



WMSC Commissioner Brief: W-0145 – Improper Movement – Medical Center Station – September 28, 2021

Prepared for Washington Metrorail Safety Commission meeting on January 25, 2022

Safety event summary:

The WMSC's regular independent oversight and monitoring of Metrorail data identified an improper vehicle movement without speed commands from Medical Center Station that had not been reported to the WMSC by Metrorail as required by the WMSC Program Standard.

The WMSC communicated this to Metrorail's Safety Department, which led to the event being reported.

The investigation identified that this improper use of stop and proceed mode and movement without required authorization from the Rail Operations Control Center (ROCC) was observed in real time by Rail Transportation QA/QC personnel performing compliance checks designed to identify whether operators were following rules requiring doors to remain open on the platform until permission is granted to move or speed commands return. The compliance team did not immediately report the safety event to division management, ROCC or the Safety Department.

At 8:02 p.m., approximately 47 minutes after the event, a QA/QC auditor requested that the Chief Mechanical Officer, Rail's Incident Investigation Team download data from the train. That Incident Investigation Team, which is separate from Metrorail's Safety Department investigation team, provided additional confirmation of the improper movement via email to the QA/QC auditor at 11:57 p.m.

The WMSC reviewed video that had been collected by the Incident Investigation Team and uploaded for WMSC review as required by the WMSC order issued on July 13, 2021, confirmed the improper vehicle movement, and contacted Metrorail's Safety Department. The Safety Department then contacted Rail Transportation division management and reported the event to the WMSC.

Other RTRA QA/QC audits sampled for review as part of this investigation identified instances on February 3, 2021, February 9, 2021, and March 1, 2021 where similar improper movements were observed. In those cases, the events were reported to Rail Transportation division management, but they were not reported to the Safety Department.

Typical practice for such QA/QC audits is to activate a turn back, which removes speed commands at a location without a red signal to simulate the presence of workers or another vehicle on the tracks ahead.

In this case, the train operator moved forward, then identified that they did not have speed commands and stopped the train. After moving past the end of the station platform, they radioed the ROCC to request permission to proceed, which was granted. However, the Train Operator then moved the master controller to P5 (of 5) power mode and exceeded the 15 mph maximum speed limit in stop and proceed mode, and the train automatically applied braking.

The Train Operator then entered stop and proceed mode again and continued on in accordance with operating speed requirements.



Probable Cause:

The probable cause of this event was gaps in supervisory oversight designed to ensure safety procedures are followed.

The probable cause of the event not being properly reported was siloing in the Metrorail organization and a lack of clear reporting requirements for internal auditors

Corrective Actions:

Rail Transportation QA/QC revised their procedure for Rules Efficiency Testing Train Operations to include immediate actions and reporting procedures after identifying safety events.

Rail Transportation QA/QC will include checks to ensure all written procedures are reviewed by all WMATA stakeholders, such as the Safety Department, before implementation.

WMSA staff observations:

Metrorail's QA/QC practices for operators can be a valuable tool as part of the safety management system (SMS) approach Metrorail has committed to in its Public Transportation Agency Safety Plan (PTASP). Taking full advantage of this or similar efficiency testing programs requires clear and complete reporting processes.

The Train Operator's use of coast and coast to car wash to move forward a few feet to attempt to gain speed commands suggests an area of practical drift from Metrorail's written procedures. Metrorail should consider additional safety promotion activities related to the importance of speed commands and other procedures to safety.

The WMSA is finalizing a draft Rail Operations Audit report that is expected to be transmitted to Metrorail in coming weeks that includes reviews of Metrorail's QA/QC practices and other operational procedures.

As the WMSA has identified in audit work, and as was also identified in this investigation, Metrorail did not inform train operators that stop and proceed mode had been added to 6000 Series trains. The mode had initially been in place only on 7000 Series trains.

Staff recommendation: Adopt final report.



Washington Metro Area Transit Authority
Department of Safety and Environmental
Management (SAFE)

FINAL REPORT OF INVESTIGATION A&I E21474

Date of Event:	09/28/2021
Type of Event:	Improper Rail Vehicle Movement
Incident Time:	2024 hours
Location:	Medical Center Station, Track 2
Time and How received by SAFE:	0921 hours WMSC via Text
WMSC Notification Time:	1131 hours, 9/29/2021
Responding Safety Officers:	WMATA SAFE: No WMSC: No Other: N/A
Rail Vehicle:	Train ID 108, (L) <u>7722</u> -23X7741-40x7744-45x7313-12 (T)
Injuries:	None
Damage:	None
Emergency Responders:	None
SMS I/A Incident Number:	20211126#97047

Medical Center Station – Improper Rail Vehicle Movement

September 28, 2021

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Abbreviations and Acronyms

AIMS	Advanced Information Management System
ARS	Audio Recording System
CMOR	Office of Chief Mechanical Officer
COMR	Office of Radio Communication
ER	Event Recorder
IIT	Incident Investigation Team
MC	Master Controller
MSRPH	Metro Safety Rules Procedures Handbook
NVR	Network Video Recorder
OPMS	Operations Management Services
QA	Quality Assurance
QA	Quality Control
ROQT	Rail Operations Quality Training
RTC	Rail Traffic Controller
RTRA	Office of Rail Transportation
RSDAR	Rail Supervisor Daily Activity Report
SMNT	Office of System Maintenance
SOP	Standard Operating Procedure
VMDS	Vehicle Monitoring and Diagnostic System
WMSC	Washington Metrorail Safety Commission

Washington Metropolitan Area Transit Authority
Department of Safety & Environmental Management

FINAL REPORT OF INVESTIGATION A&I E21474

Executive Summary

On Tuesday, September 28, 2021, during an established Quality Assurance compliance check, the Train Operator of Red Line Train ID 108 [(L) **7722**-23X7741-40x7744-45x7313-12 (T)], operating towards Shady Grove Station, Track #2, entered Stop and Proceed mode at Medical Center Station. Train ID 108 Train Operator moved approximately five feet without speed commands prior to receiving authorization from the Rail Operations Center Control (ROCC) Radio Rail Traffic Controller (RTC). The compliance check was designed so that trains would lose speed commands after berthing at the eight-car marker and require the Train Operator leave their doors open at the platform and request permission to move.

According to the System Recording Data, at approximately 20:24 hours, Train ID 108 Train Operator arrived at Medical Center Station and properly berthed at the 8-car marker on Track #2 outbound in Shady Grove Station's direction. Upon arrival, Train ID 108 performed a left-side door operation and allowed customers to board. Network Video Recording (NVR) playback and Office of Chief Mechanical Officer (CMOR) Incident Investigation Team (IIT) analysis supported that Train ID 108 entered stop and proceed on the console after performing a left-side door closure operation at approximately 20:24:34 hours. Audio Recording Services (ARS) playback determined that Train ID 108 Train Operator did not request permission to perform this action before moving approximately five feet outside the platform limits.

At approximately 20:25 hours, Train ID 108 Train Operator notified the Radio RTC that they did not have speed commands at Medical Center Station. The Radio RTC granted Train ID 108 Train Operator permission to enter stop and proceed mode and continue. According to CMOR IIT analysis, Train ID 108 Train Operator continued operating towards the next station [Grosvenor-Strathmore] until the Automatic Train Control (ATC) applied Full-Service brake in B4 Brake Application at 20:25 hours and 24 seconds, after traveling approximately 265 feet. NVR console playback showed Train ID 108 Train Operator entered Stop and Proceed mode a second time at 20:25 hours and 47 seconds and continued towards the next station without incident.

At approximately 21:02 hours, the RTRA QA/QC department auditor requested a CMOR IIT download to confirm whether the Train Operator moved without speed commands. CMOR IIT responded via email at approximately 23:57 hours on September 28, 2021, confirming the Improper Rail Vehicle Movement.

On September 29, 2021, at approximately 09:21 hours, the Washington Metrorail Safety Commission (WMSC) notified SAFE via text of NVR uploaded by CMOR IIT of an Improper Rail Vehicle Movement [moving without speed commands] at Medical Center Track #2 outbound in Shady Grove Station's direction. SAFE undertook a review of the Office of Rail Transportation Quality Assurance and Quality Control (RTRA QA/QC) department data request for car number 7722. CMOR IIT and system recording data confirmed the Operator entered Stop and Proceed mode and moved their train approximately five feet without receiving permission from ROCC.

After SAFE confirmed the event findings, SAFE contacted the RTRA Glenmont Division managerial staff and notified them of the Improper Rail Vehicle Movement. RTRA subsequently removed the Train Operator from service for post-incident toxicology testing.

