

**W-0405 Improper Roadway Worker Protection at Capitol Heights Station – April 23, 2024****Document Purpose**

This WMSC written report on WMATA Metrorail's safety event investigation and review of Metrorail's findings in accordance with the WMSC Program Standard, in conjunction with the attached Metrorail investigation report that has undergone WMSC staff review, feedback, and Metrorail revision, describes the investigation activities, identifies factors causing or contributing to the accident, and sets forth ongoing, additional, or upcoming corrective actions and further oversight work (such as inspections and audits) as necessary or appropriate. The WMSC's ongoing oversight during the investigative process, including safety event reporting and verification, participation in investigative interviews, data review, consistent communication with the Metrorail investigations team, and feedback on Metrorail's reports leads to further improvements prior to consideration of the reports by WMSC Commissioners for adoption. The WMSC's safety event investigation oversight assures the sufficiency and thoroughness of Metrorail's investigations. The WMSC Commissioners are considering these documents (the WMSC review and Metrorail's investigation report) as a unified item for adoption at the Washington Metrorail Safety Commission meeting October 21, 2025

WMSC staff recommend adoption of this investigation.

Safety event summary:

On Tuesday, April 23, at approximately 10:40 a.m., a Roadway Worker Protection rule violation took place between Capitol Heights Station and Addison Road Station, when a work crew conducting a track inspection on track 2 without establishing an Advanced Mobile Flagger (AMF) at the stations to warn train operators of roadway worker personnel on the tracks, encountered a train operating at regulated speed, instead of at 35MPH as the rule dictates. The track inspection was being performed on track 1 between Benning Road Station and Addison Road Station and then returning to Benning Road Station on track 2. The RWIC briefed their work crew, including AMFs before the work began, however changed the track order after the briefing was completed, notifying only AMF #1 of the change.

The work crew was supposed to be under Advance Mobile Flagging protection; however, the Advance Mobile Flagger was not in the correct location, to provide this protection. This was as a result of the Roadway Worker in Charge not communicating this information to all personnel that were part of the roadway work crew. The Roadway Worker –In Charge requested permission from the Rail Traffic Controller in the Control Center to conduct a walking track inspection. The Roadway Worker in Charge was instructed to verify that the Advance Mobile Flagger (AMF) was in place, to which the AMF stated that they were in a place of safety at Benning Road Station, track 2. There was a location discrepancy not identified by the RWIC or the Radio Rail Traffic Controller, who then granted the RWIC permission to begin their walking track inspection. At 10:47 a.m., the Train Operator of Train 414 reported having passed a work crew as they approached Capitol Heights Station, but that there was not an AMF at Addison Road Station.

One minute later, the Radio Rail Traffic Controller contacted the Train Operator of Train 620, located at Addison Road Station, who confirmed that there was no AMF present at that location. They then contacted the RWIC, to determine the work crew's location. The RWIC clarified they were at Capitol Heights Station, while the AMF was at Benning Road Station. The Radio Rail Traffic Controller instructed the RWIC to stand by and stand clear for Train 620 to pick them up.



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No injuries or damage resulted from the event. The RWIC, AMF and Radio RTC were removed from service for post-incident toxicology testing.

The probable cause and contributing factors of this safety event include:

- Failure to adhere to Metrorail procedures, including those related to communication and rail vehicle operation
- Loss/lack of situational awareness

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

- C-0183 establishes that Metrorail must develop, require, and implement effective territory familiarization and physical characteristics training and take steps such as territory-specific certification to ensure adequate knowledge of physical characteristics prior to assigning operations personnel (such as train operators, rail supervisors, terminal supervisors, and interlocking operators) work on a line in a terminal or in a yard. (Scheduled completion date December 2026).
- C-280 - Metrorail must ensure appropriate safety promotion and awareness for personnel to understand the safety implications of unauthorized deviations from documented roadway worker protection requirements. This corrective action plan is 40% complete and is expected to be fully implemented in the next ten months, in August 2026.
- In the 2025 Rail Control and Rail Operations Audit issued on August 27, 2025, the WMSC wrote that Metrorail must evaluate its current operational environment through a staffing assessment that accounts for factors such as report-writing, breaks, absenteeism, vacation, training, actual attrition rate, and any other sort of absence from the rail traffic controller console. Metrorail proposed corrective action plan to address this issue is currently being reviewed by the WMSC.



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

FINAL REPORT OF INVESTIGATION A&I E24322

Date of Event:	April 23, 2024
Type of Event:	(O-23): Improper Roadway Worker Protection (RWP)
Incident Time:	10:39 hours
Location:	Capitol Heights Station, track 2
Time and How received by SAFE:	10:53 Hours, Safety Information Officer (SIO) Email
WMSC Notification Time:	11:57 hours
Responding Safety Officers:	WMATA: No WMSC: No Other: No
Rail Vehicle:	Train ID 414 (L6030/31x6060/61x6146/47T)
Injuries:	None
Damage:	None
Emergency Responders:	None
SMS I/A Incident Number:	20240323#115654MX

Shady Grove Station – Improper Door Operation

April 23, 2024

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Work Order: 18585441	G01/G02 Safety Request Radio Operational test including Platf	Maint. Alert? ☐	Attachments
Asset: 60067	> RADIO, CRCS, G02	Work Type: CM	Parent WO: >
Work Location: >		Failure Class: COMR004	> CRCS TUNNEL EQUIPMENT
Status: CLOSE		Problem Code: 3662	> DOWNLINK COMM PROBLEM
		Job Plan: >	

Failure Details

Remarks:
RADIO CHECKS LOUD AND CLEAR

Remark Date:
5/2/24 20:17

-----	22
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Abbreviations and Acronyms

AIMS	Advanced Information Management System
AMF	Advanced Mobile Flagger
ARS	Audio Recording System
AOM	Assistant Operations Manager
CM	Chain Marker
CCTV	Closed-Circuit Television
MICC	Metro Integrated Command and Communications Center
MOR	Metrorail Operating Rulebook
NOAA	National Oceanic and Atmospheric Administration
RTC	Rail Traffic Controller
RTRA	Office of Rail Transportation
RWIC	Roadway Worker in Charge
SAFE	Department of Safety
SPOTS	System Performance On-Time Summary
SMS	Safety Measurement System
TRST	Office of Track and Structures
WMATA	Washington Metropolitan Area Transit Authority
WMSC	Washington Metrorail Safety Commission

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

Executive Summary

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

On Tuesday, April 23, 2024, at 10:39 hours, the Metro Integrated Command and Communication (MICC) Center received a report of a Roadway Protection violation that occurred between Capitol Heights Station and Addison Road Station on track 2.

