



**WMSC Commissioner Brief: W-0182 – Improper Roadway Worker Protection – Metro Center Station – May 3, 2022**

*Prepared for Washington Metrorail Safety Commission meeting on September 20, 2022*

**Safety event summary:**

A Red Line train came upon a work crew without warning at approximately 9:46 a.m. on May 3, 2022. The Metrorail track inspection crew had entered the roadway without permission or protection at Metro Center Station as they attempted to continue a track inspection toward Farragut North Station.

The crew had properly obtained permission to enter the roadway and walk each segment from Union Station to Metro Center Station, but then continued from Metro Center Station toward Farragut North Station without contacting the Rail Operations Control Center (ROCC) or their Advanced Mobile Flagger (AMF). Contact and confirmation is required with both the ROCC and AMF to conduct such an inspection safely.

The Train Operator came upon the inspectors five to six minutes after the inspectors entered the roadway without permission or protection.

The Train Operator of Train 108 did not immediately report the near-miss to the ROCC. The Train Operator attempted to contact the RWIC over the radio to tell the Roadway Worker In Charge (RWIC) to have their AMF begin flagging to warn trains that the inspectors are on the roadway. Approximately one minute later, the Radio Rail Traffic Controller contacted the Train Operator of Train 108 to ask if they had made a request. The Train Operator then told the Rail Traffic Controller that the AMF did not know the inspectors were on the roadway and did not brief the Train Operator to operate at reduced speed. The Train Operator did not specify the location of the inspectors.

The AMF had been at the Farragut North Station platform, but had not been informed by the RWIC that they should begin warning trains that the inspection crew was on the roadway. The other inspector with the RWIC had also not raised any safety concern.

The Rail Traffic Controller contacted the RWIC to instruct them to contact the AMF. The RWIC then contacted the AMF, but the Train Operator of Train 108 reiterated that the AMF did not know that the inspectors were on the roadway. The RWIC then incorrectly stated that the inspectors were between Gallery Place and Metro Center stations. The communications did not include a chain marker location (a chain marker is like a highway milepost that states the line, track number and distance from the center of the system every 100 feet along Metrorail tracks). Approximately two minutes later, the RWIC correctly stated that they were between Metro Center and Farragut North stations. The ROCC did not require the inspectors to stand clear and await a train pickup as would be standard Metrorail practice.

**Probable Cause:**

The probable cause of this event was a lack of focus on and supervisory oversight regarding the safety-critical task of ensuring proper roadway worker protection (RWP). Contributing to this event was the lack of involvement of all members of the work crew, not just the RWIC, in ensuring proper RWP procedures.

**Corrective Actions:**

Metrorail's Safety Department is reviewing options to ensure employees remain aware of their surroundings while conducting roadway tasks, including a review of policies, procedures and signage.



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Track and Structures (TRST) conducted safety talks focused on proper radio communications during roadway operations.

**WMSC staff observations:**

Although not contributing directly to the inspectors entering the roadway without permission or protection, the Roadway Job Safety Briefing Form for this work crew only listed one radio call ID noted for the three members of the crew in addition to the RWIC and did not note the radio serial number or certification date as required on the form. The listing of only one radio call ID and no radio certification dates was despite the inspection crew consisting of two AMFs (each requiring a radio), and an inspector (radio optional).

Recording radio information is one way Metrorail can ensure that all personnel have properly calibrated and functioning safety equipment and that safety communication is clear. Metrorail's new roadway job safety briefing form adjusts the format for recording radio calibration information. It still includes a requirement to confirm radios being used are in calibration and functioning. This is an element of Metrorail Corrective Action Plan (CAP) C-0042 and other steps Metrorail has committed to to improve its roadway worker protection program.

The WMSC emphasizes the importance of all members of a work crew taking responsibility for their safety. This includes active participation in the job safety briefing(s) and ensuring that safety procedures are followed. Metrorail has opportunities to ensure this participation through its ongoing planning for long-term improvements to its RWP program, but also through more immediate actions such as improved supervisory oversight and consistent safety promotion activities.



Washington Metro Area Transit Authority  
Department of Safety and Environmental  
Management (SAFE)  
**FINAL REPORT OF INVESTIGATION A&I E22270**

<b>Date of Event:</b>	05/03/2022
<b>Type of Event:</b>	Improper Roadway Worker Protection (RWP)
<b>Incident Time:</b>	09:47 hours
<b>Location:</b>	Metro Center Station, Track 1
<b>Time and How received by SAFE:</b>	09:59 hours via MAC Notification
<b>WMSC Notification Time:</b>	10:49 hours
<b>Responding Safety Officers:</b>	WMATA: No WMSC: No Other: No
<b>Rail Vehicle:</b>	N/A
<b>Injuries:</b>	None
<b>Damage:</b>	None
<b>SMS I/A Incident Number:</b>	20220509#100193

# Medical Center Station – Improper Roadway Worker Protection (RWP)

May 3, 2022

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## **Abbreviations and Acronyms**

<b>AIMS</b>	Advanced Information Management System
<b>AMF</b>	Advanced Mobile Flagger
<b>ARS</b>	Audio Recording System
<b>CAP</b>	Corrective Action Plan
<b>CCTV</b>	Closed-Circuit Television
<b>I/A</b>	Incidents/Accidents Module
<b>MAC</b>	Mission Assurance Coordinator
<b>MSRPH</b>	Metrorail Safety Rules and Procedures Handbook
<b>NOAA</b>	National Oceanic and Atmospheric Administration
<b>RJSBF</b>	Roadway Job Safety Briefing Form
<b>ROCC</b>	Rail Operations Control Center
<b>RTC</b>	Rail Traffic Controller
<b>RWIC</b>	Roadway Worker In Charge
<b>RWP</b>	Roadway Worker Protection
<b>SAFE</b>	Department of Safety and Environmental Management
<b>SMS</b>	Safety Measurement System
<b>SRC</b>	Safety Risk Coordinator
<b>TRST</b>	Office of Track and Structures
<b>WMATA</b>	Washington Metropolitan Area Transit Authority
<b>WMSC</b>	Washington Metrorail Safety Commission