A subsequent review of previously submitted RTRA QA/QC audits revealed that on February 3, 2021, February 9, 2021, and March 1, 2021, Train Operators entered Stop and Proceed mode without ROCC permission. These events were reported to the divisions and CMOR IIT request made; however, they were not reported to SAFE.

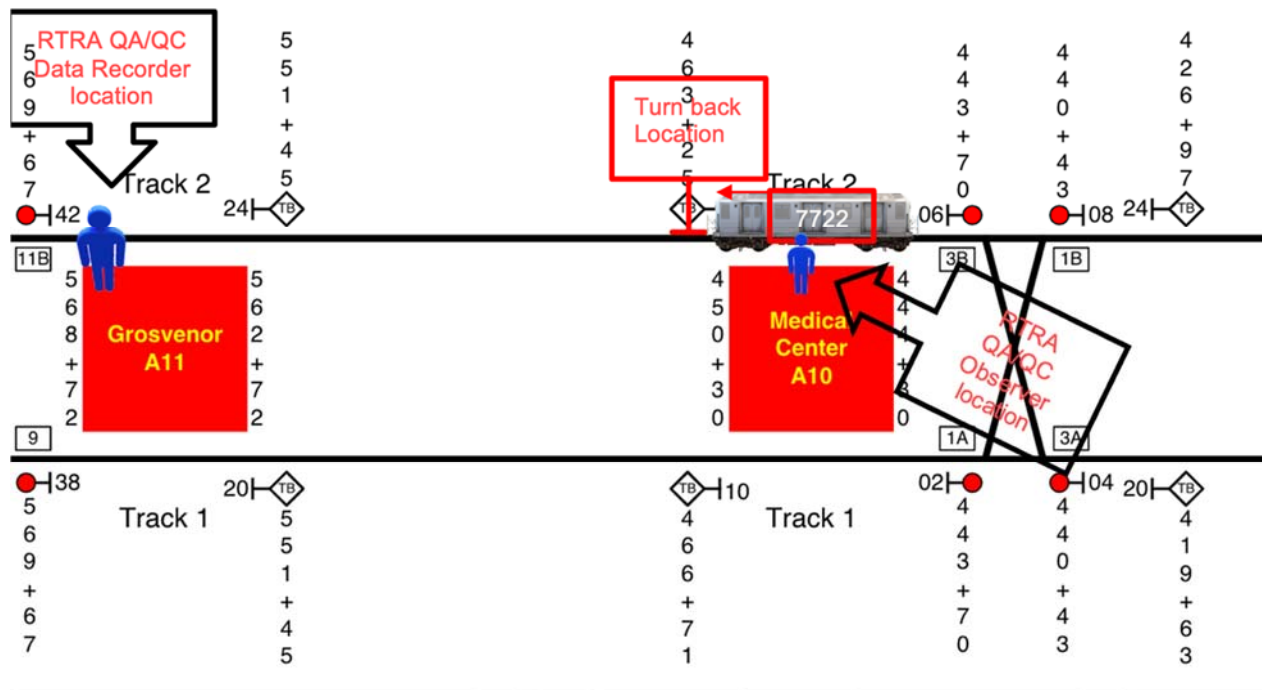
The probable cause for the Improper Rail Vehicle Movement event at Medical Center Station was that the Train Operator failed to follow established procedures for entering Stop and Proceed mode, resulting in an Improper Rail Vehicle Movement.

The late notification's cause was due to the lack of clear reporting procedures within the QA/QC written SOP.

Incident Site

Medical Center Station, Track #2

Field Sketch/Schematics*



**Not to scale*

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 the notification of an Improper Rail Vehicle Movement at the Medical Center Station on September 28, 2021, SAFE launched an investigation into this event. SAFE team members worked with relevant Washington Metropolitan Area Transit Authority (WMATA) subject matter experts to review the incident's facts and data.

Investigation Methods

The investigative methodologies included the following:

Formal Interviews – SAFE conducted three out of four interviews as part of this investigation. Interviews include persons present at, during, and after the incident, those directly involved in the response process, and managers responsible for the process. SAFE interviewed the following individuals:

- Formal Interviews:
 - Train Operator
 - RTRA QA/QC Observer
 - RTRA QA/QC ROCC Coordinator
 - RTRA QA/QC Data Recorder
- Informal Interviews – Collected through conversations with individuals during the investigation to provide background and supporting information.
 - RTRA QA/QC Manager
- Documentation Review – A collection of relevant work history information and process documentation contained in Metro systems of record. These records include:
 - Training Procedures & Records
 - Certification
 - The 30-Day work history review
 - Office of Rail Transportation (RTRA) Incident Investigation Report
 - RTRA Quality Assurance Reports
 - Metrorail Safety Rules and Procedures Handbook (MSRPH)
 - National Oceanic and Atmospheric Administration (NOAA)
 - Rail Supervisor Daily Activity Report (RSDAR)
- System Data Recording Review – A collection of information in Metro Data Recording Systems. This data includes:
 - Audio Recording System (ARS) playback [Radio and Ambient]
 - Network Video Recording (NVR) playback
 - Advance Information Management System (AIMS)

Investigation

On Tuesday, September 28, 2021, the RTRA QA/QC department scheduled and conducted a Red Signal/Zero Speed Commands Audit on track two at the Medical Center station. A10-14 Turnback was used to simulate a red signal/Zero Speed commands causing all operators to lose speed readouts once they reached the 8-car marker/end of the platform. A turnback is a location identified by a green TB roadway sign. This TB sign indicates when an eight-car consist has cleared an interlocking area with enough distance to allow ROCC to change route directions for Train Operators, switching ends to cross over from one track to another and operate in the other direction. Three RTRA QA/QC personnel were located at separate locations to conduct this audit: one at ROCC to coordinate and oversee RTC operations and monitor the AIMS screen, one at the audit location [Medical Center] as the observer, and one at Grosvenor station, which is positioned ahead of the train's arrival for data collection(e.g., employee credentials, name, payroll, division, and lead car).

According to the System Recording Data, at approximately 20:24 hours, Train ID 108 Train Operator arrived at Medical Center Station and properly berthed at the 8-car marker on Track #2 outbound in Shady Grove Station's direction. Upon arrival, Train ID 108 performed a left-side door operation and allowed customers to board. NVR playback showed Train ID 108 Train Operator did not return to the console before performing a left side closing door operation.

Based on the MSRP SOP #40 40.5.3 Door Closing Procedures: 40.5.3.1, *"Prior to initiating the Close Door button, the train operator shall check the operating console for speed commands and check Roadway ahead of the train to ensure it is clear."* NVR playback and CMOR IIT analysis supported that Train ID 108 attempted to move the train after conducting a left-side door operation. Train ID 108 Train Operator was unable to move due to a controlled audit being undertaken by RTRA QA/QC to cause trains at Medical Center Station to lose speed readouts upon arrival at the eight-car marker.



Figure 1 - Train ID 108 Train Operator attempting to take a point of power with Master Controller (MC) moved to the P4 Position.

At approximately 20:24:34 hours, NVR playback and CMOR IIT data confirmed Train ID 108 Train Operator entered Stop and Proceed on the operator's console after performing a left-side door operation.



Figure 2 - Train ID 108 Train Operator entering Stop and Proceed without ROCC Authorization.

Audio Recording Services ARS playback determined Train ID 108 Train Operator did not request permission to enter Stop and Proceed mode before moving approximately five feet outside the platform limits. The Train Operator placed the MC in coast and depressed the car wash pushbutton. The Train then moved at two mph for two seconds before the Train Operator entered a braking mode. At approximately 20:25 hours, Train ID 108 Train Operator notified the Radio RTC that they did not have speed commands at Medical Center Station. The Radio RTC granted Train ID 108 Train Operator permission to enter stop and proceed mode and continue.



Figure 3 - Train ID 108 Train Operator asking for permission to enter Stop and Proceed mode.

According to CMOR IIT analysis, Train ID 108 Train Operator continued operating towards the next station [Grosvenor-Strathmore] until the ATC applied Full-Service brake in B4 Brake Application at 20:25 hours and 24 seconds after traveling approximately 265 feet.



Figure 4 – ATP activated, and Train ID 108 came to a complete stop after traveling 263 feet.

NVR console playback showed Train ID 108 Train Operator entered Stop and Proceed mode a second time at 20:25 hours and 47 seconds.



Figure 5 - Train ID 108 Train Operator entering Stop and Proceed a second time.

Train ID 108 Train Operator then operated in Shady Grove's direction without further incident.



