTPD. [Radio]
21:34:51 hrs.	<ul style="list-style-type: none"> • <u>ROIC Assistant Superintendent</u>: Called MTPD and requested if MTPD needed Fire Department personnel to evacuate the customers. • <u>MTPD Dispatch</u>: "They have not requested it on our side."
21:38:10 hrs.	<ul style="list-style-type: none"> • <u>JGB MOC Assistant Superintendent</u>: "Hey, they said they are not going to bring the power-up. They are going to evacuate it first." • <u>CTF MOC Assistant Superintendent</u>: "Did someone call the Fire Department." • <u>JGB MOC Assistant Superintendent</u>: "I cannot hear you." • <u>CTF MOC Assistant Superintendent</u>: "Did someone call the Fire Department." • <u>JGB MOC Assistant Superintendent</u>: "Yes, The ROCC Assistant Superintendent said the ROIC Specialist called the Fire Department."
21:38:36 hrs.	<ul style="list-style-type: none"> • <u>DCFEMS dispatch</u>: "Metro Station Rescue Alarm Engine 14, Truck 11, tower 3, Battalion Chief special ops, rescue squad 2, rescue squad 3, EMS and medic Safety Battalion Chief to respond report of a train stuck on tracks at Fort Totten Station." [DCFEMS Radio]
21:40:21 hrs.	<ul style="list-style-type: none"> • <u>DCFEMS Communications</u>: "Battalion Special Operations Communication get in contact with ROCC liaison." [DCFEMS Radio]
21:40:33 hrs.	<ul style="list-style-type: none"> • <u>TRPM</u>: Contacted MOC dispatch • <u>MOC Dispatch</u>: Notified TRPM does not energize breakers. • <u>TRPM</u>: Notified them that Radio communication was bad in the TBS room • <u>MOC Dispatch</u>: confirmed and reinstructed TRPM to notify personnel upon arrival and not energize the respective breakers.
21:47:02 hrs.	<ul style="list-style-type: none"> • <u>DFCD Battalion Chief</u>: Notified dispatch on scene and assumed Fort Totten Station Command and unified with MTPD. [DCFEMS Radio]
21:53:34 hrs.	<ul style="list-style-type: none"> • <u>MTPD</u>: Notified MOC COMM of portable radios unable to transmit at Fort Totten Station [tunnel area]. • <u>MOC COMM</u>: Opened a Maximo ticket for the radio failure.
21:56:53 hrs.	<ul style="list-style-type: none"> • <u>DFCD Communications</u>: Notified Battalion Special Operations Communication and provided an incident time of 10-minutes. [DCFEMS Radio]
22:07:30 hrs.	<ul style="list-style-type: none"> • <u>DCFEMS Communications</u>: "Communications to Galloway street command, you have a 20 - minute duration. Are you okay?" • <u>Battalion Chief</u>: "We are doing an accountability with the units now MTPD evacuated the first train that was between West Hyattsville and

	unintelligible with a total of 10 persons that were brought back to the platform we are now going to relocate to the Georgia Ave-Petworth Station closer to that train and MTPD will escort those persons to that station a total number given was 14 people" [DCFEMS Radio]
22:15:03 hrs.	<ul style="list-style-type: none"> • <u>Battalion Chief</u>: "The portion of the accountability was complete all members accounted for all units report to the Georgia Ave-Petworth Station scene and working with Metro Transit" [DCFEMS Radio]
22:15:36 hrs	<ul style="list-style-type: none"> • <u>Radio RTC</u>: Contacted RTRA Supervisor 56 and requested an update regarding the customers on Train ID 502 • <u>RTRA Supervisor 56</u>: Notified they need a ride to Georgia Ave-Petworth and would communicate with MTPD for transportation support. • Radio RTC: Confirmed the transmission. [Radio]
22:15: 56 hrs	<ul style="list-style-type: none"> • <u>RTRA Supervisor 64</u>: Notified the Radio RTC that they were at Georgia Ave-Petworth, and the train was not close enough to the platform for them to see. • <u>Radio RTC</u>: Confirmed the transmission and asked if the RTRA Supervisor had a working hot stick. • <u>RTRA Supervisor 64</u>: Confirmed they had a working hot stick. [Radio]
10:16:17 hrs.	<ul style="list-style-type: none"> • <u>Radio RTC</u>: Confirmed the transmission and began giving RTRA Supervisor 64 prohibit exits and blue block human form repeat back instructions for Foul Time Protection to enter the roadway to verify third rail power was de-energized. • <u>RTRA Supervisor 64</u>: Confirmed prohibit exits and blue block repeat back instructions. [Radio]
10:17:16 hrs.	<ul style="list-style-type: none"> • <u>RTRA Supervisor 64</u>: Contacted the Radio RTC and inform them that MTPD denied their access to the roadway until authorization is received from the command post. • <u>Radio RTC</u>: Confirmed RTRA Supervisor 64's radio transmission and said advise central when you receive permission to go onto the roadway. [Radio]
10:19:22 hrs.	<ul style="list-style-type: none"> • <u>RTRA Supervisor 64</u>: Notified the Radio RTC that they received permission from the incident command post. • <u>Radio RTC</u>: Confirmed the transmission and reiterated prohibit exits. Blue block human form repeat back instructions for Foul Time Protection to enter the roadway to verify third rail power was de-energized. • <u>RTRA Supervisor 64</u>: Confirmed prohibit exits, and blue block human form repeat back instructions. [Radio]
10:21:24 hrs.	<ul style="list-style-type: none"> • <u>RTRA Supervisor 64</u>: Contacted the Radio RTC and reported that Third rail power was confirmed de-energized • <u>Radio RTC</u>: Confirmed repeat back and stated Fire Department is on the scene at this time. [Radio]
10:23:11 hrs.	<ul style="list-style-type: none"> • <u>RTRA Supervisor 64</u>: Contacted the Radio RTC and stated the Fire Department would like to know if there is a Chain Marker location of the stranded train. [Radio]