### **Executive Summary**

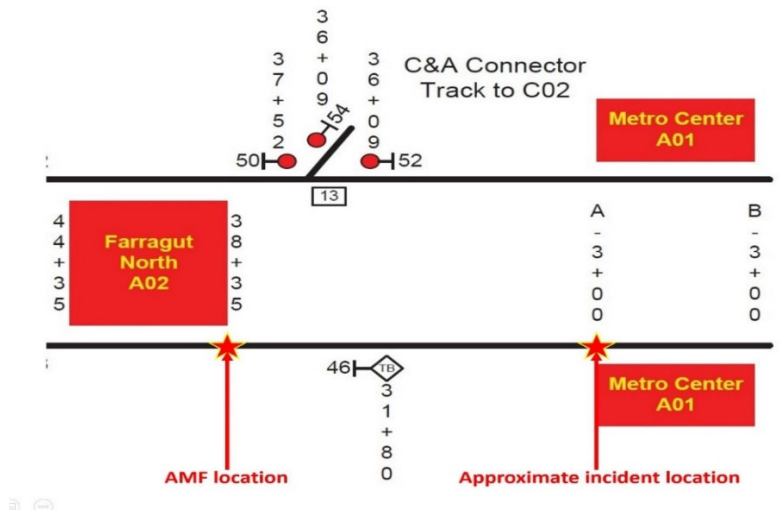
On Tuesday, May 3, 2022, at approximately 09:47 hours, an Office of Track and Structures (TRST) employee, performing a track inspection as a Roadway Worker in Charge (RWIC), was removed from service for improperly accessing the roadway near Metro Center Station, Track 1. The RWIC initially accessed the roadway from the 8-Car Marker at Gallery Place-Chinatown Station with an additional crew member on Track 1 in order to conduct a track inspection. After making a Foul Time request, the Rail Operations Control Center (ROCC) Rail Traffic Controller (RTC) permitted the RWIC to commence their track inspection from Gallery Place Station to Farragut North Station on Track 1. After the RWIC arrived at Metro Center Station, they failed to contact the ROCC RTC to continue their track inspection towards Farragut North Station. While traversing the roadway between Metro Center Station and Farragut North on Track 1, they encountered Train ID 108. The Train Operator reported personnel on the roadway and advised the RTC that they did not receive a briefing from the Advanced Mobile Flagger (AMF). The AMF was in place at Farragut North Station, however the RWIC did not notify them to begin flagging operations prior to entering the roadway at Metro Center Station. After receiving the report of personnel on the roadway from Train ID 108, the Radio RTC instructed the RWIC to contact them via landline. The RWIC was subsequently removed from service for post-incident testing. No injuries or damages were reported as a result of this incident.

The probable cause of the Improper Roadway Worker Protection (RWP) event was a human factors failure as the RWIC failed to adhere to established procedures. Permission was not requested or received prior to entering the roadway at Metro Center Station. Foul time protection was needed as Train Operators were unaware of the RWIC's presence. The RWIC demonstrated complacency with a repetitive task by failing to request permission to continue their inspection and not notifying the AMF to begin flagging.

### **Incident Site**

Metro Center Station, Track 1

## 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.

## Investigative Methods

The investigative methodologies included the following:

- Formal Interview – SAFE interviewed one individual as part of this investigation. Interviews included persons present at, during, and after the incident, those directly involved in the response process. Representatives from the Washington Metrorail Safety Commission (WMSC) were present during the interview. SAFE interviewed the following individual:
  - RWIC
- Documentation Review – A collection of relevant work history information and process documentation in Metro systems of record. These records include:
  - RWIC Incident Report
  - RWIC 30-day work history
  - RWIC Certification and Training Record
  - Roadway Job Safety Briefing Form
  - Metrorail Safety Rules and Procedures Handbook (MSRPH)
  - National Oceanic and 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) Playback
  - Advanced Information Management System (AIMS) Playback

## Investigation

At approximately 08:57 hours on Tuesday, May 3, 2022, a mobile work crew began performing a track inspection on the B-line, Track 1 between Union Station and Woodley Park/Zoo-Adams Morgan Station. The RWIC utilized two AMFs, working in tandem. The AMFs initial positions were at Judiciary Square and Gallery Place – Chinatown Stations. Prior to the event, the RWIC conducted a Roadway Job Safety Briefing prior to requesting permission to conduct their inspection from Judiciary Square to Gallery Place – Chinatown Station and then from Gallery Place – Chinatown to Metro Center Station. For the first three segments of the inspection, they followed all required procedures, including contact with the AMF to verify that they were in place to brief train operators.

At approximately 09:39 hours, the AMF at Farragut North station attempted to contact the RWIC via radio and informed them that they were in place and ready to flag. However, the RWIC did not respond to the radio call. After arriving on the platform at Metro Center, the RWIC did not contact the ROCC RTC to request to continue their track inspection and continued walking towards Farragut North Station on Track 1. At approximately 09:46 hours, Train ID 108 observed the RWIC as they were on the roadway. The Train Operator contacted ROCC and reported the crew on the roadway. The ROCC RTC contacted the RWIC and instructed them to ensure their AMF was briefing trains at the 8-Car Marker. Subsequently, the ROCC asked the Train Operator of Train ID 108 where they witnessed the TRST personnel walking on the roadway. The Train Operator reported seeing the personnel walking on the roadway in between Farragut North and Metro Center Station. Upon further investigation by ROCC, it was determined the RWIC did not contact ROCC after arriving at Metro Center Station and request permission to continue their inspection. The RWIC was subsequently removed from service for post-incident analysis. No injuries or damages were reported as a result of this incident.