Figure 6 - Train ID 108 Train Operator resumed normal operations towards Grosvenor

On September 29, 2021, at approximately 09:21 hours, the WMSC notified SAFE via text of NVR uploaded by CMOR IIT of an Improper Rail Vehicle Movement [moving without speed commands] at Medical Center Track #2 outbound in Shady Grove Station's direction. SAFE undertook a review of the RTRA QA/QC department data request for car number 7722. CMOR IIT and system recording data confirmed the Operator entered Stop and Proceed mode and moved their train approximately five feet without receiving permission from ROCC.

At approximately 21:02 hours, the RTRA QA department requested a CMOR IIT download. CMOR IIT responded via email at approximately 23:57 hours on September 28, 2021, confirming the Improper Rail Vehicle Movement. After SAFE confirmed the event findings, SAFE contacted the RTRA Glenmont Division managerial staff and notified them of the Improper Rail Vehicle Movement. RTRA subsequently removed the Train Operator from service for post-incident toxicology testing per WMATA's Drug and Alcohol Policy and Testing Program 7.7.3/6. WMATA's Drug and Alcohol Program determined that the Train Operator was not in violation of the Drug and Alcohol Policy and Testing Program 7.7.3/6.

RTRA QA/QC conducted three audits on February 3, 2021, February 9, 2021, and March 1, 2021, where Train Operators entered Stop and Proceed mode without ROCC permission. These events were reported to the divisions and CMOR IIT request made; however, they were not reported to SAFE or WMSC.

Chronological Event Timeline

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

Time	Description
18:15 hours	RTRA QA/QC received permission from ROCC Operations and Assistant Operations Manager to conduct the Red Signal/Zero Speed Commands Audit.
19:00 hours	RTRA QA/QC personnel were in place at ROCC, Grosvenor, and Medical Center locations to conduct the audit.
19:18 hours	RTRA QA/QC began their Red Signal/Zero Speed Commands Audit at Medical Center Station.
20:24 hours	Train ID 108 arrived at Medical Center Station, Track #2, and properly berthed at the 8-car marker. [NVR, CMOR IIT, and AIMS playback]
20:24 hours	Train ID 108 Train Operator entered Stop and Proceed mode without permission from ROCC. [NVR and CMOR IIT Data]
20:24 hours	Train ID 108 Train Operator placed the MC in coast and activated the Car wash pushbutton, and the Train began to move in the direction of Grosvenor at a speed no greater than 2 MPH. [NVR, CMOR IIT]
20:24 hours	Train ID 108 Train Operator placed the MC in a B5 Braking mode. [NVR, CMOR IIT]
20:24 hours	Train ID 108 came to a complete stop after traveling five feet [CMOR IIT data, AIMS, and NVR Data].
20:25 hours	Train ID 108 ATC applied Full-service Brake and initiated B4 Brake Application. [CMOR IIT AIMS, and NVR Data].
20:25 hours	<p><u>Train ID 108 Train Operator</u>: "Central, Train ID 108 at Medical Center no speed readouts."</p> <p><u>Radio RTC</u>: "Train ID 108, verify you serviced the platform Medical Center Track #2. You got a permissive block to the turnback speed commands continue on over [Radio Ops 1]."</p> <p><u>Train ID 108 Train Operator</u>: "Affirm, I verified that I did service the platform. I have a permissive block to the turnback speed commands and continue on, over."</p> <p><u>Radio RTC</u>: "Affirm Central's out." [Radio Ops 1]</p>
20:25 hours	<u>Train ID 108 Train Operator</u> : Entered Stop and Proceed mode after receiving permission from ROCC. [NVR, AIMS, and CMOR IIT Data].
20:25 hours	Train ID 108 came to a complete stop after traveling 265 feet. CMOR IIT and NVR Data]
21:02 hours	RTRA QA/QC requested a data download on Train ID 108 for a possible train operating without speed commands [Email].
23:57 hours	CMOR IIT provided data for the reported incident train RTRA QA/QC identified during an audit. [Email].

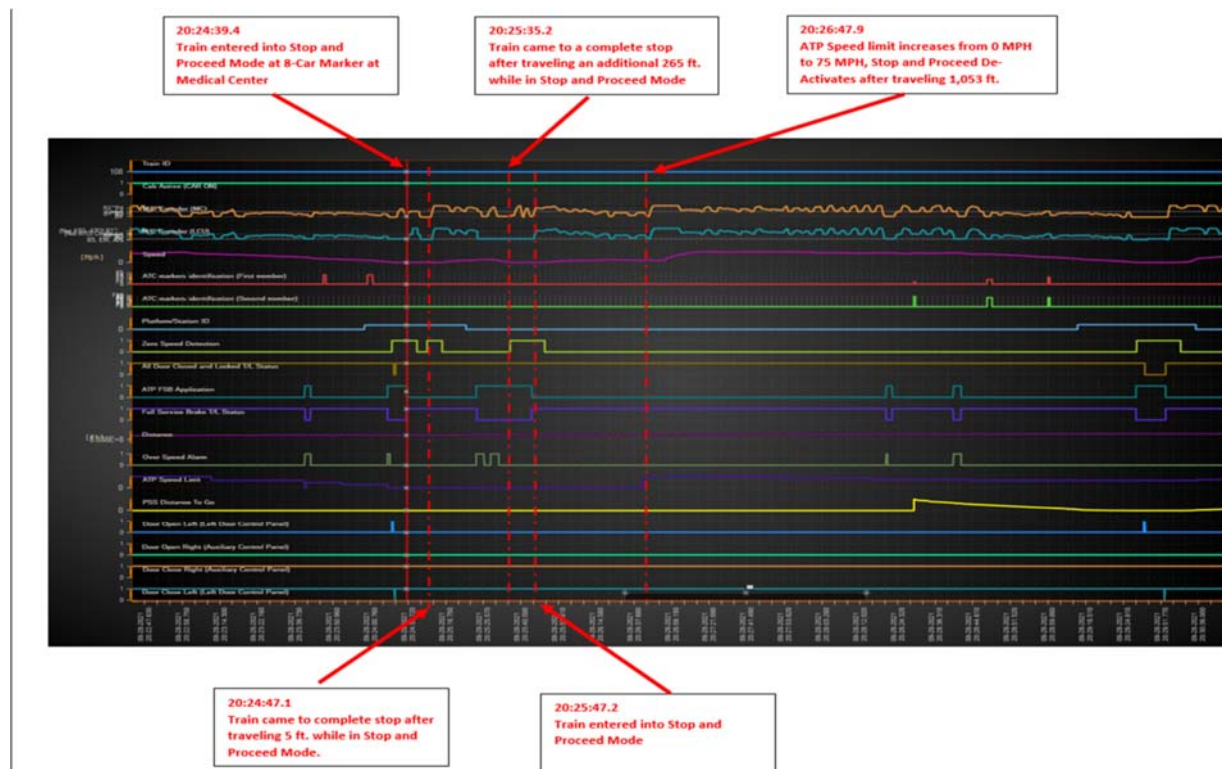
Time	Description
September 29, 2021, 09:21 hours	SAFE received notification of the event from the WMSC via text regarding a CMOR IIT upload in the SharePoint site.
September 29, 2021, 11:09 hours	SAFE confirmed the event and reported the Medical Center Improper Rail Vehicle Movement findings to the Glenmont Division RTRA Supervision.

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

Office of Chief Mechanical Officer (CMOR) Incident Investigation Team (IIT)

Event Recorder (ER) data and VMDS analysis

Based on the CMOR IIT data analysis of Train ID 108, after Train ID 108 Train Operator serviced Medical Center Station, Track #2, with an ATP Speed limit of 0 MPH, the train was entered into Stop and Proceed mode. The train traveled 5 feet, then another 265 feet before Stop and Proceed deactivated. The train was again entered into Stop and Proceed Mode and traveled another 1,053 ft. before the ATP Speed limit increased from 0 to 75 MPH, deactivating Stop and Proceed.