	<ul style="list-style-type: none"> • <u>Radio RTC</u>: Responded and stated, it is close to Echo two, two fourteen plus double zero [E2 214+00] [Radio]
10:25:09 hrs.	<ul style="list-style-type: none"> • <u>RTRA Supervisor 64</u>: Fire Department would like to know if Third rail power is de-energized up to E2 214 +00. I hot stucked and confirmed at E2 179+00 • <u>Radio RTC</u>: You can escort the Fire Department down to that location and confirm power is de-energized at that location. • <u>RTRA Supervisor 64</u>: Confirmed the Radio RTC transmission. [Radio]
10:24:43 hrs.	<ul style="list-style-type: none"> • <u>RTRA Supervisor 56</u>: Notified the Radio RTC that they were en route to Georgia Ave-Petworth Station. • <u>Radio RTC</u>: Confirmed RTRA Supervisor 56 transmission. [Radio]
10:26:32 hrs.	<ul style="list-style-type: none"> • <u>Radio RTC</u>: Contacted RTRA Supervisor 64 and stated they have information that MTPD is escorting customers off Train ID 702 • <u>RTRA Supervisor 64</u>: Confirmed the Radio RTC transmission and asked the Radio RTC which direction. RTRA Supervisor 64 stated that there was no one escorted off the train towards Georgia Ave-Petworth station at the present time and that the Fire Department was still at Chain Marker E2 179+00. [Radio]
10:27:28 hrs.	<ul style="list-style-type: none"> • <u>Radio RTC</u>: Stated to RTRA Supervisor 64, the information that I have MTPD officers are on Train ID 702 and currently escorting passengers towards Georgia Ave-Petworth at this time. • <u>RTRA Supervisor 64</u>: Copied the Radio RTC transmission and stated they would confirm. [Radio]
10:33:32 hrs.	<ul style="list-style-type: none"> • <u>RTRA Supervisor 56</u>: Notified the Radio RTC that they arrived at Georgia Ave-Petworth and heading to the command post. [Radio]
10:36:20 hrs.	<ul style="list-style-type: none"> • <u>RTRA Supervisor 64</u>: Contacted the Radio RTC and confirmed MTPD offloaded the passengers in Georgia Ave-Petworth station, and all customer were clear of the train. • <u>Radio RTC</u>: Confirmed the transmission and stated let them know when all the passengers are safely on the platform at Georgia Ave-Petworth station. [Radio]
10:43:12 hrs.	<ul style="list-style-type: none"> • <u>RTRA Supervisor 64</u>: Notified the Radio RTC that all 13 customers are safely aboard the platform. • <u>Radio RTC</u>: Confirmed RTRA Superviosr 64 transmission. [Radio]
22:44:05 hrs.	<ul style="list-style-type: none"> • <u>Battalion Chief</u>: "Georgia Ave-Petworth Station command to communications, a total of 13 passengers evacuated from the train to the platform here at Georgia Ave-Petworth Station we were just standing by while MTPD facilitated customers from the train to the platform. We will continue to hold the units, and I will provide further information" [DCFEMS Radio]
22:49:52 hrs.	<ul style="list-style-type: none"> • <u>Battalion Chief</u>: "Returning all units, all personnel were off the train, and WMATA will manage the rest of the incident." [DCFEMS Radio]

Metro Transit Police Department

On December 13, 2020, at 21:20 hrs., Officers responded to a call for trains being de-energized at Fort Totten Station located at 550 Galloway Street, NE. Train ID 308 was stationary at CM E2-269+00 in the platform's view at Fort Totten Station with seven passengers on board. In comparison, Train ID 502 was de-energized at CM E2-215+00 in the platform's view at Georgia Ave-Petworth Station with 13 passengers on board.

An MTPD Sergeant arrived on the scene at Fort Totten Station and established incident command at 21:24 hrs. a Rail Supervisor arrived on the scene along with a Bus Supervisor. Power personnel who were still on the scene from a previous incident involving retrieving a cat from the tracks advised they were aware of the situation; however, they could not estimate the time in which the tracks would be reenergized. MTPD Lieutenant 601 arrived on the scene and assumed incident command from the MTPD Sergeant. MTPD Sergeant boarded Train ID 308 along with MTPD Officer. After receiving confirmation from ROCC and rail personnel, the officers on board safely evacuated all seven passengers from Train ID 308 to the platform utilizing the catwalk in the tunnel with no injuries reported by any passengers or WMATA employees. DC Fire Engine #14 and DC Fire Truck #11 arrived on the scene and assisted with the evacuation. Metro Transit Police cleared Fort Totten Station at 22:26 hrs. and all units and WMATA supervisor personnel were redirected to Georgia Ave-Petworth Station to assist with the evacuation at that location. All passengers were transported to their location via shuttle bus or utilizing their own personal means

MTPD Sergeant arrived on scene at Georgia Ave-Petworth Station and established incident command at 21:24 hrs. The RTRA Supervisor arrived on the scene. The MTPD Sergeant and MTPD Officer arrived on the scene and boarded Train ID 502. MTPD Lieutenant arrived on scene and assumed incident command from MTPD Sergeant, and the MTPD Sergeant proceeded to boarded Train ID 502, acting as the forward liaison. After receiving confirmation from ROCC and rail personnel, the officers on board safely evacuated all 13 passengers from Train ID 502 to the platform utilizing the catwalk in the tunnel with no injuries reported by any passengers or WMATA employees. DC Fire Engine #14 and DC Fire Truck #11 arrived on the scene and assisted with the evacuation. Three additional officers also assisted with evacuating the train as well. Metro Transit Police Department cleared Georgia Ave-Petworth Station, and the scene in its entirety was turned over to Rail Supervisor at 22:47 hrs., concluding that incident. All passengers at Georgia Ave-Petworth Station were transported to their destination via shuttle bus or utilizing their own personal means."