Before the event, the Roadway Worker-In-Charge (RWIC) requested permission from the Radio Rail Traffic Controller (RTC) to conduct a walking track inspection and was instructed to verify that the Advance Mobile Flagger (AMF) was in place.

The RWIC contacted the AMF by name instead of their call sign, to verify their location. The AMF responded stating they were in place of safety and ready to flag at Benning Road Station, track 2. The location discrepancy was not identified by the RWIC or the Radio RTC who then granted the RWIC permission to begin their walking track inspection.

At 10:47 hours, the Train Operator of Train ID 414 reported to the Radio RTC that they passed a work crew on track 2 while approaching Capitol Heights Station. The Train Operator of Train ID 414 reported that there was not an AMF at Addison Road Station. At 10:47 hours, the Radio RTC attempted to contact the RWIC three (3) times via radio without success.

At 10:48 hours, the Radio RTC contacted the Train Operator of Train ID 620 at Addison Road Station, who confirmed that no AMF was present at that location. The Radio RTC contacted the RWIC via radio to determine the work crew's location. The RWIC stated they were located at Chain Marker (CM) G2 438+00. The Radio RTC directed the RWIC to stand by and stand clear for a train pick up by Train ID 620.

At 10:49 hours, the Button RTC informed the Assistant Operations Manager (AOM) of the incident.

At 10:54 hours, the RWIC and crew received a train pick-up from the roadway at chain marker (CM) G2 538+00 by Train ID 620 (L67450/51x7360/61x7211/10T) and dropped off at Capitol Heights Station.

No injuries or damage resulted from the event.

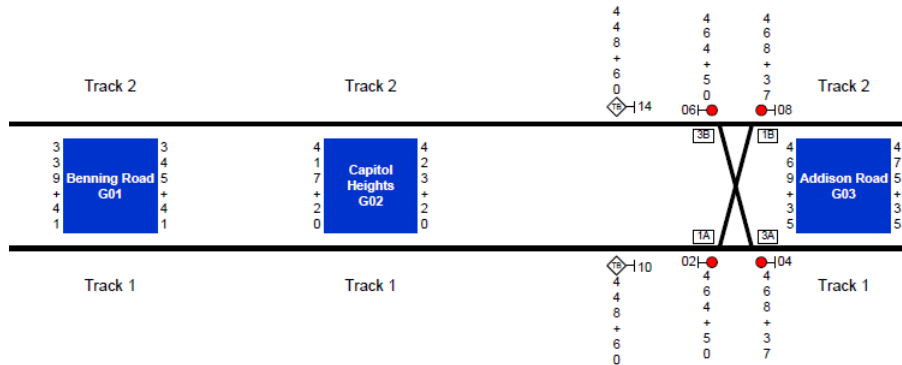
In accordance with the Office of the Chief Mechanical Officer (CMOR) Incident Investigation Team (IIT) Operations Administrative Policy (OAP) 102.01-02 the Metro Integrated Command and Communications Center (MICC) promptly initiated the removal of the RWIC, AMF, and the Radio RTC from service for post-incident investigative measures. This action adhered to the Rail Vehicle Event Investigation Policy, ensuring a comprehensive examination of the incident.

The probable cause of the Improper RWP event on April 23, 2024, at Capitol Heights Station was the complacency of the RWIC, and Radio RTC in failing to confirm the AMF was in place before granting and accepting permission to begin the track inspection.

Incident Site

Capitol Heights Station, track 2

Field Sketch/Schematics



The above depiction is not to scale.

Purpose and Scope

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

Investigative Methods

The investigative methodologies included the following:

- Site Assessment through documentation video review
- Formal Interviews – SAFE interviewed (two) 2 individuals as part of this investigation. The interview included persons present at, during, and after the incident, those directly involved in the response process, and representatives from the Washington Metrorail Safety Commission (WMSC). SAFE interviewed the following individuals:
 - Radio RTC
 - RWIC
- Informal Interviews – Collected through conversations with individuals during the investigation to provide background and supporting information. Written statements were reviewed from personnel present during the event.
- Documentation Review – Collection of relevant work history information and process documentation contained in WMATA systems of record. These records include:
 - Radio RTC 30-day work history review
 - RWIC 30-day work history review
 - Metrorail Operating Rulebook (MOR)
 - National Oceanic and Atmospheric Administration (NOAA)
 - Metro Integrated Command and Control (MICC) Incident Report
 - Maximo Data

- System Data Recording Review – A collection of information contained in Metro Data Recording Systems. This data includes:
 - System Data Recording Review – Collection of information contained in Metro Data Recording Systems. This data includes:
 - ARS (Audio Recording System) playback
 - Closed-circuit television (CCTV)
 - System Performance On-Time Summary (SPOTS)
 - Advanced Information Systems (AIMS)

Investigation

On Tuesday, April 23, 2024, at 10:00 hours, the Closed-Circuit Television (CCTV) shows the RWIC briefing the work crew in preparation for a track inspection. The track inspection was being performed on track 1 between Benning Road Station and Addison Road Station, and then returning to Benning Road Station on track 2.

The Roadway Job Safety Briefing outlined the inspection and written statements provided by AMF #1 and AMF #2. AMF #2 confirmed that the RWIC changed the inspection plans while on the train and notified AMF #2 by phone as radio communications were poor.

According to the Audio Recording System (ARS), at 10:39 hours, the RWIC requested permission via Ops 2 radio, to contact AMF #1 stating the RWIC was located at the Capitol Heights Station platform and the Radio RTC granted permission. The RWIC contacted AMF #1 by name and asked how do you copy? AMF #1 responded good copy, at Benning Road Station, 8-car marker, on track 1 ready to flag, how do you copy? The RWIC replied loud and clear and asked the Radio RTC if they copied the transmission. The RWIC contacted the AMF by name and failed to acknowledge the incorrect location provided by the AMF during the radio transmission.