Description of Events (ER Log Data for Car 7722):

Time	Description of Events
20:24:08.1 hours	Train ID 108 came to a complete stop at the 8-Car marker at Medical Center Station, Track #2.
20:24:15.4 hours	Left Door Open Pushbutton Activated and Left side Doors Opened
20:24:23.6 hours	Left Door Closed Pushbutton Activated
20:24:28.4 hours	All door closed and locked signal goes high, indicating all doors are closed and locked.
20:24:32.9 hours	MC moved to a P1-P4 Power position; ATP Speed limit is 0 MPH.
20:24:34.6 hours	MC moved to a B4 Braking Mode.
20:24:39.4 hours	The train entered into Stop and Proceed Mode while at the 8-Car Marker at Medical Center
20:24:40.0 hours	MC placed in "Coast," ATP Speed Limit 0 MPH.
20:24:40.2 hours	Carwash Pushbutton Activated
20:24:42.1 hours	The train begins to move in the direction of Grosvenor at a speed no greater than 2 MPH.
20:24:44.8 hours	MC moved to B5 Braking Mode.
20:24:47.1 hours	The train came to a complete stop after traveling 5 Ft.
20:25:14.4 hours	MC moved to a P5 Power position; ATP Speed limit is 0 MPH.
20:25:15.9 hours	The train begins to move in the direction of Grosvenor at speeds no greater than 15 MPH.
20:25:24.4 hours	ATC Applies Full-Service Brake, Initiates B4 Brake Application. Stop and Proceed Mode De-Activates.
20:25:35.2 hours	The train comes to a stop after traveling an additional 265 ft.
20:25:47.2 hours	The train entered into Stop and Proceed Mode
20:25:48.7 hours	MC Placed in a P1-P4 Power Mode. ATP Speed Limit 0 MPH.
20:25:50.3 hours	The train begins to move in the direction of Grosvenor at speeds no greater than 15 MPH.
20:26:47.9 hours	ATP Speed Limit increased from 0 to 75 MPH after the train traveled an additional 1,053 feet and Stop and Proceed was de-activated.

Office of Rail Transportation (RTRA)

RTRA investigated the Improper Rail Vehicle Movement event and determined the Train Operator moved their train without speed commands. RTRA reported their records to indicate that in July 2019, the employee was certified as a Train Operator and had two infractions in November 2019 for a Station Overrun and September 2021 for accepting an incorrect lead. Based on RTRA's investigation, SAFE did not see a review of training nor fatigue as part of their investigation process. See Appendix D.

Office of Rail Transportation Quality Assurance (QA) and Quality Control Group (QC)

SAFE reviewed three revisions of the RTRA's QA/QC Standard Operating Procedure (SOP) 106-1 RTRA Rules Efficiency Testing Train Operations. January 14, 2014, and December 5, 2016, revisions did not incorporate or outline immediate actions, to include reporting procedures, after identifying safety violations. RTRA QA/QC revised SOP 106-1 after the October 7, 2021, event to reflect reporting processes.

The Office of System Maintenance (SMNT), Office of Radio Communications (COMR)

COMR conducted a comprehensive Radio operational test at Medical Center Station. COMR reported no trouble found at this time; the radio system is functioning as designed.

Applicable Rules and Procedures

Train Operation

Permanent Order NO. T-20-28 – Modification to Operating Rule 3.79 moving a train with zero speed commands. Approved August 27, 2020.

3.79.1. Upon losing speed commands on the platform, the Operator may NOT adjust the train in the same direction of traffic to service the station without contacting ROCC or terminal supervisor for permission. After servicing the station, the Operator must keep their train doors open until such time when the operator has received speed commands, a proper signal aspect (Lunar or Flashing), along with contacting the ROCC or terminal supervisor for permission to leave, and an absolute block for the move if speed commands do not return (Reference: SOP 40).

Interview Findings

SAFE conducted three interviews via Microsoft Teams based on the investigation launched into the Improper Rail Vehicle Movement event, including the investigation team and the WMSC. These interviews were conducted eight days after the event and identified the following key findings associated with this event:

Train Operator

The Train Operator reported that as they entered Medical Center Station, they performed a left side door operation. Observed the platform and entered stop and proceed mode to adjust on the platform limits to see if speed commands were reestablished. After placing the MC in coast to car wash and the train did not receive speed commands, the Train Operator notified ROCC that they did not have speed commands.

RTRA QA/QC Observer

The RTRA QA/QC Observer was approximately 225 feet from the 8-car marker during their audit. The RTRA QA/QC Observer noted the Train Operator never left the non-operating side [left Side] window to check the operator console to ascertain if they had speed commands. The RTRA QA/QC Observer said they did not hear any radio communication from the Train Operator before Train ID 108 moved. RTRA QA/QC Observer said they contacted ROCC RTRA QA/QC Officer to determine if they heard any radio communication. The ROCC RTRA QA/QC Officer said no; then, less than a minute later, they heard the Train Operator report loss of speed commands.

The RTRA QA/QC Observer said that although this was a controlled Red Signal/Zero Speed Commands Audit designed to cause trains entering Medical Center Station to lose speed commands. A request for CMOR download was necessary to confirm the event occurred before reporting the incident. Since the RTRA QA/QC Observer was not in the cab or standing near to see the Train Operator entered Stop and Proceed mode visually, the RTRA QA/QC Observer had to verify their observation. Therefore, the incident was not reported until validated.

The RTRA QA/QC Observer noted that one can move the 3000 series trains without entering Stop and Proceed mode and with 7000 series, one must enter the code to move. In previous audits, every train lost speeds at the 8-car marker at this location. The RTRA QA/QC also noted they had a previous incident where a Train Operator operated all the way to the Turnback location. In that situation, they could confirm the incident occurred and report it immediately. The RTRA QA/QC said that the AIMS screen would not show the train move for this event.

RTRA QA/QC Data Recorder

The RTRA QA/QC Data Recorder did not receive any communication regarding a potential train moving without speed commands. The RTRA QA/QC Data Recorder mainly focused on capturing the data and reported they did not hear Train ID 108 request permission to enter Stop and Proceed mode. The RTRA QA/QC Data Recorder stated there were no issues with radio communications during the audit. The RTRA QA/QC Data Recorder estimated that their crew finished their audit at approximately 21:30 hours. The RTRA QA/QC Data Recorder said there is not an immediate after-action review of the audit to discuss the respective findings. The RTRA QA/QC Data Recorder said the Observer collects data from the recorder and drafts a report with their findings.

RTRA QA/QC Data Recorder recalled as a Train Operator, coast to car wash was used to traverse the Car wash. They might use coast-to-car wash if a train loses speed commands on the platform and during safety stops when you're within 10 feet of a train during close-in procedures.

RTRA QA/QC ROCC Coordinator

The RTRA QA/QC ROCC Coordinator said they were positioned approximately 20-30 feet away from the Ops 1 desk and monitored the radio and AIMS screen from that location. The RTRA QA/QC ROCC coordinator noted it is normal to brief the RTCs about the audit intentions because they have to "pull the Turnback," which causes the trains to lose speed commands on the platform. The RTRA QA/QC ROCC coordinator audits the RTC to capture non-compliance with their radio communication during the audit. The RTRA QA/QC ROCC coordinator said they never received any communication about a potential train move without speed commands from field personnel. The RTRA QA/QC ROCC coordinator stated, *"we might have someone move with speed commands until we contact IT and get the data pulled from the train."*

The RTRA QA/QC ROCC coordinator said you could not tell by the AIMS screen if the train moved without speed commands unless the train moved 50 or more feet. The RTRA QA/QC ROCC coordinator said, *“at the end of the audit, the observer makes arrangements with the RTRA QA/QC recorder to retrieve their documents then compile the information and submit a report. If they had a possible event, they would send an email to IT to request download from the lead car.”* The RTRA QA/QC ROCC coordinator said a train might have speed commands, so a data download is required.

Immediate Mitigation to Prevent Recurrence

- RTRA removed the Train Operator from service upon notification on September 29, 2021, pending investigation and post-incident toxicology test results.

Investigative Findings

- Train ID 108 Train Operator entered stop and proceed mode while on the Track #2 platform without ROCC permission.
- The Train Operator did not verify speed commands before activating the left side door close pushbutton.
- RTRA QA/QC conducted a controlled Red Signal/Zero Speed commands audit at Medical Center Station.
- RTRA QA/QC conducted three audits on February 3, 2021, February 9, 2021, and March 1, 2021, where Train Operators moved their trains entered Stop and Proceed mode without ROCC permission. These events were reported to the divisions but not to SAFE or WMSC.
- The RTRA QA/QC group did not conduct an after-action review among the auditing group to discuss findings following the conclusion of their audit.
- SAFE identified RTRA did not formally communicate that Stop and Proceed modes are installed on 6K series trains.

Weather

At the time of the incident, National Oceanic and Atmospheric Administration (NOAA) recorded the temperature as 64°F with an overcast. The incident occurred within a tunnel section of the rail system. SAFE has concluded that weather was not a contributing factor in this incident (Weather source: NOAA – Location: Washington, DC.)