Traction Power Maintenance

TRPM performed an internal investigation into the respective breakers [#64 and #66] opening uncommanded at Fort Totten TBS #2.

The investigation into the relays' status at Georgia Ave-Petworth TP revealed that breaker 32 had a defective SMC 176 relay. The AIMS playback indicated third rail power breakers opening and closing uncommanded approximately 5 times when 8-car consist's trains were leaving the E05 platform.

When the crews arrived at Georgia Ave-Petworth TP, they attempted to close breaker 32, and nothing happened. Later, it was determined that the 176 relay had burnt out from the breakers' high activity, constantly tripping and closing. TRPM restored Fort Totten Station TB on Saturday, December 12, 2020, after completing a switchgear change replacement. Before Saturday morning, December 12, 2020, there were no issues in this area. Inverse Definite Minimum Time (IDMT) is a protective function that provides high-speed protection of a circuit from fault current. It sends a signal to the circuit-breaker to trip if the current exceeds a given threshold (pickup current level) and if the overcurrent lasts longer than a time-delay. Both parameters are adjustable.

The TRPM response timeline is below:

- MOC notified the Region crew at 20:48 hrs.
- Region Crew arrived at Georgia Avenue Petworth TPSS at 21:21 hrs.
- Crews stated breaker 32 not reacting to any commands.
- MOC instructed regions Crews to vacate the room at 21:40 hrs., due to the customer evacuation.
- The second Preventative Maintenance Inspection (PMI) supervisor and crew arrived at approximately 22:04 hrs.
- Approximately 22:50 hrs. TRPM crew were allowed back in Georgia Ave-Petworth TPSS to continue troubleshooting.
- TRPM Region crews closed the Breaker, and rail reenergized approximately 23:05 hrs.
- No other investigation was needed at the TB since we identified the cause of the nuisance tripping.

Findings:

- Georgia Ave-Petworth TPSS: 176 (DC Overcurrent Protective Relay) and 182 (Load Measuring Relay) lost their negative control power on breaker 32; therefore, no reclosing of the breaker was possible at Georgia Ave-Petworth TPSS: Bad SMC 176 Relay on breaker 32 replaced
- Georgia Ave-Petworth TPSS: Flag on the Long T.O.C breaker 32
- Fort Totten TBS#2: Nuisance Trippings from the IDTM1 protective function (Timed Inverse Overcurrent) for Breaker 64 and 66.

TRPM corrective actions for the respective event are as follows:

- Re-established negative connection for the 176 (DC Overcurrent Protective Relay) and 182 (Load Measuring Relay) at Georgia Ave-Petworth TPSS
- Replaced the defective SMC 176 Relay on breaker 32 and adjusted protective settings at Fort Totten TBS#2 for Breakers 64 and 66.

- At Fort Totten TBS #2,DISABLED the IDTM1 protective function (Timed Inverse Overcurrent) on all breakers (62,64,67,63,61,69,66 & 65) pending further investigation with ENGA & MOWE

Office of System Maintenance

The Office of System Maintenance (SMNT) Communication Section (COMM) performed a comprehensive radio check and analysis at Fort Totten Station and did not find any discrepancies with the radio communication system.

The task within Maximo stated, "at Fort Totten Station, spoke to the station manager and MTPD officer on the scene, confirmed no comms problems, then spoke to the operator on Ops3 at ROCC, also confirmed no comms problem associated with this incident."

Interview Findings

Based on the investigation launched into the Fort Totten, Track #2 customer evacuation event, SAFE conducted five interviews via Microsoft teams, including the investigation team and relevant Metro management. These interviews were conducted over two weeks after the event and identified the following key findings associated with this event, as follows:

MTPD Lieutenant IC stated a WSAD was not used at either location. During the event, there were communication issues, and MTPD officers used cell phones to provide updates. The Lieutenant IC gave MTPD personnel permission to enter the roadway to board the respective trains. The MTPD Lieutenant authorized the customer to evacuate onto the roadway to the respective platforms. The MTPD Lieutenant IC noted they usually use a personal checklist [tick sheet] to account for respective processes; however, they did not have it that day. The MTPD Lieutenant IC requested if DCFEMS were going to assist, and the DCFEMS responded that they would not if no WSAD would be used.

MTPD Sergeant #2 Forward Liaison stated Train ID 308 on approach to Fort Totten Station was positioned close to the handrail by the catwalk. The MTPD Forward Liaison noted passengers were walking through the bulkhead door and requested to board the train to prevent customers from self-evacuating. The MTPD Forward Liaison stated there were customers of different body sizes who may have impeded safe passage on the catwalk, along with equipment fixed on the tunnel walls. The MTPD Forward Liaison requested the passengers be evacuated to the roadway via emergency ladder through the bulkhead door; to the handrail catwalk area. The MTPD Forward Liaison reported seven customers to include one small child evacuated safely to the platform limits. The MTPD Forward Liaison noted that all passengers remained on the non-third rail side during the evacuation.