At 10:40 hours, the Radio RTC responded by announcing to all train operators that there would be personnel walking between Capitol Heights Station to Addison Road Station on track 2, upon approaching personnel to tap the horn, dim lights, and train speed not to exceed 35 mph until the next station. The Radio RTC advised the RWIC they had permission to continue between Capitol Heights Station and Addison Road Station on track 2, all roadway procedures in effect. The RWIC responded, loud and clear, permission was granted to continue, and all roadway procedures were in effect.



Image 1 - The left image shows the RWIC entering the roadway at Capitol Heights Station, and the right image shows the AMF in place at Benning Road Station 8-car marker.

At 10:47 hours, the Train Operator of Train ID 414 reported to the Radio RTC that they passed a work crew on track 2 while approaching Capitol Heights Station. The Train Operator reported that there was not an AMF at Addison Road Station. At 10:47 hours, the Radio RTC attempted three (3) times to contact the RWIC by radio without success.

At 10:48 hours, the Radio RTC contacted the Train Operator of Train ID 620 at the Addison Road Station, who confirmed that no AMF was present at that location. The Radio RTC contacted the RWIC via radio to determine the work crew's location. The RWIC stated they were located at CM G2 438+00. The Radio RTC directed the RWIC to stand by and stand clear for a train pick up by Train ID 620.

At 10:49 hours, the Button RTC notified the AOM of the event.

At 10:54 hours, the Radio RTC notified the Train Operator of Train ID 620 to stop and pick up the work crew at CM G2 438+00. At 10:57 hours, the Train Operator of Train ID 620 advised they were keyed down at G02 CM 438+00 and the RWIC and crew had boarded and were returned to the Capitol Heights Station.

At 11:05 hours, the Button RTC advised the RWIC of the issue and instructed them to contact their supervisor.

No injuries or damage resulted in injuries or damage resulted from the event.

Advanced Information Management System (AIMS)

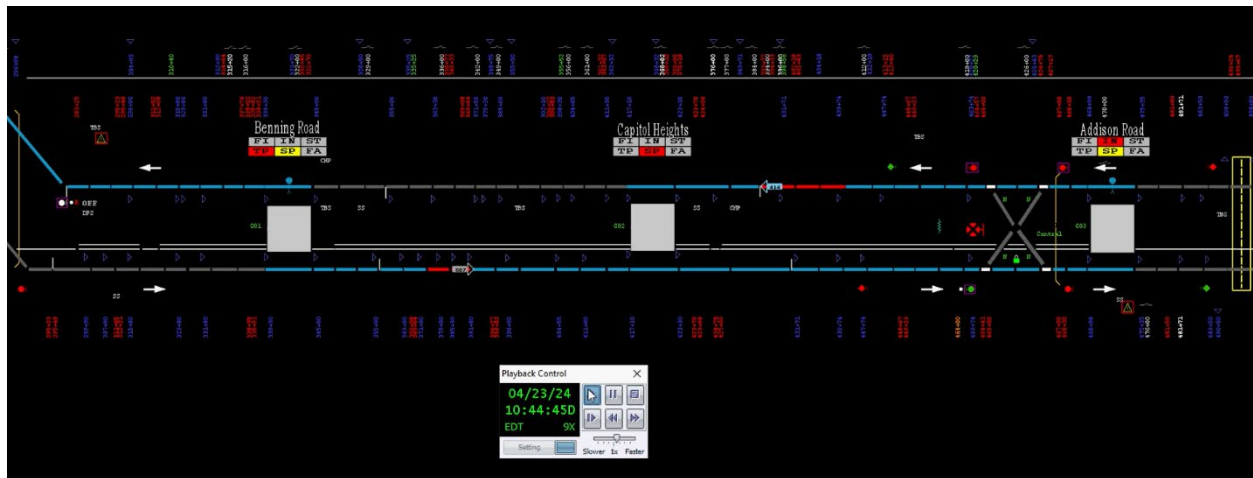


Figure 1 – AIMS indicating Train ID 414 after passing RWIC near G02 CM 438+00.

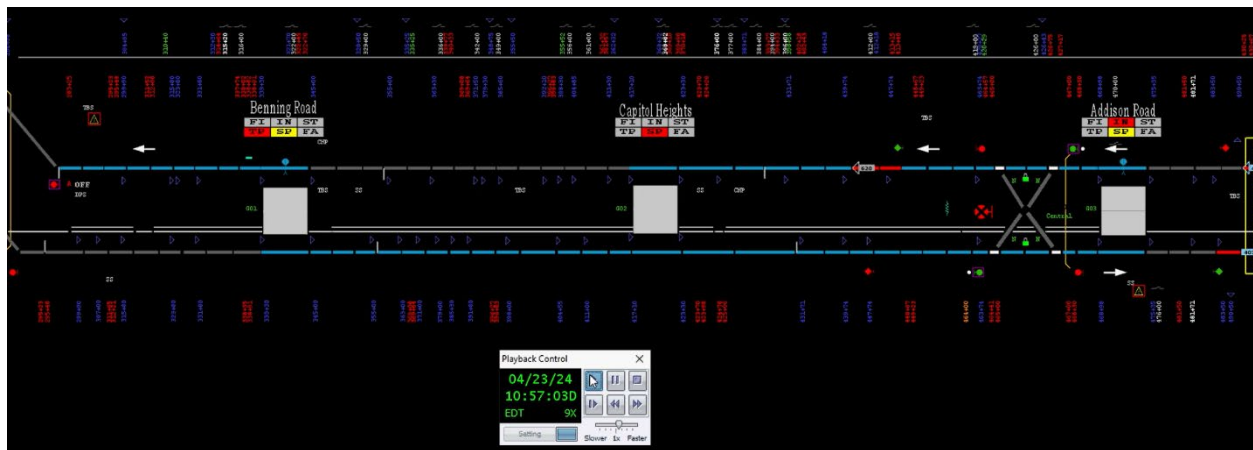


Figure 2 – AIMS indicating Train ID 620 in the area of Train ID 620's train pick up of RWIC near G02 CM 438+00