Human Factors

Fatigue

Evidence of Fatigue – Train Operator

Conditions were evaluated at the time of the incident to distinguish whether evidence of fatigue was present. The available data indicated no sign of fatigue. Video of the incident was reviewed for behaviors suggesting fatigue. No indications of fatigue were evident from the video. The employee reported feeling fully alert at the time of the incident. The employee reported experiencing no symptoms of fatigue in the time leading up to the incident.

Fatigue Risk – Train Operator

Data was evaluated for fatigue risk factors. Risk factors for fatigue were not present. The incident time of day did not suggest an increased risk of fatigue-related impairment. The employee reported some variation in sleep schedule in the days leading up to the incident. The employee worked evening shift in the days leading up to the incident. The employee reported 10 hours of sleep in the 24 hours preceding the incident and was awake for 10.1 hours at the time of the incident. The off-duty period was 24 hours, which provided an opportunity for 7-9 hours of sleep. The employee reported no issues with sleep.

Evidence of Fatigue – Observer

Conditions were evaluated at the time of the incident to distinguish whether evidence of fatigue was present. The available data indicated no sign of fatigue. Video of the incident was reviewed for behaviors suggesting fatigue. No indications of fatigue were evident from the video. The employee reported feeling fully alert at the time of the incident. The employee reported experiencing no symptoms of fatigue in the time leading up to the incident.

Fatigue Risk – Observer

Data was evaluated 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 employee reported some variation in sleep schedule in the days leading up to the incident. The employee worked evening shift in the days leading up to the incident. The employee reported 8 hours of sleep in the 24 hours preceding the incident and was awake for 13.4 hours at the time of the incident. The off-duty period was 24 hours, which provided an opportunity for 7-9 hours of sleep. The employee reported no issues with sleep.

Evidence of Fatigue – Data Recorder

Conditions were evaluated at the time of the incident to distinguish whether evidence of fatigue was present. The available data indicated no sign of fatigue. Video of the incident was reviewed for behaviors suggesting fatigue. No indications of fatigue were evident from the video. The employee reported feeling fully alert at the time of the incident. The employee reported experiencing no symptoms of fatigue in the time leading up to the incident.

Fatigue Risk – Data Recorder

Data was evaluated 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 employee reported some variation in sleep schedule in the days leading up to the incident. The employee worked dayshift in the days leading up to the incident. The employee reported 10 hours of sleep in the 24 hours preceding the incident and was awake for 12.4 hours at the time of the incident. This was a comparable amount of the employee's usual workday sleep durations. The off-duty period was 24 hours, which provided an opportunity for 7-9 hours of sleep. The employee reported no issues with sleep.

Evidence of Fatigue – ROCC Coordinator

Conditions were evaluated at the time of the incident to distinguish whether evidence of fatigue was present. The available data indicated no sign of fatigue. Video of the incident was reviewed for behaviors suggesting fatigue, and no indications of fatigue were evident from the video. The

employee reported feeling fully alert at the time of the incident, and the employee reported experiencing no symptoms of fatigue in the time leading up to the incident.

Fatigue Risk – ROCC Coordinator

Data was evaluated for fatigue risk factors. Risk factors for fatigue were not present. The incident time of day did not suggest an increased risk of fatigue-related impairment. The employee reported no variation in the sleep schedule in the days leading up to the incident. The employee worked dayshift in the days leading up to the incident. The employee reported 8 hours of sleep in the 24 hours preceding the incident and was awake for 11.4 hours at the time of the incident. The off-duty period was 24 hours, which provided an opportunity for 7-9 hours of sleep. The employee reported no issues with sleep.

Training

- The Train Operator underwent Red Line Familiarization training in March 2019.
- The Train Operator received the Stop and Proceed RTRA Personnel notice in June 2020.
- SAFE reviewed the Train Operator training history and confirmed the Train Operator underwent stop and proceed mode Computer-Based Testing.

Post-Incident Toxicology Testing

WMATA's Drug and Alcohol Program determined that the Train Operator was not in violation of the Drug and Alcohol Policy and Testing Program 7.7.3/6.

Probable Cause

The probable cause for September 28, 2021, Improper Rail Vehicle Movement event at Medical Center Station was that the Train Operator failed to follow established procedures for entering Stop and Proceed mode, resulting in an Improper Rail Vehicle Movement.

The late notification's cause was due to the lack of clear reporting procedures within the QA/QC written SOP.

Recommendations/Corrective Actions

The following are the recommendations and corrective actions identified as a result of this investigation. These recommendations and corrective actions are tracked and verified by SAFE upon completion. The department responsible is identified in the corrective action code, and the respective safety risk coordinator (SRC) will manage the mitigation. Refer to the SMS I/A module for additional information.

Corrective Action Code	Description	Responsible Party	Due Date
97047_SAFECAPS_RTRA QA/QC_001	(RC-2, CF-2) RTRA QA/QC shall revise SOP 106-1 to reflect incidents, accidents, and occurrences reporting processes.	RTRA QA/QC/SRC	Completed
97047_SAFECAPS_RTRA QA/QC_002	(RC-2, CF-2) RTRA QA/QC shall ensure all written procedures are reviewed by all WMATA stakeholders before implementation.	RTRA QA/QC/SRC	Completed
97047_SAFECAPS_RTRA_001	(RC-1 CF-1) RTRA shall ensure the Train Operator undergoes Refresher Training.	RTRA/SRC	Completed

Appendices

Appendix A – Interview Summaries

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

Train Operator

The Train Operator is a WMATA employee with two years of experience as a Train Operator and seven years of service with WMATA. The employee's previous position was a Bus Operator. The Train Operator was certified in July 2019.

The Train Operator said, *“received my manifest, picked up my train operated and moved the train without speed commands. I was informed later about the incident.”*

Interview follow-up questions revealed no mechanical issues with the train and no cab distractions while operating. The Train operator provided an understanding of SOP 40 door closing procedures but failed to give the proper steps in sequence while iterating the process, i.e., check for speed commands before performing a door closing operation.

However, when asked, the Train Operator stated you should check for speed commands while the doors are open. The Train Operator was unable to confirm if this step occurred. The Train Operator noted, they try to remain consistent with their actions and normally check for speed commands. The Train Operator reported there was no reason why they went coast to car wash when they lost speed commands. As the interview continued, the Train Operator mentioned they may have adjusted their train on the platform to see if they could get speed commands and that speed commands could be within a few inches of that movement.

The Train Operator did admit that you would have to enter stop and proceed mode to adjust and move their train in any operations mode, for example, coast to car wash. The Train Operator said, *“training overall is good; however, stop and proceed on the 6000 series was word of mouth.”* When they got to the next station, the Train Operator said RTRA QA personnel gathered my personal information and did not mention anything regarding losing speed commands.

RTRA QA/QC Observer

The RTRA QA/QC Observer is a WMATA employee with three years and six months of experience as an RTRA QA/QC Officer and 15.5 years of service. The employee has held several positions at WMATA, such as Bus Operator, Train Operator, Rail Supervisor, Rail Training Instructor, and Fire Life Safety Liaison Officer. The RTRA QA/QC Officer's last certification was in April 2021.

The RTRA QA/QC Observer said, *“we had a planned Zero Speed audit. We decided to do a PM audit and reviewed SharePoint to determine the next audit location, which was Medical Center. The way RTRA QA/QC conducts this audit is we have one person at the station to make physical observations, one person at the following station to collect data, and one person at ROCC to coordinate the Turnback. We use a turnback to simulate a Red Signal to take away speed commands from the operators. On this particular day, I was the observer at Medical Center Station. I was looking for specific things, operators closing their doors without verifying they had speed*

commands, making contact with ROCC when they did not have speed commands, and whether they moved their train without communicating with ROCC.

Per my audit, four people closed their doors without verifying they had speed commands based on Radio Communication. I visually observed them close the doors, and after closing the doors, they contacted ROCC and stated they did not have speed commands. There was one Train Operator that closed their doors without speed commands also moved their train slightly. I emailed our CMOR group for data to confirm what I suspected. The data came back that the Train Operator moved their train approximately five feet with zero speed commands prior to contacting ROCC. I completed my report and submitted the report along with the corrective actions."