The MTPD Sergeant #1 stated they arrived at Fort Totten Station and assumed IC. The MTPD Lieutenant arrived, and they transferred IC. The MTPD Sergeant walked towards the Georgia Ave-Petworth location with another MTPD Officer. Once beyond the end gate, the MTPD Sergeant was waiting for permission to enter the roadway. The Lieutenant IC granted permission, and they continued on the catwalk until they ran into obstructions and narrow passages. The MTPD Sergeant then stepped down into the roadway eventually boarded Train ID 502. The MTPD Sergeant stated there were radio communication issues, and they had to use cellphones to relay information. A total of 13 passengers were later evacuated onto the roadway with permission from Georgia Ave-Petworth IC to the handrail guarded catwalk. The MTPD Sergeant #1 indicated they

were out of the loop, specific to poor communication during the incident and who would meet them during the evacuation.

MTPD Sergeant #3 Forward Liaison

I arrived at Georgia Ave-Petworth Station; I did see the train in the tunnel at a distance. I was unsure how far; it was quite a distance, but I could see the lights. MTPD then attempted to ascertain which station was closer to the disabled train; through ROCC, we identified Georgia Ave-Petworth Station.

MTPD Lieutenant IC gave MTPD Sergeant #1 permission to enter the roadway for purposes of boarding the down train. MTPD Sergeant #1 notified the MTPD Lieutenant IC via radio that there were 13 passengers with no reported injuries. An RTRA Supervisor arrived at Georgia Ave-Petworth Station, went beyond the endgate to hot stick, and confirm third rail power was de-energized without permission initially. "I stopped the RTRA Supervisor and asked where they were going." The RTRA Supervisor stated they were going to the right of way to confirm third rail power was down. I notified the RTRA Supervisor that is fine, but we need permission from the MTPD Lieutenant IC before you into the right of way. RTRA Supervisor responded, "Okay, that's fine."

I notified the MTPD Lieutenant IC via radio that an RTRA Supervisor was requesting permission to enter the right of way to hot stick and confirm third rail power was down. The MTPD Lieutenant IC granted permission, and the RTRA Supervisor entered the roadway and confirmed that third rail power was de-energized. MTPD Sergeant #1 aboard Train ID 502 contacted the MTPD Lieutenant IC and requested permission to evacuate the customers. The MTPD Lieutenant IC granted MTPD Sergeant #1 permission to evacuate the train. I asked the DCFEMS are they coming down, they said no. I notified that their customers were evacuating, DCFEMS said they were not coming down. I, an RTRA Supervisor, and OEM personnel went out towards the train, met MTPD Sergeant #1, and evacuated customers to the platform. MTPD and DCFEMS personnel were on the Georgia Ave-Petworth platform, assisting upon arrival.

MTPD Sergeant #3 Forward Liaison did not recall a WSAD deployed at Georgia Ave-Petworth. The customers were in the middle of the roadway upon arriving at the down train to assist MTPD Sergeant #1 with evacuation. MTPD Sergeant #3 had a total of five WMATA personnel assisting with the evacuation.

The Fire Liaison Officer stated they knew what was going on, so there was no need for a turnover. The Fire Liaison kept the cameras active; the Fire Liaison Officer [Captain of Alexandria City] reported they did notice the RTC's still in the room. The Fire Liaison [Captain of Alexandria City] stated that while at JGB, they are located in the emergency management room where you cannot hear what was going on. The Fire Liaison mentioned a considerable amount of chatter on the Radio but assumed that the incident was over.

The Fire Liaison Officer [Captain of Alexandria City] packed up all the equipment, went to the locker, and locked up the radios. The Fire Liaison Officer [Captain of Alexandria City] stated they told everyone good night and mentioned that on a typical night, they would be the last ones leaving. The Fire Liaison Officer [Captain of Alexandria City] left JGB and received a call from the Fire Liaison Officer [Captain from Montgomery] and asked was anything going on when you left. The Fire Liaison [Captain of Alexandria City] responded, "Yeah, people were down there doing paperwork, but no one said anything about an incident."

Findings

- MTPD officers entered the roadway and conducted a train evacuation of customers from the train to the Fort Totten Station and Georgia Ave-Petworth Station platforms without proper PPE [WSAD]. This action is not in compliance with MSRP Section 5 RWP, which states, *"the WSAD must be used whenever third-rail power is de-energized to monitor for the inadvertent restoration of power. WSADs will be properly installed in a work zone so all Roadway Workers within the work zone can see the strobe light and hear the siren, should it be activated."*
- Fort Totten Station had two separate events occur in tandem from 19:30 hrs. – 23:15 hrs.
- The first event [animal wayside] started at approximately 19:30 hrs. ROCC de-energized third-rail power from Fort Totten Station to Georgia Ave-Petworth Station on Track 2.
- The first event [animal wayside] ROCC reenergized third-rail power at approximately 20:40:00 hrs. between Fort Totten Station to Georgia Ave-Petworth Station and resumed normal service; however, breakers 36 and 34 remained open and would not close with a section of third-rail de-energized between Georgia Ave-Petworth Station and Fort Totten Station on Track 2.
- Train Operator of Train ID 501 [Green Line] serviced Fort Totten Station at approximately 20:42:55 hrs. – 20:44:15 hrs. During this time frame, AIMS playback indicated third-rail power briefly de-energized from 20:44:05 – 20:44:10 hrs. before Train ID 501, Train Operator departed Fort Totten Station, Track 2.
- The Train Operator of Train ID 307 [Yellow Line] serviced Fort Totten Station between 20:45:00 hrs. – 20:47:15 hrs. At approximately 20:47:10 hrs. Third-rail power de-energizes again for a duration of 55 seconds [20:48:05 hrs.]
- The Train Operator of Train ID 502 serviced Fort Totten Station at approximately 20:57:00 hrs. – 20:57:30 hrs. At approximately 20:57:30 hrs. Third-rail power de-energized the third time at Fort Totten Station, Track 2 as Train ID 502 Train Operator departed Fort Totten Station. At 20:57:50 hrs., breaker #64 showed closed on the AIMS playback, and third-rail power reenergized Fort Totten Station, Track 2.
- At approximately 20:58:00 hrs., third-rail power de-energized un-commanded at Fort Totten Station, Track 2. After Train ID 502 [Green Line], Train Operator departed Fort Totten Station, and Train ID 308 [Yellow Line], Train Operator was approaching Fort Totten Station, Track 2. Breaker #66 opened and de-energized a third-rail section before Fort Totten Station, Track 2.
- At approximately 20:58:25 hrs. breakers #64 and #66 closed and reenergized third-rail power briefly. Breaker #64 and #66 opened un-commanded once again. Train ID 502 [Green Line] and Train ID [Yellow Line] 308 moved slightly and stopped.
- The on-duty FD Liaison was not in the ROCC during the incident.
- MTPD IC authorized MTPD officers to enter the roadway for purposes of boarding the stranded train.
- The on-duty Fire Liaison Officer admitted being in a non-work-related conversation with ROCC MTPD during the event.
- The outgoing Fire Liaison Officer admitted being knowledgeable of a power issue.
- ROCC was unable to notify the Fire Liaison Officer of the stranded train because they could not locate the outgoing Fire Liaison Officer.
- The outgoing Fire Liaison Officer did not leave JGB premises until the oncoming Fire Liaison Officer arrived at CTF for ROCC shift transfer due to COVID 19 cleaning protocols until 21:24 hrs.
- There is no JGB CCTV footage available to verify if the Fire Liaison Officer was inside the ROCC when ROCC management attempted to notify the Fire Liaison.