ROCS SPOTS REPORT

based on up-to-the-second operational performance data from the Rail Operations Control System

Current date/time: Sun May 5 20:37:48 2024

Select Platform: and/or Select ID: Leave blank to remove criteria

and/or Select 4-digit car number: Leave blank to remove criteria

Select Date: Select Times (0-24HRS): From To

Generate Report

ID	Platform	length	dcode	Right door open	Right door close	dwel	Left door open	Left door close	dwel	Head Arrived	Tail cleared	cars	Headway door open to door open
612	G02-2	6	68				10:01:29	10:01:42	13	10:00:52	10:02:11	7220-7221.7712-7713.7543-7542	-
408	G02-2	6	16				10:07:45	10:08:00	15	10:07:12	10:08:27	7564-7565.7624-7625.7671-7670	6:16
614	G02-2	6	68				10:13:02	10:13:21	19	10:12:30	10:13:45	6120-6121.6090-6091.6097-6096	5:17
410	G02-2	6	16				10:20:14	10:20:26	12	10:19:31	10:20:49	7646-7647.7176-7177.7681-7680	7:12
616	G02-2	6	68				10:23:51	10:24:08	17	10:23:15	10:24:31	7424-7425.7230-7231.7251-7250	3:37
412	G02-2	6	16				10:32:25	10:32:46	21	10:31:53	10:33:19	3024-3025.3082-3083.3059-3058	8:34
628	G02-2	6	68				10:37:50	10:38:26	36	10:37:02	10:38:53	7602-7603.7665-7664.7205-7204	5:25
414	G02-2	6	16				10:45:43	10:46:00	17	10:45:05	10:46:28	6030-6031.6060-6061.6146-6147	7:53
620	G02-2	6	68				10:59:31	10:59:43	12	10:58:49	11:00:07	7450-7451.7360-7361.7211-7210	13:48

Figure 1 - Capitol Heights Station SPOTS Report

Chronological Event Timeline

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

Time	Description
10:39:50 hours	<u>RWIC</u>: Asked RTC permission to go direct with AMF #1 I am on platform Capitol Heights. <u>Radio RTC</u>: Granted <u>RWIC</u>: AMF #1 How do you copy? <u>AMF #1</u>: That's a good copy at Benning Road track 1, 8-car marker ready to flag, how do you copy? <u>RWIC</u>: Loud and clear, central how do you copy AMF 1? <u>Radio RTC</u>: Attention all operators personnel walking Capitol Heights to Addison Rd track 2, on approach tap the horn lightly, speed not to exceed 35 mph to the next station. The time is 10-40. RWIC, you have permission to continue from Capitol Heights Station to Addison Road Station track 2, all roadway procedures in effect. <u>RWIC</u>: Acknowledged transmission. Loud and clear central I do have permission to continue, all roadway procedures are in effect. [Radio, OPS 2]
10:47:03 hours	<u>Train Operator of Train ID 414</u>: Asked, track 2 approaching 2 Benning Road track 2 I did not know we had personnel walking Capitol Heights to Benning Road by track 2. <u>Radio RTC</u>: Stated, was AMF in place? <u>Train Operator of Train ID 414</u>: Replied, negative there was no AMF in sight. <u>Radio RTC</u>: Passed personnel? <u>Train Operator of Train ID 414</u>: Affirmed, I passed the personnel there was no AMF. [Radio, OPS 2]
10:48:27 hours	<u>Radio RTC</u>: Asked the Train Operator of Train ID 620 if they saw an AMF on the Addison Road platform. <u>Train Operator of Train ID 620</u>: Advised the Radio RTC that there was no AMF at the 8-car marker. <u>Radio RTC</u>: Contacted the RWIC and asked location. <u>RWIC</u>: Responded, at CM G2 438+00. <u>Radio RTC</u>: Advised we have a train on track 2 from Addison and need you to stand clear and await train pick up. The operator reported no AMF at Addison Road. [RADIO, OPS 2]
10:49:35 hours	Button RTC notified AOM of the Improper RWP issue. [Phone, BLOR 2]
10:54:37 hours	<u>Radio RTC</u>: Instructed Train ID 620 to stop and pick up RWIC at CM 438+00, key down. <u>Train Operator of Train ID 620</u>: Acknowledged. [Radio, OPS 2]
10:57:21 hours	<u>Train Operator of Train ID 620</u>: Keyed down. <u>Radio RTC</u>: Advised RWIC to key on, clearance time 10:57, and give Central a landline. <u>RWIC</u>: Acknowledged. [RADIO, OPS 2]
11:05:26 hours	<u>Button RTC</u>: Advised the RWIC when of Train ID 414's report that there was no AMF at Addison Road Station Platform, 8-car marker. RWIC was advised to contact their supervisor. [Phone, BLOR 2]

11:33:14 hours	<u>AOM</u> : Advised RAIL 2 radio transmission reviewed confirmed RTC and RWIC missed AMF calling out at Benning Rd Station, not Addison Rd. Phone, RAIL 2:
12:06:12 hours	<u>AOM</u> : Advised RAIL 2 that Radio RTC and supervisor headed for PIME. Phone, RAIL 2
12:13:14 hours	<u>AOM</u> : Advised Maximo would be completed by MICC. Phone, RAIL 2

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

The Office of Systems Maintenance, Office of Radio Communications (COMR)

CMOR performed a radio test, and reported that no discrepancies were found.

Interview Findings

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

Radio RTC

- The Radio RTC stated they heard the request from the RWIC for permission to continue to walk and to go direct with AMF.
- The Radio RTC stated they heard a response from an AMF and granted permission for the walk to begin under the impression the AMF was in place.
- The Radio RTC left the console on a break when it was reported there was no AMF at Addison Road Station by Train ID 414. The Radio RTC did not return to the console as a controller before being removed from service and a PIME was completed.