Interview follow-up questions revealed, the RTRA QA/QC Observer was approximately 225 feet from the 8-car marker during their audit. The RTRA QA/QC Observer noted the Train Operator never left the non-operating side [left Side] window to check the operator console to ascertain if they had speed commands. The RTRA QA/QC Observer said they did not hear any radio communication from the Train Operator before Train ID 108 moved. RTRA QA/QC Observer said they contacted ROCC RTRA QA/QC Officer to determine if they heard any radio communication. The ROCC RTRA QA/QC Officer said no; then, less than a minute later, they heard the Train Operator report loss of speed commands. The RTRA QA/QC Observer said that even though this was a controlled Red Signal/Zero Speed Commands Audit designed to cause trains entering Medical Center Station to lose speed commands. A request for CMOR download is necessary to confirm the event occurred before reporting the incident. Since the RTRA QA/QC Observer was not in the cab or standing near to visually see the Train Operator enter the Stop and Proceed mode, the RTRA QA/QC Observer had to verify their observation. Therefore, the incident was not reported until validated.

The RTRA QA/QC Observer said one can move the 3000 series trains without entering Stop and Proceed mode, and with 7000 series, one must enter the code to move. In previous audits, every train lost speeds at the 8-car marker. The RTRA QA/QC also noted they had a previous incident where a Train Operator operated all the way to the Turnback location. In that situation, we could confirm the incident occurred and report it immediately. The RTRA QA/QC said that the AIMS screen would not show the train move for this event.

RTRA QA/QC Data Recorder

The RTRA QA/QC Data Recorder is a WMATA employee with seven years and six months of experience as an RTRA QA/QC Officer and 21 years of service. The employee has held several positions at WMATA, such as Bus Operator, Train Operator, RTRA Supervisor, and Station Manager. The RTRA QA/QC Officer's last certification was in March 2021.

The RTRA QA/QC Data Recorder said, *"I was at Grosvenor Station collecting the data. I am the recorder for the Train Operators once they arrive at Grosvenor Station, Track 2. I record their Train Id, Lead Car, Name Payroll, and Division. That is what my job basically consisted of for that evening."*

Interview follow-up questions revealed that the RTRA QA/QC Data Recorder did not receive any communication regarding a potential train moving without speed commands. The RTRA QA/QC Data Recorder focused on capturing the data and reported they did not hear Train ID 108 request permission to enter Stop and Proceed mode. The RTRA QA/QC Data Recorder stated there were no issues with radio communications during the audit. The RTRA QA/QC Data Recorder estimated that their crew finished their audit at approximately 21:30 hours. The RTRA QA/QC Data Recorder said there is not an after-action review of the audit to discuss the respective findings. The RTRA

QA/QC Data Recorder said the Observer collects data from the recorder and drafts a report with their findings.

RTRA QA/QC Data Recorder recalled as a Train Operator coast to car wash was used to traverse the Car wash. They might use coast to car wash if a train loses speed commands on the platform and during safety stops when within 10 feet of a train during close-in procedures.

RTRA QA/QC ROCC Coordinator

The RTRA QA/QC ROCC Coordinator is a WMATA employee with seven years of experience as an RTRA QA/QC Officer and 21 years of service. The employee has held several positions at WMATA, such as RTRA Assistant Superintendent, RTRA Supervisor, Terminal Supervisor, Train Operator, Station Manager, and Bus Operator. The RTRA QA/QC Officer's last certification was in December 2020.

The RTRA QA/QC ROCC coordinator said, "I reported to ROCC at approximately 18:15 hours and requested permission from the ROCC Operations, and Assistant Operations Manager to conduct the Red Signal/Zero Speed Commands Audit. Informed them of the location, and requested permission to speak with the controllers to discuss the audit and what we would be looking for, their obligations, and personnel would be in place at 19:00 hours to start the audit. The Red Signal/Zero Speed Commands Audit started at 19:18 hours and was completed at 20:39 hours, and this ended the audit and my day."

Interview follow-up questions revealed the RTRA QA/QC ROCC coordinator said they notified the RTCs they would be listening for communication. General Rule 3.79, which is repeat back and over and ensuring the Train Operator followed the rules for losing speed commands and requested permission to adjust on the platform or continue with a block until they pick up speed commands.

The RTRA QA/QC ROCC coordinator said they were positioned approximately 20-30 feet away from the Ops 1 desk and monitored the radio and AIMS screen from that location. The RTRA QA/QC ROCC coordinator noted it is normal to brief the RTCs about the audit intentions because they have to pull Turnback, which allows them to take the speed commands on the platform. During the audit, the RTRA QA/QC ROCC coordinator audits the RTC as well to capture non-compliance with their radio communication. The RTRA QA/QC ROCC coordinator said they never received any communication about a potential train move without speed commands from field personnel. The RTRA QA/QC ROCC coordinator stated, *"we might have someone move with speed commands until we contact IT and get the data pulled from the train."*

The RTRA QA/QC ROCC coordinator noted that one could not tell by the AIMS screen if the train moved without speed commands unless the train moved 50 or more feet. The RTRA QA/QC ROCC coordinator said, *"at the end of the audit, the observer makes arrangements with the RTRA QA/QC recorder to retrieve their documents then compile the information and submit a report. If they had a possible event, they would send an email to IT to request download from the lead car."* The RTRA QA/QC ROCC coordinator said a train might have speed commands, so a data download is required.

Appendix B – RTRA QA/QC Audits

Washington Metropolitan Area Transit Authority
Office of Rail Transportation
RTRA Quality Assurance/Quality Control Group
Internal Audit Report



Audit Number:	A-RSTO-20210203-01	Audit Type:	Red Signal Aspect/Zero Speed Command
Audit Date(s):	Wednesday, February 3, 2021	Location(s):	D06-Eastern Market-Mezz 60
Audited Branch:	RSTO	Audit Status:	Under Review
Auditor(s):	[REDACTED]	Program Manager(s):	[REDACTED]
Audit Objective:	The objective of this audit is to examine the Train Operators compliance with the Metrorail Safety Rules and Procedures Handbook (MSRPH) Operating Rule (OR) 3.69 and Permanent Order (PO) T-20-28, which permanently modifies OR 3.79; specifically, the rules governing the Train Operators procedures when losing speed commands on the mainline.		
Audit Scope:	<p>The scope of this audit is to evaluate the Train Operators adherence of OR 3.69 and PO T-20-28 when losing speed commands in approach to or on the platform of Eastern Market station, track number two (2). Train Operators are examined to verify their conformance to the requirements stated in the OR and PO.</p> <p>The Operating Rule and Permanent Order state the following:</p> <p>Operating Rule 3.69 Operators of rail vehicles stopped by a fixed signal, cab signal, loss of power, or unusual circumstances shall contact ROCC or the Interlocking Operator immediately and be governed by their instructions.</p> <p>Permanent Order T-20-28 3.79. Train Operators shall not move trains with zero speed commands except after notifying ROCC or terminal supervisor and being given permission to move with zero speed commands and either a permissive block going with traffic or an absolute block going against traffic (see SOP 15).</p> <p>3.79.1. Upon losing speed commands on the platform, the operator may NOT adjust the train in the same direction of traffic to service the station without contacting ROCC or terminal supervisor for permission. After servicing the station, the operator must keep their train doors open, until such time when the operator has received speed commands, a proper signal aspect (Lunar or Flashing) along with contacting the ROCC or terminal supervisor for permission to leave and an absolute block for the move if speed commands do not return (Reference SOP 40).</p> <p>3.79.2. On 7000 Series Trains - If speed commands are lost on the mainline and the consist comes to a complete stop with the ADU displaying the code number; the Operator must contact ROCC or terminal supervisor to obtain either a permissive block or absolute block before entering the corresponding number on the ADU touchpad to enter Stop and Proceed Mode.</p> <p>3.79.3. Legacy Trains - Operators shall contact ROCC or terminal supervisor anytime the train loses speed commands and comes to a stop, even within the platform limits. Before moving the train, a permissive or absolute block must be established.</p>		
Executive Summary:	On Wednesday, February 3, 2021, the Rail Transportation (RTRA) Quality Assurance and Quality Control (QA/QC) Group conducted a Red Signal/Zero Speed Commands Audit at Eastern Market station on track number two (2). D06-14 Turnback was used as a signal, and was requested to be made red to cause all trains entering the platform to lose speed commands once they reached the 8-car marker/end of the platform.		