- At Georgia Ave-Petworth, TPSS: 182 (Load Measuring Relay) lost its negative reference on breaker #32; therefore, no reclosing of the Breaker was possible
- At Georgia Ave-Petworth TPSS: Bad SMC 176 Relay on breaker #32
- At Georgia Ave-Petworth TPSS: Flag on the Long T.O.C breaker #32
- At Fort Totten TBS#2: Nuisance Tripping's from the IDTM1 protective function (Timed Inverse Overcurrent) for Breaker #64 and #66
- MTPD notified MOC COMM of radio communication problems at Fort Totten Station [Portable radios unable to transmit].
- An RTRA Supervisor attempted to enter the roadway without the IC permission to Hot stick and confirm that Third rail power was de-energized.

Immediate Mitigation to Prevent Recurrence

- TRPM replaced the defective SMC 176 Relay on breaker 32 in the TP room. Re-established negative reference for 182 (Load Measuring Relay) at Georgia Ave-Petworth TPSS.

Weather

At the time of the incident, NOAA recorded the temperature at 49°F. SAFE has concluded that weather was not a contributing factor in this incident (Weather source: NOAA – Location: Washington, DC.)

Human Factors

Fatigue

Based on SAFE's interview questions related to Fatigue Factors and review of the Train Operator's 30-day work history, SAFE determined that all employee's 30-day work schedule leading up to the incident was compliant with WMATA's Policy/Instruction 10.6/1 Hours of Service Limitations for Prevention of Fatigue and did not present a significant risk of impairment due to fatigue. Based on a formal interview, no personal factors would have increased the likelihood of fatigue-related impairment. MTPD and the Fire Liaison had no history of sleep issues to report.

Post-Incident Toxicology Testing

At the time of this incident, MTPD managerial staff did not remove any MTPD official from service for post-incident toxicology testing. Based on SAFE's investigative findings and Metro's drug and alcohol policy, MTPD managerial staff should have removed MTPD officials from service for post-incident testing given the known facts at the time of the incident. Under WMATA's current Drug and Alcohol Policy and Testing Program Policy Instruction 7.7.3/6, WMATA may perform Post-Incident Testing on employees and contractors whose performance cannot be "completely discounted,"

Training Issues

MTPD officials did not pose any concerns related to their training. MTPD officials reported that training is adequate for their job function. An MTPD official did note that a quick checklist with respective responsibilities would help respond to incidents and assume IC.

Probable Cause Statement

The probable cause of the breaker's opening un-commanded at breakers 32 and 36 was due to a defective SMC 176 relay on breaker 32. This SMC 182 relay failure prevented the remote closing command and on-site manual closing of the affected breakers. This failure extended the delay resulting in a customer evacuation from Train ID 308 and Train ID 502 to Fort Totten Station and Georgia Ave-Petworth Station platforms via the roadway.

An analysis of data collected from systems of record and the results of interviews with staff, multiple human factors failures occurred in response to this incident. Upon the customer evacuation, stranded Train ID 502 and Train ID 308 at Fort Totten Station Track #2. MTPD IC did not ensure WSAD devices were installed at both locations before granting MTPD permission to enter the roadway. MTPD IC granted MTPD permission to evacuate customers from the train onto the roadway back to Georgia's Ave-Petworth and Fort Totten Stations.

The departing Fire Liaison standing by at the JGB facility waiting for the arriving Fire Liaison to travel from JGB to CTF due to COVID cleaning restrictions did not oversee the un-commanded loss of third rail power event while the arriving Fire Liaison traveled towards CTF to transfer over operations. Therefore, the Fire Liaison did not communicate with DCFEMS upon arrival to provide updates and assistance. Additionally, there were communication issues within the tunnels reducing response times and updates to MTPD officers. The DCFEMS did not assume the IC upon arrival.

Recommendations

The following are the recommendations and corrective actions identified as a result of this investigation. These recommendations and corrective actions are tracked using WMATA's Safety Measurement System Incidents/Accidents (SMS I/A) Module and are verified by SAFE upon completion. The responsible department is identified in the corrective action code. Refer to the SMS I/A module for additional information.