RWIC

- The RWIC stated, that they held a briefing with crew and AMFs outlining the plan at New Carrollton Yard before the AMFAMFs deployed to assignments.
- The RWIC stated that they changed their mind regarding the movements of the inspection but only notified one (1) of the two (2) AMFs.
- The RWIC stated AMF #1 was not provided the updated inspection information.
- The RWIC stated they went direct with the AMF to confirm they were in place, ready to flag but did not specify their assigned location in the transmission.
- AMF #1 stated they were at Benning Road Station, track 1, 8-car marker, however, both the RWIC and Radio RTC missed that information.
- The RWIC accepted permission to begin track inspection without confirmation an AMF was in place at Addison Road Station, track 2, 8-car marker.
- The RWIC stated the work crew was removed from the roadway at CM G02 438+00 and removed from service. Both the AMF # 1 and the RWIC completed a PIME.

Weather

On April 23, 2024, at the time of the incident, NOAA recorded the temperature as 62°F, with partly cloudy skies, winds of nine mph, and 52% humidity. This is an underground station. The weather was not a contributing factor in this incident (Weather source: NOAA) – Location: [Washington, D.C.].

Related Rules and Procedures

Metrorail Operating Rulebook (MOR) 17.22.6 - Advanced Mobile Flagging Procedures:

- a. The RWIC will conduct a Roadway Job Safety Briefing to entering the roadway and assign the Advanced Mobile Flagger(s) and Watchman/ Lookout(s).
- b. The RWIC will contact the Rail Traffic Controller and perform a radio check establishing positive communication.
- e. Under the direction of the RWIC, the Advanced Mobile Flagger will position themselves at the next station ahead (in the direction the Mobile Work Crew will be walking). Advanced Mobile Flaggers will take their position at the end of the platform (eight (8) car marker or end gate) in the direction the train is traveling, and on the track the Mobile Work Crew is inspecting.
- g. Advanced Mobile Flaggers must establish positive communication, via WMATA calibrated radio, to notify the RWIC that they are in place and the flashing amber lantern/E-flare positioned and Orange Flag in their possession.
- h. After receiving confirmation that the Advanced Mobile Flagger is in position, the RWIC will request permission from the Rail Traffic Controller to enter the roadway.
- k. Once the Rail Traffic Controller gives permission, and before the Mobile Work Crew enters the roadway, the RWIC will notify the Advanced Mobile Flagger to begin Advanced Mobile Flagging operations.

Human Factors

Evidence of Fatigue

RWIC

SAFE evaluated signs and symptoms of fatigue that may have been present at the time of the incident. No signs or symptoms of fatigue were detected from the available data. Video of the incident was reviewed for signs of the RWIC's fatigue. No signs or symptoms of fatigue were evident from the video. The RWIC reported feeling fully alert at the time of the incident. The RWIC reported experiencing no symptoms of fatigue at the time leading up to the incident.

Fatigue Risk

SAFE evaluated incident data for fatigue risk factors. Risk factors for fatigue were present. 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 RWIC performed day and night work leading up to the incident. The RWIC was awake for eleven and a half hours at the time of the incident. The RWIC reported two and a half hours of sleep in the 24 hours preceding the incident. This was less than the employee's usual workday sleep duration. The off-duty period was 9 hours, which provided an opportunity for 7-9 hours of sleep. The RWIC reported no issues with sleep. The employee worked the morning shift in the days leading up to the incident.

Evidence of Fatigue

Radio RTC

SAFE examined signs and symptoms of fatigue that may have been present at the time of the incident. No video of the person involved was reviewed to ascertain whether signs of fatigue were present. The Radio RTC reported feeling fully alert at the time of the incident. The Radio RTC reported experiencing no symptoms of fatigue in the time leading up to the incident.

Fatigue Risk

SAFE evaluated incident data for fatigue risk factors. No significant risk was identified. The incident time of day did not suggest an increased risk of fatigue-related impairment. The Radio RTC reported keeping a regular sleep schedule on the days leading up to the incident. The Radio RTC worked the morning shift in the days leading up to the incident. The Radio RTC was awake for 6.65 hours at the time of the incident. The Radio RTC reported seven hours of sleep in the 24 hours preceding the incident. This was a comparable amount to the employee's usual workday sleep durations. The off-duty period was 15.75 hours, which provided an opportunity for 7-9 hours of sleep. The Radio RTC reported no issues with sleep.

Post-Incident Toxicology Testing

WMATA's Drug and Alcohol Program determined that the Radio RTC, RWIC, and AMF complied with the Drug and Alcohol Policy and Testing Program 7.7.3/7.

Findings

- The RWIC briefed their work crew, including AMFs before the work began. The RWIC changed the track order after the briefing was completed. The RWIC only notified AMF #1 of the change.
- The RWIC requested permission from the Radio RTC to walk track 2, not track 1 as the briefing identified.
- The RWIC contacted AMF # 1 by name and asked if they were in position but did not specify their location.
- The AMF # 1 responded correctly they were at Benning Road, track # 1, where they were originally assigned. Neither the RWIC nor Radio RTC repeated the information from AMF # 1 or identified the discrepancy. The Radio RTC granted the RWIC permission to conduct a track inspection on track 2, from Capitol Heights Station to Addison Road Station.
- The Train Operator of Train ID 414 reported to the Radio RTC that they passed track personnel on the roadway while approaching Capitol Heights Station, track 2.
- The Radio RTC confirmed Train ID 414 had passed the crew safely. Train ID 620 confirmed no AMF was in place at Addison Road and was directed to complete a train-up pickup of the RWIC and crew. The Button RTC notified the RWIC to contact their supervisor once they had cleared the roadway.

Immediate Mitigation to Prevent Recurrence

- The work crew was picked up by a train and cleared from the roadway.
- The RWIC, Radio RTC, and AMF #1 were removed from service.

Probable Cause Statement

The probable cause of the Improper RWP event was the complacency of the RWIC, and Radio RTC in ensuring the confirmation of the AMF being in place before granting and accepting permission to begin the track inspection.