Form: QA/QC AR (RTRA QA/QC Audit Report)
RTRA QA/QC Group
Rev. Date: 6/7/2017

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Attachment 1 – RTRA Audit Form February 3, 2021, page 1 of 3

Incident Date: 09/28/2021 Time: 20:24 hours.
Final Report – Improper Rail Vehicle Movement
E21474

Drafted By: SAFE 704 – 11/02/2021
Reviewed By: SAFE 71 – 11/24/2021
Approved By: SAFE 71 – 11/26/2021

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<p>Based on previous data collection, it has shown that trains would lose speed commands at the eight (8) marker.</p> <p>The QA/QC audit group consisted of three (3) Officers in the following locations: One at the Rail Operations Control Center (ROCC), One at Eastern Market Station, and the third at Capitol South Station. The Officers were at these locations conducting this audit between the hours of 9:55am and 10:50am.</p> <p>The QA/QC Officer at the ROCC monitored trains through visual and audible systems via the Advanced Information Management (AIM) display and the Motorola XTS-5000 Handheld Radio. The QA/QC Officer at Eastern Market station visually monitored Operators as they serviced the station; and the third QA/QC Officer was located at the eight (8) car marker on the track two (2) side of Capitol South station, to record the Train Operators lead car, name, payroll number and rail division.</p> <p>The QA/QC Officers located within the ROCC recorded the following observations:</p> <ol style="list-style-type: none"> 1. Operator contacting ROCC 2. Operator reporting zero speed commands 3. ROCC instructions to the operator 4. Operator repeating back ROCC instructions <p>The QA/QC Officer located at Eastern Market station recorded the following observations:</p> <ol style="list-style-type: none"> 1. Operator adjusting train within platform limits 2. Operator contacting ROCC 3. Operator reporting zero speed commands 4. Operator keeping train doors open 5. ROCC instructions to the operator 6. Operator repeating back ROCC instructions 			
Significant Findings:	<p>A total of ten (10) Train Operators were observed during this audit. There were two (2) significant findings:</p> <ol style="list-style-type: none"> 1. Four (4) Train Operators violated Permanent Order T-20-28 OR 3.79.1 by closing their train doors after servicing the station without the presence of speed commands. Note: Although not within the direct scope of this audit, SOP 40 is referenced in OR 3.79.1. The four (4) operators also violated SOP 40.5.3.1 which states Prior to initiating the Close Door button, the train operator shall check the operating console for speed commands and check the Roadway ahead of the train to ensure it is clear. 2. One (1) Train Operator, operating a 7K series consist, violated Operating Rule 3.69, Permanent Order T-20-28 OR 3.79 and 3.79.2 by entering Stop and Proceed Mode and moving their consist without obtaining a permissive block from ROCC. 		
Priority:	(2) Normal	Number of Observations:	10
Notify Status:	Sent to Program Manager	Compliance #:	6
Notify Date:	Thursday, February 4, 2021	Non-Compliance #:	4
Related Audits:	None	Compliance %:	60
Corrective Action:	Yes	Non-Compliance %:	40

Washington Metropolitan Area Transit Authority
Office of Rail Transportation
RTRA Quality Assurance/Quality Control Group
Internal Audit Report



Lead QA/QC Officer Signature:	Date Signed:	02/04/2021
QA/QC Manager Signature:	Date Signed:	02/04/2021

Form: QAQC AR (RTRA QA/QC Audit Report)
RTRA QA/QC Group
Rev. Date: 6/7/2017

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Attachment 1 – RTRA Audit Form February 3, 2021, page 3 of 3

Incident Date: 09/28/2021 Time: 20:24 hours.
Final Report – Improper Rail Vehicle Movement
E21474

Drafted By: SAFE 704 – 11/02/2021
Reviewed By: SAFE 71 – 11/24/2021
Approved By: SAFE 71 – 11/26/2021

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Audit Number:	A-RSTO-20210209-01	Audit Type:	Red Signal Aspect/Zero Speed Command
Audit Date(s):	Tuesday, February 9, 2021	Location(s):	E03-U Street-Carodozo-Mezz 73
Audited Branch:	RSTO	Audit Status:	Under Review
Auditor(s):	[REDACTED]	Program Manager(s):	[REDACTED]
Audit Objective:	The objective of this audit is to examine the Train Operators compliance with the Metrorail Safety Rules and Procedures Handbook (MSRPH) Operating Rule (OR) 3.69 and Permanent Order (PO) T-20-28, which permanently modifies OR 3.79; specifically, the rules governing the Train Operators procedures when losing speed commands.		
Audit Scope:	<p>The scope of this audit is to evaluate the Rail Train Operators adherence of OR's 3.69 and PO T-20-28 when losing speed commands at the U St. (E03) station track number one (1) eight (8) car marker/end of platform. Rail Train Operators are examined to verify their conformance to the requirements stated in the Operating Rule and Permanent Order. The Operating Rule and Permanent Order states the following:</p> <p>Operating Rules:</p> <p>3.69 Operators of rail vehicles stopped by a fixed signal, cab signal, loss of power, or unusual circumstances shall contact ROCC or the Interlocking Operator immediately and be governed by their instructions. Permanent Order T-20-28 Modified Operating Rules</p> <p>3.79. Train Operators shall not move trains with zero speed commands except after notifying ROCC or terminal supervisor and being given permission to move with zero speed commands and either a permissive block going with traffic or an absolute block going against traffic (see SOP 15).</p> <p>3.79.1. Upon losing speed commands on the platform, the operator may NOT adjust the train in the same direction of traffic to service the station without contacting ROCC or terminal supervisor for permission. After servicing the station, the operator must keep their train doors open, until such time when the operator has received speed commands, a proper signal aspect (Lunar or Flashing) along with contacting the ROCC or terminal supervisor for permission to leave and an absolute block for the move if speed commands do not return (Reference SOP 40).</p> <p>3.79.2. On 7000 Series Trains - If speed commands are lost on the mainline and the consist comes to a complete stop with the ADU displaying the code number; the Operator must contact ROCC or terminal supervisor to obtain either a permissive block or absolute block before entering the corresponding number on the ADU touchpad to enter Stop and Proceed Mode.</p> <p>3.79.3. Legacy Trains - Operators shall contact ROCC or terminal supervisor anytime the train loses speed commands and comes to a stop, even within the platform limits. Before moving the train, a permissive or absolute block must be established.</p>		
Executive Summary:	On Tuesday, February 9, 2021, the Rail Transportation (RTRA) Quality Assurance and Quality Control (QA/QC) Group conducted a Red Signal/Zero Speed Commands Audit at the U St. (E03) station on track number one (1). E03-20 (Echo Zero Three-Twenty) Turnback was used to simulate a red signal causing all operators to lose speed commands once they reached the 8-car marker/end of the platform.		



<p>Based off previous data collection, it showed that operators would lose their speed commands prior to servicing or prior to leaving the U St. station track #1.</p> <p>The QA/QC audit group consisted of three (3) Officers located at the Rail Operations Control Center (ROCC), U St. (E03), and Columbia Heights (E04) stations between the hours of 2:55pm - 3:55pm. One (1) QA/QC Officer at the ROCC monitored trains through visual and audible systems via the Advanced Information Management (AIM) display and the Motorola XTS-5000 Handheld Radio, as they approached E03 station. One (1) QA/QC Officer located at E03 station physically monitored operators as they serviced the station and the additional QA/QC Officer was located at the eight (8) car marker stop track one (1) side of E04 station, to collect data from Train Operators lead car, name, payroll number and rail division.</p> <p>The QA/QC Officers located within the ROCC recorded the following observations:</p> <ol style="list-style-type: none"> 1. Operator contacting ROCC 2. Operator reporting zero speed commands 3. ROCC instructions to the operator 4. Operator repeating back ROCC instructions <p>The QA/QC Officer located at U Street observed the following:</p> <ol style="list-style-type: none"> 1. Operator adjusting train within platform limits 2. Operator contacting ROCC 3. Operator reporting zero speed commands 4. Operator keeping train doors open 5. ROCC instructions to the operator 6. Operator repeating back ROCC instructions 			
<p>Significant Findings: A total of eleven (11) Train Operators along with one (1) ROCC Controller were observed during this audit and two (2) Train Operators were found to be noncompliant:</p> <ol style="list-style-type: none"> 1. One (1) Train Operator violated Permanent Order T-20-28 OR 3.79.1 by closing their train doors after servicing the station without the presence of speed commands. 2. One (1) Train Operator violated 3.69 by failing to contact ROCC and reporting the loss of speed commands. 			
Priority:	(2) Normal	Number of Observations:	11
Notify Status:	Sent to Program Manager	Compliance #:	9
Notify Date:	Friday, February 12, 2021	Non-Compliance #:	2
Related Audits:		Compliance %:	82
Corrective Action:	Yes	Non-Compliance %:	18

Lead QA/QC Officer Signature:	Date Signed:	02/11/2021
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Washington Metropolitan Area Transit Authority
Office of Rail Transportation
RTRA Quality Assurance/Quality Control Group
Internal Audit Report