### **Advanced Information Management System (AIMS)**

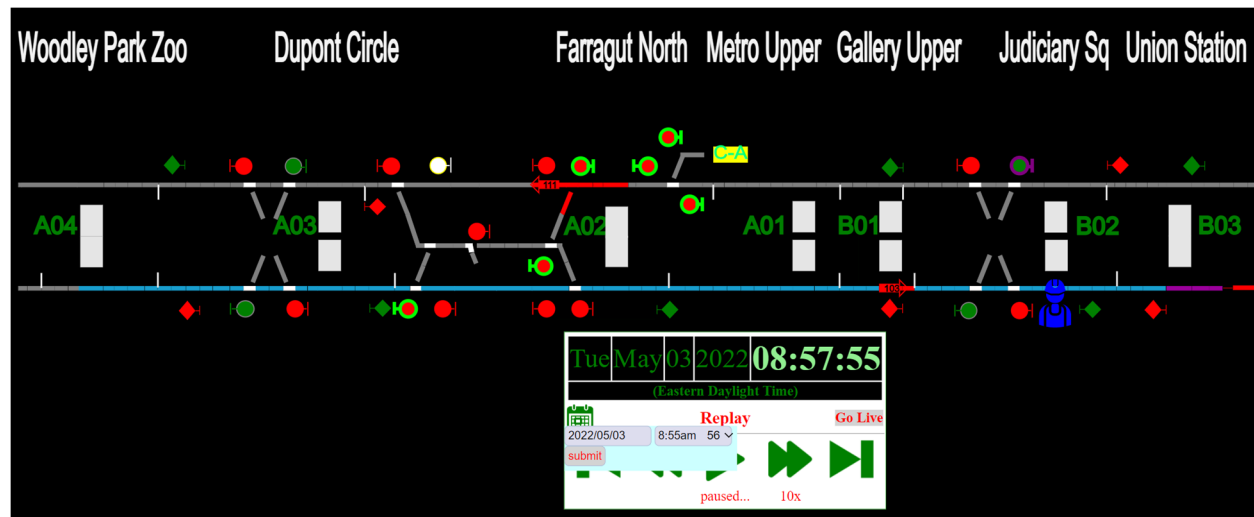


Figure 1 - TRST Mobile Work Crew enters the roadway at Union Station, walking in the direction of Judiciary Square on Track 1.



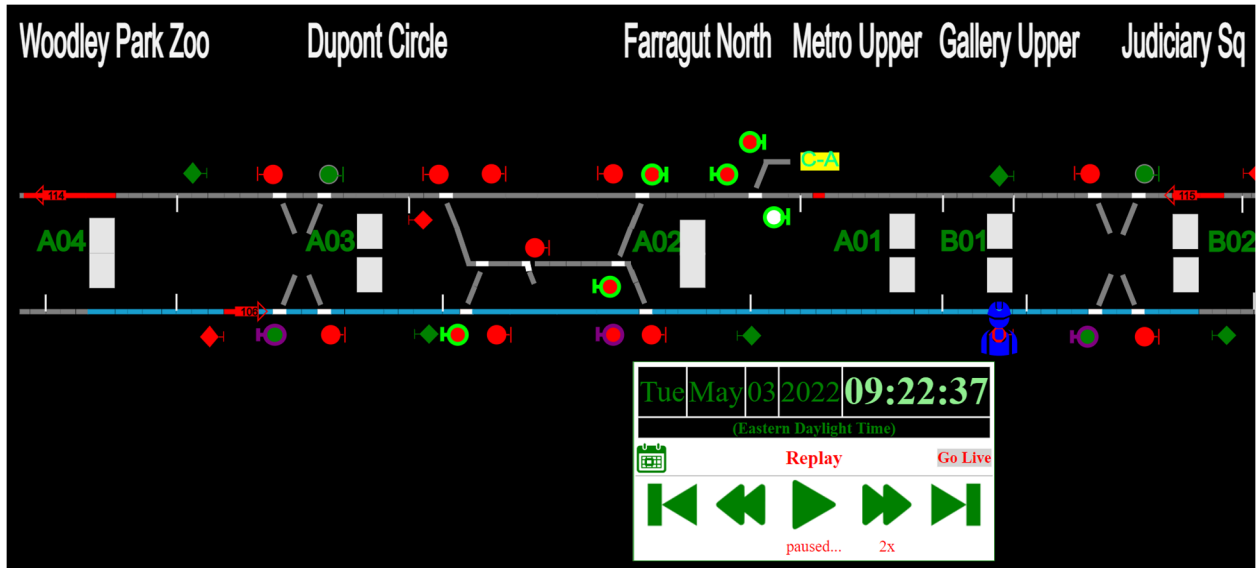


Figure 2 - TRST Mobile Work Crew enters the roadway at Judiciary Square, walking in the direction of Gallery Place on Track 1.

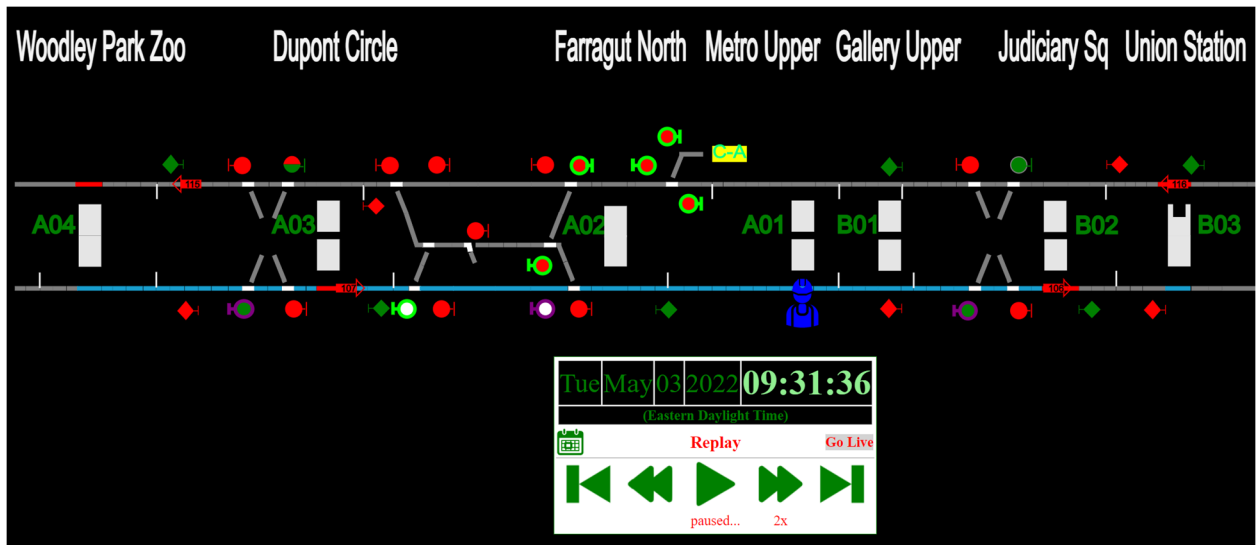


Figure 3 - TRST Mobile Work Crew enters the roadway at Gallery Place, walking in the direction of Metro Center on Track 1.