Corrective Action Code	Description
90755_SAFECAPS_MTPD_001	OEM shall undertake a review of the Fire Liaison turnover process to identify opportunities for improvement under COVID 19 pandemic cleaning restrictions. OEM spoke with the Program Manager to ensure Fire Liaison Officer Personnel verify the switch has occurred before departure.
90755_SAFECAPS_MTPD_001	Shall develop an incident response / IC quick [tick] checklist to identify responsibilities, respective equipment, processes upon arrival
90755_SAFECAPS_MTPD_001	MTPD shall retrain MTPD Management on post-incident drug and alcohol testing requirements for their staff.

Appendix A – Interviews

MTPD Sergeant #1

The MTPD Officer is a WMATA employee with four years of experience as a Sergeant and 11 of service in various positions, Police Officer 1, Police Officer 2, and Police Officer 3.

The MTPD Officer's 30-day work schedule leading up to the incident was compliant with WMATA's Policy/Instruction 10.6/1 Hours of Service Limitations for Prevention of Fatigue. It did not present a significant risk of impairment due to fatigue. Based on employee interviews, there were no personal factors present that would have increased the likelihood of fatigue-related impairment. Based on the interview, the employee had no history of sleep issues to report.

The MTPD Sergeant underwent Incident Command - National Incident Management System (NIMS) online training, academy training, and several joint supervisor training. The MTPD officers thought the training is sufficient for their respective roles. The MTPD officer has been involved in approximately 13 IC events and was their first event with customers' evacuation in a tunnel.

Based on SAFE's interview and personal accounts of events, MTPD Sergeant #1 stated the following:

Upon arrival at Fort Totten, the sergeant took incident command and located the train, determined it right near the catwalk from the portal coming from West Hyattsville.

I sent MTPD Forward Liaison to determine the train's position, identify the handrail's location and the train's proximity, i.e., where the handrail started, and instructed MTPD Forward Liaison attempted to communicate with the Train Operator. The MTPD Forward Liaison informed MTPD Sergeant #1 [IC] they could speak with the Train Operator, and the Train Operator moved everyone to the front cab.

The Lieutenant arrived, and MTPD Sergeant #1 notified the Lieutenant [now IC] that MTPD Forward Liaison would try to make entry onto the train after they were granted permission to get an accurate account of the customers and check on their welfare. After that, I moved down to the other end of the tunnel with an MTPD Officer towards Georgia Ave-Petworth Station to see if I could see the train. We waited just beyond the end gate where the railing while they evacuated the other train [Fort Totten Station]. There was a discussion about where the train was located; was it closer to Fort Totten or Georgia Ave-Petworth Station. IC permitted us to find the train. We walked down the curved catwalk, but there were boxes impeding movement, and the catwalk was 3.5 to 4 feet above the roadway. As we walked, it became more and more challenging to stay on the catwalk. So we moved down to the left side of the tracks opposite of the third rail, boarded the train, went from car to car, got to the front of the train, and then awaited further instruction to evacuate that train.

From the front of the cab, I could see the lights from Georgia Ave-Petworth Station Avenue-Petworth Station. At that point, I notified the IC that evacuating to Georgia Ave would make more sense and would stand by and wait for permission to evacuate the customers. I also informed IC that the catwalk was high; there were too many panels and obstacles, and I did not feel safe putting customers that high above the right of way. MTPD Sergeant notified IC that they would need to evacuate. However, they would stay on the left-hand side of the tracks opposite the third rail until they arrived at the handrail near Georgia Ave-Petworth Station. From there, they would move back to the station via the catwalk protected by the handrail. MTPD Sergeant #1 stated that they verified that the Train Operator was remaining with the train. Once IC permitted them to

evacuate, they evacuated from the front of the train down the emergency ladder and remained on the left-hand side of the road, way, and walked Georgia Ave-Petworth Station's direction. MTPD Sergeant #1 stated, the walk was not far; OEM and Sergeant #3 met them en route to assist with the evacuation. Once they arrived at the Georgia Ave-Petworth Station platform, no injuries or medical issues were reported.

During the after-action report, MTPD Sergeant #1 reported having trouble hearing transmissions. MTPD Sergeant #1 reported they were unsure who was meeting them in the tunnel, the timeframe, i.e., what they were waiting on. The MTPD Sergeant #1 stated that they felt out of the loop and used the cell phone to confirm information. MTPD Sergeant #1 mentioned the evacuation was difficult even with a small group of customers and challenged with guiding customers effectively without sufficient support.

MTPD Sergeant #1 heard they asked the DCFEMS if they would assist, and they declined. MTPD Sergeant #1 was unaware of why DCFEMS declined.

COMM section calibrated MTPD Sergeant #1's Radio in November 2020.

MTPD Sergeant #2 Forward Liaison

The MTPD Officer is a WMATA employee with three years of experience as a Sergeant and 10 of service in various positions, Police Officer 1, Police Officer 2, and Police Officer 3.

The MTPD Officer's 30-day work schedule leading up to the incident was compliant with WMATA's Policy/Instruction 10.6/1 Hours of Service Limitations for Prevention of Fatigue. It did not present a significant risk of impairment due to fatigue. Based on employee interviews, there were no personal factors present that would have increased the likelihood of fatigue-related impairment." Based on the interview, the employee had no history of sleep issues to report"

The MTPD Sergeant underwent NIMS, full-scale incident, and joint supervisor training. The MTPD officers feel the training is sufficient for their respective roles. The MTPD officer has been involved in many IC events and five to ten events involving customer evacuation.

Based on SAFE's interview and personal accounts of events, MTPD Forward Liaison stated the following:

We had a previous call at Fort Totten for a cat that was on the roadway. Through ROCC, we requested power down with animal control. Within an hour or two, we got another call two train's stuck train with power down. I responded from across the street. I was the MTPD forward Liaison, and MTPD Sergeant #1 was IC. Our primary scene was a stuck train visible from the platform at Fort Totten in the portable towards greenbelt myself, and an MTPD officer started down the catwalk to assess the situation.