Recommended Corrective Actions

Corrective Action Code	Description	Responsible Party	Estimated Completion Date
116373MX_ SAFECAPS_ TRST_001	(RC-1) TRST Management will ensure that RWIC attends refresher training on RWP procedures.	TRST	Completed
116373MX_ SAFECAPS_ MICC_001	(CF-1) MICC Management will ensure that the Radio RTC completes refresher training on RWP procedures.	MICC	Completed

Appendices

Appendix A – Interview Summaries and Written Statement

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

RWIC

The RWIC is a WMATA employee with 15 years of service and ten and a half years of experience as a Track Walker and RWIC. The Rail Supervisor holds a Roadway Worker Protection (RWP) Level 4 certification that expires in May of 2024.

During the formal interview, the RWIC stated that they had held a RJSB at New Carrollton Yard with their crew and two AMFs. The original plan involved track inspections from Benning Road Station through Capitol Heights to Addison Road Station on track 1 and returning on the opposite track 2 from Addison through Capitol Heights Station and ending at Benning Road Station.

While on the train the RWIC changed plans and decided to begin at Benning Road Station towards Capitol Heights Station on track 2. The RWIC stated they had informed AMF # 2 about the change by cell phone since radio communications were bad in that area. The RWIC had forgotten to notify AMF # 1 of the change. AMF # 1 had remained at their original assignment at the Benning Road Station, track 1, 8-car marker.

The RWIC stated they called AMF # 1 on the radio by name and asked if they were in place and ready to flag. The AMF #1 replied they were in place and the RWIC did not identify the location change issue. The Radio RTC also did not identify the issue either and the Radio RTC granted permission for the RWIC to begin their track walk to Addison Road Station on track 2.

The RWIC stated they did not recall hearing AMF stating they were at Benning Road Station, possibly due to bad radio communications. The RWIC also stated maybe that was a reason the Radio RTC did not identify it either.

The RWIC stated they were directed to leave the track by a train pick-up and learned about the AMF and Improper RWP issue on the phone as they headed to Capitol Heights Station and were removed from service.

RWIC Written Statement (redacted)



Witness or Employee Statement Form

TO BE COMPLETED AND

Washington Metropolitan Area Transit Authority

DISTRIBUTED WITHIN 24 HOURS

Complete all Fields (Write N/A if field does not apply)

Involved Personnel (Use this Block for WMATA Employees and Contractors)			
Name (Last Name, First Name, MI)	Witness?	D.O.B.	Employee ID Union
[Redacted]	☐ Yes ☐ No	[Redacted]	[Redacted] 689
Phone Number	Job Title	Department/Division (Company)	Time asleep, before the incident?
[Redacted]	Track Worker	D99	Fell Asleep _____ Wake up _____
Last Day Worked (Prior to)	Hours Worked (in last 24 hours)	Date/Time Shift Began	Was this the sleep schedule for the last seven days, including days off?
4/22/2024	6	12AM	Yes ☐ No ☐
On Overtime? ☐ Yes ☒ No	Personal Protective Equipment used (list)		How alert were you immediately prior to the incident? Fully Alert ☐ Moderately Alert ☐ Drowsy ☐ Fighting Sleep ☐
Secondary Employment (Write None if employee does not have secondary employment)			
Name of Secondary Employer		☐ Full Time	Work Hours
		☐ Part Time	
Secondary Employer Full Address			
Date of Hire	Supervisor	Phone Number	
Injury Information (Complete for all involved People. If there is no injury, write None in Date of Injury)			
Date of Injury	Time of Injury	Date/Time Injury Reported	Body Part(s) Injured:
Location (Address) where injury occurred (check one: ☐ MD ☐ VA ☐ DC)			
Witness Information (Name, Phone Number, Email, address)			
Did Another Person Cause this Injury? ☐ Yes ☐ No		Name of Responsible Party	
Responsible Party Insurance Carrier/Agent		Phone Number	
Are you able to Continue Work? ☐ Yes ☐ No		Name/Address of facility where you will seek treatment	
Doctor's Phone Number		Date you will see your doctor	

Employee, please read before signing:

- (1) This form is only to be used for Employees who are injured on the job.
- (2) All persons having a workers' compensation claim that was caused by the act of another is required to have the written approval of the Authority before agreeing to or signing any settlement for the injuries or lost wages that were paid as part of the whole by the Authority or its insurer to the employee as workers' compensation benefits.
- (3) Any Employee who willfully makes any materially false or misleading statements or representations for the purpose of obtaining any benefits under workers' compensation or leave provisions of the Authority may be subject to prosecution, disciplinary action up to and including dismissal and may adversely affect the employee's rights to workers' compensation benefits.

THIS IS TO CERTIFY THAT I HAVE READ THE GUIDELINES AND UNDERSTAND THEM FULLY AND THE INFORMATION I HAVE PROVIDED IS TRUE AND CORRECT.

Date: 4/23/24

Original: RISK

Copy: (1) SMS Incidents/Accidents (SAFE)

(2) Employee File

(3) Employee

Figure 1 – TRST RWIC Written Statement, page 1 of 2 (redacted)

Incident Date: 04/23/2024 Time: 10:39 hours
Draft Final Report – Improper RWP
E24322

Drafted By: SAFE 709 - 06/16/2024
Reviewed By: SAFE 707- 06/19/2024
Approved By: SAFE 707 – 06/25/2024

**Witness or Employee Statement Form**

TO BE COMPLETED AND

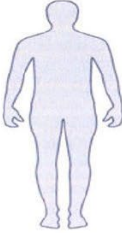
Washington Metropolitan Area Transit Authority

DISTRIBUTED WITHIN 24 HOURS

Involved Person or Witness (Use this Block for Non-WMATA Involved Person or Witness)				
Name	[REDACTED]		Phone Number	E-Mail
Address				
Incident Information				
Date	Incident Time	Date/Time Reported	Location	
Incident ID# (from OCC) - Completed by Supervisor			SMS Incidents/Accidents Report# Completed by Supervisor	
What happened prior to the incident/accident? Personnel walked from Benning rd to Capital Heights tract #2				
Describe the incident/accident Personnel declined permission to continue my track inspection from Capital heights track number 2, while continuing my inspection I was notified by RACC that my AMF was not in place Addison Rd track #2				
What happened after the incident/accident? Personnel was picked up by train on the Roadway while standing in a place of safety				

Please indicate the area of the injury by placing an X on the corresponding body parts below. To specify which side of the body is involved, please use "L" for left and "R" for right.