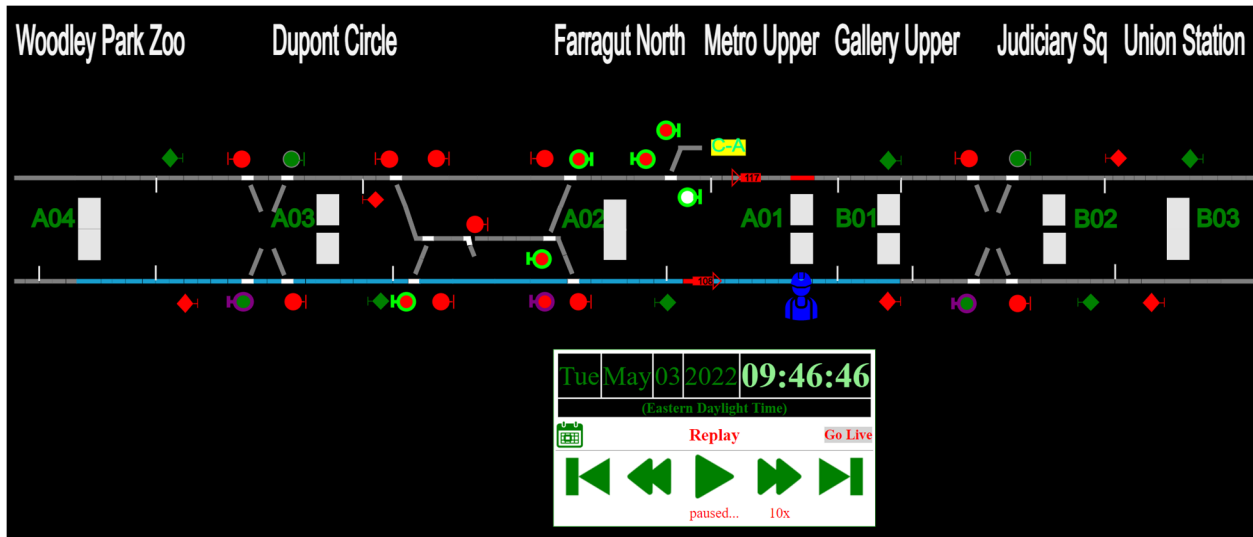


Figure 4 - Approximate event time. AIMS display shows mobile work crew between Gallery Place and Metro Center.

### Closed Circuit Television (CCTV)



Figure 5 – TRST personnel conducting a track inspection via the Metro Center Station platform, Track 1, at approximately 09:40:01 hours.



Figure 6 – TRST personnel approaching the 8-Car Marker at Metro Center Station, Track 1, at approximately 09:40:08 hours.



Figure 7 – TRST personnel leaving the platform and entering the roadway beyond the end at Metro Center Station, Track 1, at approximately 09:40:18 hours.



Figure 8 – TRST personnel out of camera view at approximately 09:40:24 hours.



Figure 9 – Train ID 108 approaching 8-Car Marker at Farragut North Station, Track 1 at approximately 09:44:29 hours. AMF is not set up.





Figure 10 – Train ID 108 stops at the 8-Car Marker at Farragut North Station, Track 1 at approximately 09:44:41 hours. AMF is not set up and did not brief the Train Operator.

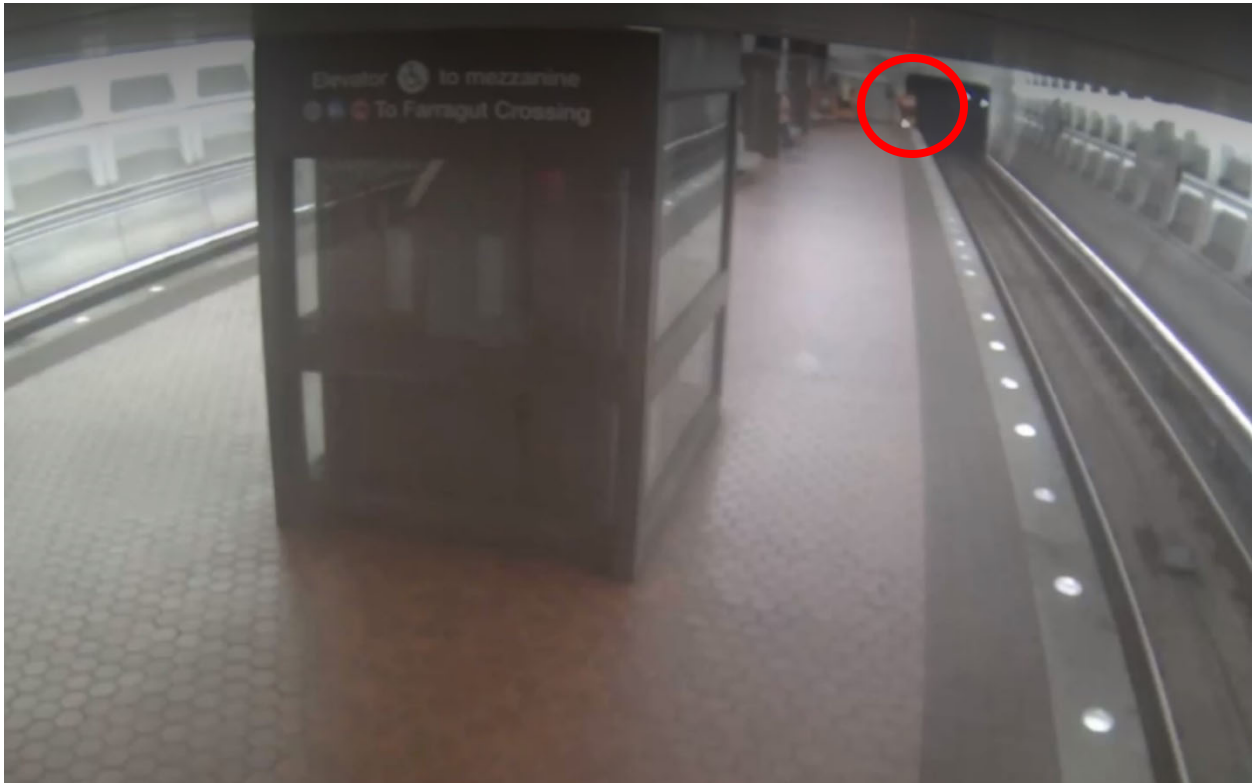


Figure 11 – AMF turns on lantern and start AMF duties at the 8-Car Marker at Farragut North Station, Track 1 at approximately 09:48:45 hours.