With radio contact with the IC, as we approached the train still on the catwalk with handrail, we could hear bulkhead doors opening and closing. We were very concerned that passengers may evacuate and requested permission from IC when we arrived at the platform's end. The front door of the train was immediate to the left of the handrail. Once the MTPD Forward Liaison received permission from IC to go beyond the handrail's end to board the down train. Once aboard, we checked on the seven customers on the train with one small child.

All of the passengers were upwardly mobile; there was a concern to walk customers on the catwalk due to narrow passages and different customer body sizes. The Lieutenant assumed

command and, through ROCC, were decided to evacuate the train. MTPD Forward Liaison and MTPD Officer evacuated customers down the ladder onto the roadway and escorted customers back to the Fort Totten platform after receiving permission. Once on the platform, DCFEMS verified there were no injuries. The Train Operator stayed with the down train. After that, we went to Georgia Ave-Petworth Station and remained top side.

The MTPD Forward Liaison was engaged with the passengers and did not visually see a WSAD in place. The MTPD Forward Liaison reported that radio communication was ineffective at the train's rear; however, they could hear the Train Operator's transmissions with ROCC. MTPD that Forward Liaison reported the bulkhead doors were open with personnel present.

MTPD Lieutenant IC

The MTPD Lieutenant is a WMATA employee with six years of experience as an MTPD Lieutenant and 12 years of service in various positions, Sergeant, Police Officer 1, Police Officer 2 Police Officer 3.

The MTPD Officer's 30-day work schedule leading up to the incident was compliant with WMATA's Policy/Instruction 10.6/1 Hours of Service Limitations for Prevention of Fatigue and did not present a significant risk of impairment due to fatigue. Based on employee interviews, there were no personal factors present that would have increased the likelihood of fatigue-related impairment. Based on the interview, the employee had no history of sleep issues to report.

The MTPD Lieutenant underwent IC, NIMS online, and academy training; and several joint supervisor training. The MTPD officers feel the training is sufficient for their respective roles. The MTPD officer has been involved in approximately 10 IC events.

Based on SAFE's interview and personal accounts of events, MTPD Sergeant #1 stated the following:

The MTPD Lieutenant arrived at the Fort Totten Station, and the MTPD Forward Liaison and another MTPD Officer were already at the train. MTPD Lieutenant IC Stated, "we could see the train from the platform at Fort Totten on the yellow, green line platform. I could see them at the train door." MTPD Sergeant #1 stated, "we are getting ready to evacuate this train, and they started walking towards the down train near Georgia Ave-Petworth Station. RTRA personnel confirmed power was down; they said it is a dead third rail."

The MTPD Lieutenant IC requested DCFEMS come. Just as we did that, my phone rang from the MTPD Forward Liaison advising the evacuation could not occur via catwalk due to the "logistical issues with some of the passengers, i.e., not being to get into space and requested to evacuate via the roadway. The MTPD Lieutenant IC instructed the MTPD Forward Liaison that was fine because we could see them there, and once they evacuated from the train, the steps were right there."

All customers were evacuated from the train. After that, the MTPD Lieutenant went upstairs to speak with the IC and asked: "if there was anything they needed." DCFEMS said no, we are just here to support you. MTPD Lieutenant notified them customers were evacuated and asked if they had resources to send to Georgia Ave-Petworth; DCFEMS said no. The MTPD Lieutenant stated they didn't have the personnel either. After that, DCFEMS suggested they move the entire ICP to Georgia Ave-Petworth Station.

Upon arrival, the DCFEMS, RTRA personnel, and MTPD Lieutenant discussed how they would remove customers from the roadway. DCFEMS stated, "if you do not put a WSAD down, we will stand on the platform if you need us." At that time, MTPD Sergeant #1 had passengers exit from the Georgia Ave-Petworth train already moving towards the Georgia Ave-Petworth Station. The MTPD Officers accounted for everyone and reported upstairs.

MTPD Lieutenant IC reported that a WSAD was not used at either location. MTPD Lieutenant IC stated there were communication issues and required cell phone updates. The MTPD Lieutenant IC noted they usually use a personal checklist [tick sheet] to account for respective processes; however, they did not have it that day.

MTPD Sergeant #3 Forward Liaison

The MTPD Officer is a WMATA employee with eight (8) years of experience as a Sergeant and 15 of service in various positions, Police Officer 1, Police Officer 2, and Police Officer 3.

The MTPD Officer's 30-day work schedule leading up to the incident was compliant with WMATA's Policy/Instruction 10.6/1 Hours of Service Limitations for Prevention of Fatigue. It did not present a significant risk of impairment due to fatigue. Based on employee interviews, there were no personal factors present that would have increased the likelihood of fatigue-related impairment. Based on the interview, the employee had no history of sleep issues to report.

The MTPD Sergeant underwent IC, NIMS online and academy training, and several joint supervisor training. The MTPD officers feel the training is sufficient for their respective roles. The MTPD officer has been involved in approximately 13 IC events and was their first event with customers' evacuation in a tunnel.

Based on SAFE's interview and personal accounts of events, MTPD Sergeant #1 stated the following:

"We received a call via radio about two trains stuck in the tunnel between Georgia Ave Petworth and Fort Totten Stations. MTPD Sergeant #1 and MTPD Forward Liaison responded to Fort Totten Station; I responded to Georgia Ave-Petworth Station. MTPD Sergeant #1 and MTPD Sergeant #2 Forward Liaison arrived at Fort Totten before reaching Georgia Ave-Petworth Station. MTPD Sergeant #1 set up IC initially, and MTPD Lieutenant MTPD Sergeant #1 was relieved shortly after without incident.