FRONT


BACK

Turn Over to Complete Employee and Injury Information



Figure 2 - TRST RWIC Written Statement - Page 2 of 2 (redacted)

Radio RTC

The Radio RTC is a WMATA employee with four years of service as an RTC. The Radio RTC holds a RWP Level 4 certification.

During the formal interview, the Radio RTC stated that they were performing their duties when a RWIC requested permission to conduct a track inspection from Capitol Heights to Addison Road Station on track 2. The RWIC went directly to their AMF on the radio, but I heard the RWIC saying they were going to Addison Road on track 2. After the RWIC had gone direct with the AMF I gave them permission for the track walk.

Incident Date: 04/23/2024 Time: 10:39 hours
Draft Final Report – Improper RWP
E24322

Drafted By: SAFE 709 - 06/16/2024
Reviewed By: SAFE 707- 06/19/2024
Approved By: SAFE 707 – 06/25/2024

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The Radio RTC stated a couple of minutes later a Train Operator reported there was no AMF at Addison Road.

The Radio RTC stated when asked if they recalled if the AMF had been called by the RWIC by name, AMF number, or location. The Radio RTC replied they did not recall. They did recall Addison Road was mentioned. The Radio RTC stated the AMF had responded to the RWIC but after hearing the actual radio tape played it was apparent the AMF had stated they were at Benning Road, track 1, ready to flag. While the Radio RTC did not recall verbatim, they believed the initial transmission the AMF was in place. Based on that belief the Radio RTC permitted the RWIC to begin the track walk towards Addison Road.

The Radio RTC advised they left the console for a break and on their return learned a train had advised of the unexpected work crew presence on the roadway, no AMF at Addison Road Station's 8-car marker or any briefing. The Radio RTC did not participate in any other actions regarding the event and was removed from service by the MICC and taken for a PIME.

AMF # 1 Written Statement (redacted)

To Whom it may concern,
1. At 0800 received Job Briefing from RWIC [REDACTED] It was specified that we would be Flagging from G03 to G01 Track 1 and then G01 to G03 Track 2. Starting on on Track 1.
2. Arrived at Benning Rd Station Track 1 at 1010.
3. 1040 I heard RWIC [REDACTED] go to ROCC saying he was at Capitol Heights Station ready to continue his Track Inspection and Mr. [REDACTED] was in place ready to Flag.
4. ROCC gave [REDACTED] permission to go direct.
5 6165 said [REDACTED] how to you copy 6165
6. I said [REDACTED] that's a good copy, AMF [REDACTED] is I place Benning Rd Track 1 at the Eight Car Marker ready to Flag, how do you copy, Over.
7. [REDACTED] said good copy, my AMF is in place.
8. Race gave [REDACTED] permission to continue the Track Inspection.

Figure 3 – TRST AMF # 1 Written Statement (redacted)

AMF # 2 Written Statement (redaction not required)

We had a briefing at New Carrollton yard at 0800 it was specified that we would do tracks 1 and 2 and that we were going to start on Track 1. I set up near Capitol Heights Station tracks 1 and received a call from my RWIC and told me that the communication was bad and he wanted to start on Track 2 first instead, I switched sides on the platform we called on the radio to perform our duties and they made it to the platform safely.

Figure 4 – TRST AMF # 2 Written Statement.

Appendix B – MICC Report (redacted)



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

Page 9 of 17
MX76PROD

Incident Number : 8751341

SMS Number : SMS ID: 20240423#116367MX

Train 414 departed Addison Road track two in approach to Capitol Heights, stated to MICC Rail of seeing track personnel walking the roadway. Operator Twyman stated that no AMF was in place at the 8 car marker at Addison Road.

<u>Date/Time</u> 04/23/2024 10:46	<u>Station Location</u> G03: (ADDISON ROAD STATION)	<u>Reported By</u>
<u>Trouble Code</u> RWPV	<u>Location Details</u>	<u>Notifications</u>
<u>RWP VIOLATION</u>	<u>Direction</u> INBOUND	<u>Resolved By</u>
<u>Responsibility Code</u> TRK	<u>Track Number</u> N/A	<u>Approved/Closed by</u>
<u>Train ID</u> 414	<u>Chain Markers</u>	<u>Org. OCC</u> ROCC
<u>Line</u> BLU		

Delays in Minutes		
<u>Line Delay</u> 0	<u>Train Delay</u> 0	<u>Passenger Delay</u> 0

Trips Modified				
<u>Partial</u> 0	<u>Late Dispatch</u> 0	<u>Rerouted</u> 0	<u>Not Dispatched</u> 0	<u>Offloads</u> 0

Incident Chronology (Timeline)				
Time	Add'l Pass. Delays	Add'l Trouble	Incident Level Code	Description
10:47				MICC Rail contacted Track Unit [REDACTED] and stated [REDACTED] was located at CM G2 438+00.
10:50				Train 620, track two in approach to Addison Road confirmed that there was no AMF located at the 8-car marker. Track Unit [REDACTED] was instructed to standby and clear until the next train picked them off the roadway. Track Unit [REDACTED] was instructed to contact his Supervisor, pending further investigation. Note: Rail Traffic Controller was removed from service pending further investigation.
12:16	0	RWPV	D3	Train 414 departed Addison Road track two in approach to Capitol Heights, stated to MICC Rail of seeing track personnel walking the roadway. Operator [REDACTED] stated that no AMF was in place at the 8 car marker at Addison Road.