## **Chronological Event Timeline**

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

<b>Time</b>	<b>Description</b>
08:56:24 hours	<u>RWIC</u> : Requested and received permission from ROCC to perform a walking track inspection with a crew of two from Union Station to Woodley Park Zoo – Adams Morgan Station. Performed positive verification with the AMF at Judiciary Square. ROCC made announcements to all Red Line operators of personnel on the roadway between Union Station and Judiciary Square Station, Track 1. [Ops 1]
09:21:52 hours	<u>RWIC</u> : Reported that they are on the platform at Judiciary Square. Requested and received permission from ROCC to continue the walking track inspection from Judiciary Square to Gallery Place. Performed positive verification with the AMF at Gallery Place. [Ops 1]
09:31:05 hours	<u>RWIC</u> : Reported that they are on the platform at Gallery Place Station and requests to continue towards Metro Center on Track 1. RWIC verifies that the AMF is in position at Metro Center and ROCC grants permission to continue. [Ops 1]
09:39:01 hours	<u>AMF</u> : AMF at Farragut North Station, Track 1 contacts ROCC and requests permission to go direct with RWIC. ROCC grants AMF permission to go direct. AMF informs RWIC they are at the 8-Car Marker at Farragut North Station, Track 1 and standing by. [Ops 1]
09:46:21 hours	<u>Train Operator of Train ID 108</u> : Train Operator attempts to contact the RWIC and informs them to contact their AMF as the AMF is not aware of the RWIC position on the roadway. [Ops 1]
09:47:15 hours	<u>ROCC RTC</u> : ROCC contacts Train Operator of Train ID 108 and asks if they made a request. Train Operator responds and states RWIC needs to contact their AMF as the AMF does not know the RWIC is on the roadway. [Ops 1]
09:47:31 hours	<u>ROCC Radio RTC</u> : ROCC contacts the RWIC and instructs them to contact their AMF at Farragut North Station. The RWIC contacts the AMF and they reported they are in position on Track 1 and standing by. The RWIC contacts ROCC and reports they have contacted their AMF at Farragut North Station, Track 1. [Ops 1]
09:47:59 hours	<u>Train Operator of Train ID 108</u> : Train Operator informs ROCC the AMF is standing by and does not know that the RWIC is on the roadway walking. The ROCC asks the Train Operator if they were briefed by the AMF. The Train Operator reports they were not briefed by the AMF. ROCC instructs the RWIC to ensure their AMF is briefing the train when approach the 8-Car Marker. The RWIC acknowledges and instructs the AMF to brief the next train. The AMF asks the RWIC if they are on the move. The RWIC affirms they are on the move and walking. The AMF acknowledges. The RWIC reports to ROCC they are walking from Gallery Place to Metro Center Station, Track 1. [Ops 1]
09:51:28 hours	<u>ROCC Radio RTC</u> : ROCC informs all personnel on OPS 1 they have Track personnel walking from Gallery Place to Metro Center Station, Track 1. ROCC contacts Train ID 108 and ascertain if they encountered track personnel walking from Farragut North to Metro Center or Metro Center to Gallery Place. Train Operator of Train ID respond they encountered personnel walking in between Farragut North and Metro Center. Train Operator also reported they were not briefed by the AMF. ROCC asks RWIC of their current location. RWIC reports they currently walking in between Metro Center and Farragut North Stations. [Ops 1]

Time	Description
09:59:52 hours	ROCC Radio RTC: ROCC informs all personnel on OPS 1 they have Track personnel walking from Metro Center to Farragut North Station, Track 1. [Ops 1]
10:07:44 hours	ROCC Radio RTC: ROCC instructs RWIC to give them a landline. RWIC acknowledges. [Ops 1]
10:08:26 hours	ROCC Radio RTC: ROCC receives landline from RWIC and asks if they called ROCC to inform them they were clear Gallery Place to Metro Center Station to continue. The RWIC reports they did not call clear and had their radio turned down as they approached the gate at Metro Center and continued their walk. RWIC stated they realized they did not call clear after encountering the train on the roadway. ROCC informed RWIC to standby and was subsequently removed from service at Farragut North Station. [Landline]

### **Interview Findings**

*Based on the investigation launched into the Improper RWP violation near Metro Center Station, SAFE conducted one formal interview with the RWIC via Microsoft Teams, which included a representative from the WMSC. The interview conducted identified the following key findings associated with this event. Findings detailed below include reported information from interviews and may conflict with other data sources contained in the report:*

The RWIC reported they were conducting a track inspection from Union Station to Woodley Park Station. They stated they had two AMFs and a Track Inspector within the work crew. The RWIC reported that they contacted ROCC prior to departing Metro Center Station. They also reported the AMF stationed at Farragut North Station was notified before they left Metro Center Station, however this was not confirmed via audio playback. The RWIC encountered Train ID 108 between Metro Center and Farragut Station Stations. The RWIC made contact with their AMF stationed at Farragut North Station after contact was made with the train operator.

### **Weather**

At the time of the incident, NOAA recorded the temperature at 60° F, low clouds, 80% humidity, winds 10 mph, and visibility of 4 miles. This event occurred within a tunneled section of the rail system. Weather was not a contributing factor in this event (Weather source: NOAA – Location: Washington, DC).

### **Human Factors**

#### **Fatigue**

Evidence of Fatigue:

The incident data was evaluated for evidence of fatigue that may have been present at the time of the incident. Some video of the RWIC was available to ascertain whether signs of fatigue were present. The RWIC reported feeling fully alert at the time of the incident and did not report experiencing any symptoms of fatigue in the time leading up to the incident.