I was not at Fort Totten Station, but I know they evacuated the train. After that, MTPD was trying to determine the location of Train ID 502 between Fort Totten and Georgia Ave-Petworth Stations. When I arrived at Georgia Ave-Petworth Station, I did see the train in the tunnel at a distance. I was unsure how far; it was quite a distance, but I could see the lights. MTPD then attempted to ascertain which station was closer to the disabled train; through ROCC, we identified Georgia Ave-Petworth Station.

MTPD Lieutenant IC gave MTPD Sergeant #1 permission to enter the roadway for purposes of boarding the down train. As MTPD Sergeant #1 arrived at the incident train, they notified the MTPD Lieutenant IC via radio that there were 13 passengers with no reported injuries. The MTPD Sergeant #1 stated that, based on their observation, Georgia Ave-Petworth Station was closer.

The MTPD Lieutenant IC said via radio the ICP was switching to Georgia Ave-Petworth Station. At that time, I was on standby until DCFEMS and the MTPD Lieutenant IC. An RTRA Supervisor arrived at Georgia Ave-Petworth Station, went beyond the endgate to hot stick, and confirm third rail power was de-energized without permission initially. "I stopped the RTRA Supervisor and asked where they were going." The RTRA Supervisor stated they were going to the right of way to confirm Third rail's power was down. I notified the RTRA Supervisor that is fine, but we need permission from the MTPD Lieutenant IC before you into the right of way. RTRA Supervisor responded, "Okay, that's fine."

I notified the MTPD Lieutenant IC via radio that an RTRA Supervisor was requesting permission to enter the right of way to Hot stick Third rail power was down. The MTPD Lieutenant IC granted permission, and the RTRA Supervisor entered the roadway and confirmed Third rail power was de-energized. Approximately ten DCFEMS arrived on the Georgia Ave-Petworth Station platform, and MTPD Sergeant #1 aboard Train ID 502 contacted the MTPD Lieutenant IC and requested permission to evacuate the customer. The MTPD Lieutenant IC granted MTPD Sergeant #1 permission to evacuate the train. I asked the DCFEMS are they coming down, they said no. I notified them customers were evacuating, DCFEMS said they were not coming down. The DCFEMS did ask how many passengers were aboard, any sick, elderly, or injured customers. Once provided, I, RTRA Supervisor, and OEM personnel went out towards the train, met MTPD Sergeant #1, and evacuated customers to the platform. MTPD and DCFEMS personnel were on the Georgia Ave-Petworth platform, assisting upon arrival.

MTPD Sergeant #3 Forward Liaison did not recall a WSAD deployed at Georgia Ave-Petworth based on incident-related questions. The customers were in the middle of the roadway upon arriving at the down train to assist MTPD Sergeant #1 with evacuation. MTPD Sergeant #3 had a total of five (5) WMATA personnel assisting with the evacuation.

Fire Liaison

The Fire Liaison Officer is an Alexandria City Fire Fighter with two years of experience as a Captain and five years of service as a program manager at WMATA for the external Fire Liaison.

The Fire Liaison Officer's 30-day work schedule leading up to the incident was compliant with WMATA's Policy/Instruction 10.6/1 Hours of Service Limitations for Prevention of Fatigue. It did not present a significant risk of impairment due to fatigue. Based on employee interviews, there were no personal factors present that would have increased the likelihood of fatigue-related impairment. Based on the interview, the employee had no history of sleep issues to report.

Based on SAFE's interview and personal accounts of events, MTPD Forward Liaison stated the following:

When the Fire Liaison Officer [Captain of Alexandria City] arrived, the operator was in the middle of an incident. Reportedly, there was a cat between a grating near the third rail, and they were getting ready to shut down power. We decided the Fire Liaison Officer would stay and work out the incident before leaving and headed towards CTF for location transfer.

At approximately 21:00 hrs., the incident was over, and the Fire Liaison Officer [Captain of Montgomery County Fire Department] headed over to JGB. After the Fire Liaison Officer Captain of Montgomery County Fire Department packed up the CTF equipment, the Fire Liaison Officer stated they knew what was going on, so there was no need for a turnover. The Fire Liaison Officer kept the cameras active; the Fire Liaison Officer [Captain of Alexandria City] reported they did notice the RTC's still in the room. The Fire Liaison Officer [Captain of Alexandria City] stated that

while at JGB, they are located in the emergency management room where you cannot hear what was going on. The Fire Liaison Officer mentioned some considerable amount of chatter on the Radio, but the assumption was that the incident was over.

After that, the Fire Liaison Officer [Captain from Montgomery] notified them they were at CTF and ready to switch over. The Fire Liaison Officer [Captain of Alexandria City] packed up all the equipment, went to the locker, and locked up the radios. The Fire Liaison Officer [Captain of Alexandria City] stated they told everyone good night and mentioned on a typical Sunday, they are the last one to leave but thought on this night, people were still doing paperwork trying to clear this incident. The Fire Liaison Officer [Captain of Alexandria City] left JGB and received a call from the Fire Liaison Officer [Captain from Montgomery] and asked was anything going on when you left. The Fire Liaison Officer [Captain of Alexandria City] responded, "Yeah, people were down there doing paperwork, but no one said anything about an incident." Fire Liaison Officer [Captain of Alexandria City] stated that The Fire Liaison Officer [Captain from Montgomery] responded, "We have a train that won't go to the station." The Fire Liaison Officer [Captain of Alexandria City] stated they answered and said, "It was it because of the power outage." The Fire Liaison Officer [Captain from Montgomery] responded to them and said, "I think so."