Document 1 - MICC Improper RWP Report. (redacted)

Incident Date: 04/23/2024 Time: 10:39 hours
Draft Final Report – Improper RWP
E24322

Drafted By: SAFE 709 - 06/16/2024
Reviewed By: SAFE 707- 06/19/2024
Approved By: SAFE 707 – 06/25/2024

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Appendix B – TRST Roadway Job Safety Briefing Form (redacted)

WMATA Roadway Job Safety Briefing Form		
This form must be completed legibly and accurately and be retained and made available for inspection for a period of 90 days.		
Part 1: General Job Briefing		
1	Date: 4/23/2024 Time: 10:00AM	RWIC: [REDACTED]
	RWIC Call #: [REDACTED]	RWIC Cell Phone #: [REDACTED]
2	Safety Contact: 3.146	
	RWP Rule: 4 Lane worker	
3	Work Location: Benning rd - Addison - Addison - Benning	
	Job Task(s): Truck inspection	
4	Worksite, Electrical, Chemical, or Environmental Hazards: N/A	
5	PPE Inspected: ☒ Electronic Device Policy Reviewed: ☒ Radio Certification Date Inspected: ☒ RWP Stickers Inspected: ☒ Tools and Equipment Inspected: ☒ Radio Checks Performed: ☒	
	What Specialized PPE Will Be Used? N/A	
6	Emergency Response Plan: Clear Roadway Contact ROCC	
Part 2: RWP Briefing: This section must be filled out before any Roadway Workers enter the Roadway.		
**Track Time On/Off: 10:00A : M, : 1 : , : 1 : **		
7	Rail Line: C	Track Number(s): 182
	Track Access Guide (TAG) Speed: [REDACTED]	
	Working Limits Chain Markers: 346+00 - 474+00 - 474+00 to 346+00	
	OPS Radio Channel: #2	OPS Phone Number: 202.962.1542
	Place of Safety: fence line / safety walk	Time Needed to Reach Place of Safety: 5 sec
	Are There Red Hot Spots Within Your Working Limits? Yes ☐ No ☒	
	Red Hot Spot Chain Markers: NO	Red Hot Spot Hazard(s): NO
8	Form of RWP: IT ☐ ETO Authority ☐ Local Signal Control ☐ AMF ☒ FT ☐ RWP Notes:	
9	Advanced Mobile Flagger Call #(s) or Last Name(s): [REDACTED] Advanced Mobile Flagger Placement: next station toward against track Watchman/Lookout Placement: N/A Required Site Distance: 50 feet Watchman/Lookout Rotation Schedule: N/A	
10	Will There be a Speed Restriction on the Adjacent Track? Yes ☐ No ☒ How Will the Speed Restriction be Implemented? Contacting ROCC	
11	Will Class 2 Vehicles be Part of the Working Limits? Yes ☐ No ☒ # of Class 2 Vehicles: N/A Type of Class 2 Vehicles: N/A	

Document 2 – TRST Roadway Job Safety Briefing (redacted)

Incident Date: 04/23/2024 Time: 10:39 hours
 Draft Final Report – Improper RWP
 E24322

Drafted By: SAFE 709 - 06/16/2024
 Reviewed By: SAFE 707 - 06/19/2024
 Approved By: SAFE 707 - 06/25/2024

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Appendix C – COMR Radio Analysis Results

Work Order: 18585441	G01/G02 Safety Request Radio Operational test including Platf	Maint. Alert? ☐	Attachments
Asset: 60067	> RADIO, CRCS, G02	Work Type: CM	Parent WO: >
Work Location: >		Failure Class: COMR004 > CRCS TUNNEL EQUIPMENT	
Status: CLOSE		Problem Code: 3662 > DOWNLINK COMM PROBLEM	
		Job Plan: >	

Failure Details

Remarks:
RADIO CHECKS LOUD AND CLEAR

Remark Date:
5/2/24 20:17

Document 3 – COMR Maximo Work Order, page 1 of 2.

Remarks:
RADIO CHECKS LOUD AND CLEAR

Remark Date:
5/2/24 20:17

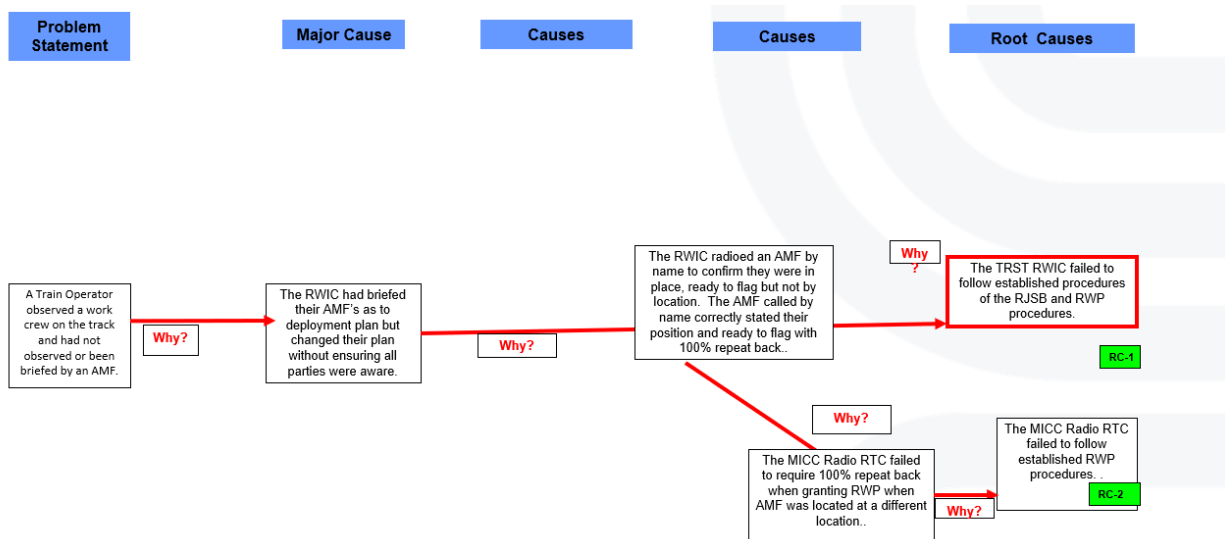
Supervisor:
E006020 > Jackson, Kenneth F.

Component:
100-112-201 > UHF RADIO SYSTEMS (CRCS)

Failure Codes	1	2	3	4	5
Type	Failure Code	Description			
PROBLEM	3662	DOWNLINK COMM PROBLEM			
CAUSE	3192	TESTED / INSPECTED			
REMEDY	3191	TESTED - NO TROUBLE FOUND			

Document 4 – COMR Maximo Work Order, page 2 of 2.

Appendix D – Why-Tree Analysis



Root Cause Analysis

E24322– Improper RWP 5
Capitol Heights Station