## Fatigue Risk:

The incident data was evaluated for fatigue risk factors. Risk factors for fatigue were present as the employee performed day and night work in the days leading up to the incident. The incident time of day did not suggest an increased risk of fatigue-related impairment. The RWIC reported keeping a regular sleep schedule in the days leading up to the incident. The employee was awake for 3.95 hours at the time of the incident. The TRPM RWIC reported a sleep duration of 7.5 hours in the 24 hours leading up to the incident. The off-duty period preceding the incident was 24.96 hours, which provided an opportunity for 7-9 hours of sleep. This was a comparable amount to the employee's usual workday sleep duration. The employee reported no issues with sleep.

## Post-Incident Toxicology Testing

WMATA's Drug and Alcohol Program determined that the RWIC was not in violation of the Drug and Alcohol Testing Program Policy 7.7.3/7.

## **Related Rules and Procedures:**

- Section 5 – RWP Rules Ver 1.5 – 5.13.6 – Advanced Mobile Flagging (AMF) – Mobile Work Crew

## **Findings**

- The Radio RTC granted permission to the RWIC to begin to conduct the track inspection between Union Station and Woodley Park/Zoo-Adams Morgan Station.
- The RWIC requested and received permission to continue their inspection for three segments prior to arriving at Metro Center Station.
- The AMF was in place at Farragut North Station, Track 1, waiting instructions to begin flagging operations.
- The AMF did not brief the Train Operator of Train ID 108 of personnel conducting a track inspection on the roadway because they were not instructed to begin flagging operations.
- The RWIC did not request permission from ROCC to continue their inspection from Metro Center Station and entered the roadway without permission from ROCC.
- The RWIC did not notify identify all Hot Spots within their working limits on the Roadway Job Safety Briefing Form (RJSBF).
- The RWIC did not ensure the AMF's radio was accounted for on the RJSBF.

## **Probable Cause Statement**

The probable cause of the Improper Roadway Worker Protection (RWP) event was a human factors failure as the RWIC failed to adhere to established procedures. Permission was not requested or received prior to entering the roadway at Metro Center Station. The RWIC demonstrated complacency with a repetitive task by failing to request permission to continue their inspection and not notifying the AMF to begin flagging.



## **SAFE 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, and the respective departmental Safety Risk Coordinator (SRC) will manage the mitigation. Refer to the SMS I/A Module for additional information.

<b>Corrective Action Code</b>	<b>Description</b>	<b>Responsible Party</b>	<b>Estimated Completion Date</b>
100193_SAFE CAPS_TRST_001	TRST Management will ensure the RWIC receives refresher RWP Training with an emphasis on Foul Time Protection.	TRST SRC	9/15/2022
100193_SAFE CAPS_TRST_002	TRST Management will conduct and document safety talks with employees focusing on proper radio communications during roadway operations.	TRST SRC	9/15/2022
100193_SAFE CAPS_SAFE_001	WMATA SAFE will review options to ensure employees remain aware of their surroundings while conducting roadway tasks to include a review of policies, procedures and signage.	SAFE SRC	12/31/2022

## **Appendices**

### **Appendix A – Interview Summaries**

*The below narrative is a summary of the interview with SAFE and represent the statements made by the individual involved. As such, times and details may present a conflict with the data contained in systems of record.*

#### **RWIC**

The RWIC is a WMATA employee with nine years of service: nine years as a Track Walker AA. The RWIC's last certified to the RWP-4 level in March of 2022. This employee has no history of sleep issues to report.

During the interview, the RWIC stated they were conducting track inspections from Union Station to Woodley Park Station. They stated there were four total personnel within the work crew, which included a Track Inspector and two AMFs. The RWIC reported they gave the RJSB before track inspections started and covered safety rules of the day and hot spots. The RWIC stated as they left Union Station, they contacted ROCC to report they were starting their track inspection in the direction of Judiciary Square Station on Track 1. After the RWIC reached Judiciary Square, they contacted ROCC and reported they were proceeding to Gallery Place Station. Once they arrived at Gallery Place, the RWIC contacted ROCC for permission to continue on the Metro Center Station. After arriving the Metro Center, the RWIC did not contact ROCC and continued their track inspection towards Farragut North Station on Track 1. The RWIC stated there were no distractions at the time of this incident and they forgot to contact ROCC before proceeding to Farragut North. They reported that the normal procedure is to contact ROCC before proceeding at each station. The RWIC suggested if they had a designated place to call ROCC near the end gate they may have been reminded to contact ROCC before proceeding to the next station.

## Appendix B – Roadway Worker Job Safety Form

Permanent Order # T-21-06

WMATA ROADWAY WORKER JOB SAFETY FORM

DATE: 05-03-2022

RWIC NAME: [REDACTED] CALL #: [REDACTED] TRACK TIME ON/OFF: 7:00 / 3:00

RWIC'S CELL PHONE #: [REDACTED] RADIO OPS CHANNEL: 1 EMPLOYEE ID #: [REDACTED]

SAFETY RULE OF THE DAY: 5.2.1

WORK ASSIGNMENT: Railroad Inspection

RAIL LINE: A B C D E F G J K L N TRACK #: 1 2 3

PLACE OF SAFETY: Safety walk, Platform

DIRECTION OF TRAFFIC: INBOUND ☐ OUTBOUND ☐

WORK LIMITS CM: A04-B03

TYPE OF PROTECTION(s): IT ☐ ETO AUTHORITY ☐ ETO LOCAL SIGNAL ☐ AMF ☒ FT ☐

REQUEST FROM ROCC: BLOCK CALLS ☒ CANCEL AUTOMATIC SIGNALS ☒ PROHIBIT EXITS ☒

RED HOT SPOT(s) TYPE/LOCATION ☐ RED HOT SPOT HAZARDS ☐ ETS/RADIO OUTAGE ☐

POWER OUTAGE: LOTD: \_\_\_\_\_ RED TAG: \_\_\_\_\_ SUPERVISORY: \_\_\_\_\_ NO POWER OUTAGE: \_\_\_\_\_

RED TAG #: \_\_\_\_\_ RED TAG HOLDER: \_\_\_\_\_

WATCHMAN/LOOKOUT ASSIGNED: YES ☐ NO ☐ WATCHMAN/LOOKOUT NAME(s): \_\_\_\_\_

WATCHMAN/LOOKOUT EQUIPPED WITH "W" WARNING DISC, AIR HORN AND WHISTLE, ("W" Warning Disc required for fixed Zones): ☐

**FOUL TIME CAN BE REQUESTED IN ALL WORK ZONE CONFIGURATIONS**

**WATCHMAN/LOOKOUT MUST BE PROPERLY SPACED AND HAVE SUFFICIENT SIGHTING DISTANCE TO PROVIDE AMPLE WARNING**

Advanced Mobile Flagger ASSIGNED: YES ☒ NO ☐ AMF CALL #: [REDACTED]

**ADVANCE MOBILE FLAGGER EQUIPPED WITH AMBER LANTERNS/E-FLARES, ORANGE FLAG, AIR HORN, WHISTLE, AND RADIO:**

PIGGYBACK CREW LEADER CALL #(s): \_\_\_\_\_ PIGGYBACK WORKZONE CM(s): \_\_\_\_\_

PIGGY BACK WORK ASSIGNMENT: \_\_\_\_\_

# OF CLASS 2 RAIL VEHICLE(s): \_\_\_\_\_ CLASS 2 RAIL VEHICLE(s) OPERATING IN THE WORK ZONE: \_\_\_\_\_

**ALL ROADWAY WORKERS MUST EXERCISE GOOD JUDGEMENT AND CONSIDER THE FOLLOWING POTENTIAL HAZARDS AND PROCEDURES BEFORE ENTERING THE ROADWAY:**

WEATHER CONDITIONS <input checked="" type="checkbox"/>	TRIPPING HAZARDS / UNEVEN WALKING SURFACES <input checked="" type="checkbox"/>
TRACK GRADE AND VISIBILITY <input checked="" type="checkbox"/>	POOR LIGHTING / TUNNEL AND VENT SHAFT(S) <input checked="" type="checkbox"/>
HAZARDS ASSOCIATED WITH RAIL VEHICLE MOVEMENT <input checked="" type="checkbox"/>	TRAIN / CURVE SPEED(S) <input checked="" type="checkbox"/>
WORKSITE CONDITIONS AND ACTIVITIES <input checked="" type="checkbox"/>	ETS BOX(S) LOCATIONS <input checked="" type="checkbox"/>
EMERGENCY PROCEDURES <input checked="" type="checkbox"/>	EQUIPMENT AND TOOL SAFETY <input checked="" type="checkbox"/>
ADJACENT TRACK PROTECTION <input checked="" type="checkbox"/>	ROTATION AND RELIEF PROCEDURES <input type="checkbox"/>

WSAD CERTIFICATION DUE	WSAD SERIAL #/ASSET ID	WSAD CERTIFICATION DUE	WSAD SERIAL #/ASSET ID

Figure 5 - WMATA Roadway Worker Job Safety Form used to conduct the track inspection. Page 1 of 2

Figure 6 - WMATA Roadway Worker Job Safety Form used to conduct the track inspection. Page 2 of 2

## Appendix C – RWIC Written Statement

Initial Incident Form		TO BE COMPLETED AND DISTRIBUTED WITHIN 24 HOURS		Page 1 of
WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY				
<b>INCIDENT</b>				
Date 05-03-2022	Incident Time 0945	<input checked="" type="checkbox"/> AM <input type="checkbox"/> PM	Date/Time Reported 5/3/22 1019	<input type="checkbox"/> AM <input checked="" type="checkbox"/> PM Worksafe Incident ID#
Location T35 METRO SUPPLY FACILITY 8201 ARDWICK-ARDMORE DR. LANDOVER, MD 20785			Incident ID# (From ROCC, BOCC, etc.)	
Type of Incident: <input type="checkbox"/> Altercation <input type="checkbox"/> External Complaint <input type="checkbox"/> Gas Detection Alarm <input type="checkbox"/> Medical Treatment <input type="checkbox"/> Vandalism <input type="checkbox"/> Assault <input type="checkbox"/> Fatality <input type="checkbox"/> Hazardous Material <input checked="" type="checkbox"/> Near Miss <input type="checkbox"/> Other: _____ <input type="checkbox"/> Derailment <input type="checkbox"/> Fire <input type="checkbox"/> Handling <input type="checkbox"/> No Treatment <input type="checkbox"/> Elevator Entrapment <input type="checkbox"/> First Aid Case <input type="checkbox"/> Internal Complaint <input type="checkbox"/> Rupture or Spill <input type="checkbox"/> Escalator <input type="checkbox"/> Flood <input type="checkbox"/> Leak <input type="checkbox"/> Trespassing				
<b>WMATA PERSONNEL INVOLVED</b>				
Name	Age	Employee # or MTBD Badge #		
Phone Number	Job Title	Department	Division/Section	
Last Day Worked (prior to)	Hours Worked (within last 24 hrs)	Overtime?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
05-01-2022				
<b>COMPLETE FOR INCIDENTS WITHIN THE RAIL SYSTEM:</b>				
Train/Vehicle ID	Direction	Track #	Car/Vehicle Numbers	Trouble Code    Resp Code
Mezzanine #	AFC Equipment #	Escalator/Elevator #	Entrance	Platform    Track    Room#
<b>COMPLETE FOR INCIDENTS WITHIN THE BUS SYSTEM</b>				
Bus or Tag Number	Vehicle or Tag Number	Block Number	Run Number	
<b>DESCRIBE THE INCIDENT AND PROPERTY/EQUIPMENT DAMAGE</b>				
Provide factual information about the task, actions before and after the incident, the injury causing agent and any damage caused to property or equipment. Provide a diagram(s) and/or photos as attachments. If necessary, provide diagram in this space or on a separate page.				
Personnel did a walking inspection from Metro Center to Farragut North without permission. I forgot to call from station to station.				
<b>EXTERNAL AGENCIES INVOLVED</b>				
<input type="checkbox"/> Fire Dept. - Arrival Time: _____ <input type="checkbox"/> EMS - Arrival Time: _____ <input type="checkbox"/> Police - Arrival Time: _____ <input type="checkbox"/> Other - Arrival Time: _____				
Name	Badge Number	Complaint Number	Jurisdiction	
Engine Number	Ambulance Number	Hospital		
<b>ACTIONS TAKEN BY SUPERVISOR</b>				
Describe immediate changes made to address the incident.				
Form completed by (Signature)				
Date			05-05-2022	
Employee Number			Phone Number	
Supervisor (Signature)				
Date			5/3/2022	
Employee Number			Phone Number	

50.588 04/09 Original: RISK Copy 1: Kiosk Copy 2: Department Photocopy to: SAFE, Employee and other per Department requirements

Document 3 – TRPM RWIC Statement (Page 1 of 1).

Incident Date: 05/03/2022 Time: 09:47 hours  
Final Report – Improper RWP  
E22270

Rev. 1 Drafted By: SAFE 702 – 08/30/2022  
Rev. 1 Reviewed By: SAFE 71 – 08/31/2022  
Rev. 1 Approved By: SAFE 71 – 08/31/2022

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## Appendix D – Rail Operations Control Center (ROCC) Report

View Approved Incident Report

INCIDENT ID: 2022123RED2					
<b>DATE</b> 2022-05-03	<b>TIME</b> 0947	<b>LINE</b> Red	<b>ITEM</b> 2		
<b>LOCATION (STATION/YARD)</b> Farragut North (A02)	<b>LOCATION/CHAIN MARKER (If Applicable)</b>		<b>REPORTED BY</b> [REDACTED]		
<b>TRAIN ID</b> 108	<b>DIRECTION</b> I/B	<b>TRACK NUMBER</b> 1	<b>DEPTS NOTIFIED</b> Everbridge Alert/Messaging		
<b>CAR NUMBERS (XXXX-XXXX)</b>					
<b>Lead Car</b>					
-	-	-	-		
Caused Issue <input type="checkbox"/>	Caused Issue <input type="checkbox"/>	Caused Issue <input type="checkbox"/>	Caused Issue <input type="checkbox"/>		
<b>TRBL CODE</b> RWPV-RWP VIOLATION	<b>RESP CODE</b> TRK				
<b>TYPE INCIDENT</b> RWP Violation					
<b>ACTION PLAN</b> Track Unit [REDACTED] removed from service, Train Operator interviewed					
DELAYS IN MINUTES					
<b>LINE</b>	<b>INCIDENT</b>	<b>TRAIN</b>	<b>TOTAL DURATION</b>		
0	0	0	0		
TRIPS MODIFIED					
<b>PARTIAL</b>	<b>GAP TRAIN</b>	<b>LATE DISPATCHES</b>	<b>REROUTED</b>	<b>NOT DISPATCHED</b>	<b>OFFLOADS</b>
0	0	0	0	0	0
FIVE PRIMARY CONSOLE INDICATIONS					
<b>BCP</b>	<b>BRAKES ON ILLUMINATED</b>	<b>ALL DOORS CLOSED ILLUMINATED</b>	<b>AUTO\MANUAL ILLUMINATED</b>	<b>BPP</b>	
			AUTO		
INCIDENT CHRONOLOGY					
<b>TIME</b>	<b>DESCRIPTION</b>				
0947	Train Operator [REDACTED] aboard Train 108, track one notified ROCC that she observed at crew walking from Metro Center (A01) to Farragut North (A02) and she had no prior warning from an AMF. Operator [REDACTED] stated there was an AMF at the 8 car marker at Farragut North, track one, but was not briefed. ROCC Assistant Operations Manager, ROIC, CMNT, MTPD and all concerned personnel were notified.				

Figure 7 - ROCC Report - Page 1 of 2

## View Approved Incident Report

0950	Upon investigation, Track Unit [REDACTED] failed to notify ROCC that he completed his walk from Gallery Place (B01) to Metro Center (A01). Track Unit [REDACTED] arrived on the platform at Metro Center and continued to walk to Farragut North (A02) via track one without notifying ROCC or going direct to the AMF at Farragut North.
0959	Track Unit [REDACTED] stated via landline interview that he continued his walk from Metro Center to Farragut North and did not notify ROCC nor the AMF.
1009	ROCC clarified with Operator [REDACTED] about Train 108 that she saw personnel on the roadway walking from Metro Center to Farragut North. Unit 17, RTRA Supervisor [REDACTED] intercepted Train 108 at Silver Spring (B08) to interview the Operator.
1010	ROCC canceled the remainder of Track Unit [REDACTED] walk due to the RWP violation.

**MAXIMO TICKET#**  
8600151

REPORT PREPARED BY	NAME	CLICK TO SIGN
RADIO CONTROLLER 1	[REDACTED]	✓
BUTTON CONTROLLER 1	[REDACTED]	✓
RADIO CONTROLLER 2		
BUTTON CONTROLLER 2		

### SUPERINTENDENTS OR ASSISTANTS SECTION

**ADDITIONAL FOLLOW-UP CORRECTIVE ACTIONS OR REMARKS**

**FOLLOW-UP INFORMATION OBTAINED FROM SUPPORT DEPARTMENTS**

**NOTIFICATIONS/PAGE GROUPS** #1/CEO ☐ #2/DGM & BELOW ☒

**ADDITIONAL NOTIFICATIONS MADE BY PHONE** MAC

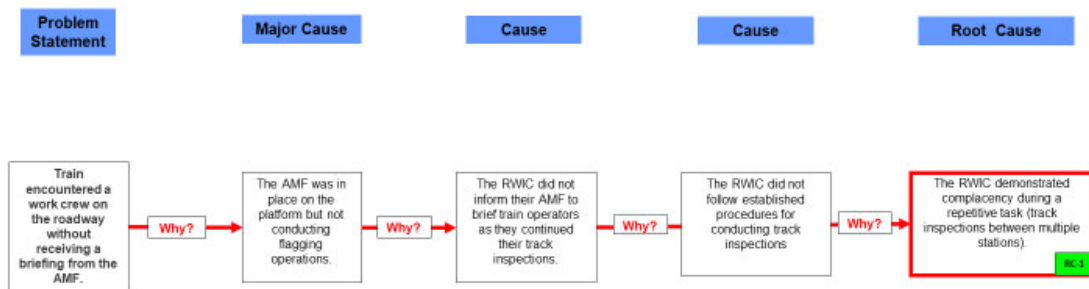
APPROVED BY	NAME	CLICK TO SIGN
REPORT APPROVED BY SUPT. OR ASST SUPT.	[REDACTED]	✓

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Figure 8 - ROCC Report - Page 2 of 2

## Appendix E – Root Cause Analysis

### E22270 – Improper RWP – Metro Center Station



#### 8 Root Cause Analysis

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