QA/QC Manager Signature:	Date Signed: 02/12/2021
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Form: QAQC AR (RTRA QA/QC Audit Report)
RTRA QA/QC Group
Rev. Date: 6/7/2017

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Attachment 2 – RTRA Audit Form February 9, 2021, page 3 of 3

Incident Date: 09/28/2021 Time: 20:24 hours.
Final Report – Improper Rail Vehicle Movement
E21474

Drafted By: SAFE 704 – 11/02/2021
Reviewed By: SAFE 71 – 11/24/2021
Approved By: SAFE 71 – 11/26/2021

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Washington Metropolitan Area Transit Authority
Office of Rail Transportation
RTRA Quality Assurance/Quality Control Group
Internal Audit Report



Audit Number:	A-RSTO-20210301-01	Audit Type:	Red Signal Aspect/Zero Speed Command
Audit Date(s):	Monday, March 1, 2021	Location(s):	A06-Van Ness-Mezz 9
Audited Branch:	RSTO	Audit Status:	Under Review
Auditor(s):	[REDACTED]	Program Manager(s):	[REDACTED]
Audit Objective:	The objective of this audit is to examine the Train Operators compliance with the Metrorail Safety Rules and Procedures Handbook (MSRPH) Operating Rules (OR) 3.69 and Permanent Order (PO) T-20-28, which permanently modifies OR 3.79. Specifically, the rules governing the Train Operators procedures when losing speed commands.		
Audit Scope:	<p>The scope of this audit is to evaluate the Train Operators adherence of OR 3.69 and PO T-20-28 when losing speed commands at the Van Ness-UDC (A06) station track number two (2) eight (8) car marker. Rail Train Operators are examined to verify their conformance to the requirements stated in the OR and PO. The OR and PO state the following: Operating Rule 3.69 Operators of rail vehicles stopped by a fixed signal, cab signal, loss of power, or unusual circumstances shall contact ROCC or the Interlocking Operator immediately and be governed by their instructions.</p> <p>Permanent Order T-20-28 3.79. Train Operators shall not move trains with zero speed commands except after notifying ROCC or terminal supervisor and being given permission to move with zero speed commands and either a permissive block going with traffic or an absolute block going against traffic (see SOP 15). 3.79.1. Upon losing speed commands on the platform, the operator may NOT adjust the train in the same direction of traffic to service the station without contacting ROCC or terminal supervisor for permission. After servicing the station, the operator must keep their train doors open, until such time when the operator has received speed commands, a proper signal aspect (Lunar or Flashing) along with contacting the ROCC or terminal supervisor for permission to leave and an absolute block for the move if speed commands do not return (Reference SOP 40). 3.79.2. On 7000 Series Trains - If speed commands are lost on the mainline and the consist comes to a complete stop with the ADU displaying the code number; the Operator must contact ROCC or terminal supervisor to obtain either a permissive block or absolute block before entering the corresponding number on the ADU touchpad to enter Stop and Proceed Mode. 3.79.3. Legacy Trains - Operators shall contact ROCC or terminal supervisor anytime the train loses speed commands and comes to a stop, even within the platform limits. Before moving the train, a permissive or absolute block must be established.</p>		
Executive Summary:	<p>On Monday, March 01, 2021, the Rail Transportation (RTRA) Quality Assurance and Quality Control (QA/QC) Group conducted a Red Signal/Zero Speed Commands Audit at the Van Ness-UDC (A06) station on track number two (2). A06-14 Turnback was used to simulate a red signal causing all operators to lose speed commands once they reached the 8-car marker/end of the platform. Based off previous data collection, it showed that operators would lose their speed commands prior to servicing the station at this location.</p> <p>The QA/QC audit group consisted of three (3) Officers located at the Rail Operations Control Center (ROCC), A06, and Tenleytown-AU (A05) stations between the hours of 10:02am and 11:26am. One (1) QA/QC Officer at the ROCC monitored trains through visual and audible systems via the Advanced Information</p>		

Form: QAQC AR (RTRA QA/QC Audit Report)
RTRA QA/QC Group
Rev. Date: 2/3/2021

Page 1 of 2

Attachment 3 – RTRA Audit Form March 1, 2021, page 1 of 2

Incident Date: 09/28/2021 Time: 20:24 hours.
Final Report – Improper Rail Vehicle Movement
E21474

Drafted By: SAFE 704 – 11/02/2021
Reviewed By: SAFE 71 – 11/24/2021
Approved By: SAFE 71 – 11/26/2021

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Management (AIM) display and the Motorola XTS-5000 Handheld Radio. One (1) QA/QC Officer located at A06 station physically monitored operators as they serviced the station and the additional QA/QC Officer was located at the eight (8) car marker on the track two (2) side of A05 station, to obtain the Rail Train Operators lead car, name, payroll number and rail division. The QA/QC Officers located within the ROCC recorded the following observations: 1. Operator contacting ROCC 2. Operator reporting zero speed commands 3. ROCC instructions to the operator 4. Operator repeating back ROCC instructions The QA/QC Officer located at Van Ness-UDC station recorded the following observations: 1. Operator adjusting train within platform limits 2. Operator contacting ROCC 3. Operator reporting zero speed commands 4. Operator keeping train doors open 5. ROCC instructions to the operator 6. Operator repeating back ROCC instructions.

The results of the audit can be found in the significant events section.

Significant Findings: A total of ten (15) Train Operators and one (1) ROCC Controller were observed during the audit. As a result, there were two (2) significant findings. 1. Four (4) Rail Train Operators violated Permanent Order T-20-28 OR 3.79.1 by closing their train doors after servicing the station without the presence of speed commands. Note: Although not within the direct scope of this audit, SOP 40 is referenced in OR 3.79.1.

The three (3) operators also violated SOP 40.5.3.1 which states Prior to initiating the Close Door button, the train operator shall check the operating console for speed commands and check the Roadway ahead of the train to ensure it is clear. 2. One (1) Rail Train Operator, operating a 7K series consist, violated Operating Rule 3.69, Permanent Order T-20-28 OR 3.79 and 3.79.2 by entering Stop and Proceed Mode and moving their consist without obtaining a permissive block from ROCC. The four (4) Train Operators found to be non-compliant will have the information forwarded to Division Management.

Priority:	(1) High	Number of Observations:	15
Notify Status:	Sent to Program Manager	Compliance #:	10
Notify Date:	Friday, March 5, 2021	Non-Compliance #:	6
Related Audits:		Compliance %:	67
Corrective Action:	Yes	Non-Compliance %:	33

Lead QA/QC Officer Signature:	Date Signed:	03/03/2021
QA/QC Manager Signature:	Date Signed:	03/05/2021

Appendix C – RTRA QA/QC Work Instructions

Washington Metropolitan Area Transit Authority			
			
DEPARTMENT OF RAIL SERVICE OFFICE OF RAIL TRANSPORTATION RTRA QUALITY ASSURANCE/QUALITY CONTROL GROUP			
Administrative Work Instruction			
CATEGORY Work Instructions		TOPIC Rules Compliance	
WI NO. 806-01	TITLE Red Signal/Zero Speed Command Compliance Audit		
LATEST REVISION NO. 3.0	ORIGINATION DATE 10/07/2016	DATE REVIEW DUE 10/08/2023	EXPIRATION DATE NONE
LATEST REVISION DATE 10/08/2021	LATEST REVIEW DATE 10/08/2021		
THIS WORK INSTRUCTION APPLIES TO: All RTRA Quality Assurance/Quality Control Group personnel			
DEPARTMENT/OFFICE/INDIVIDUAL OF PRIMARY RESPONSIBILITY (OPR) Office of Rail Transportation, RTRA Quality Assurance/Quality Control Group			
DISTRIBUTION RTRA Quality Assurance/Quality Control Group		COORDINATION WITH OTHER PUBLICATIONS RTRA QA/QC SOPs 106-01, 206-01, 206-02	
APPROVAL: _____ Operations Support Manager, RTRA		DIRECTED BY: _____ Vice President, RTRA	

QA/QC WI 806-01, Rev. 3.0

Attachment 1 – RTRA QA/QC, page 1 of 6

1. PURPOSE

The purpose of this procedure is to ensure all WMATA employees with Class I vehicle operation responsibilities are monitored for compliance with MSRPH safety rules, operating rules, standard operating procedures that govern train operations; as established by Element 13.0 of the System Safety Program Plan (SSPP), Rules and Procedures Compliance and Review and Policy/Instruction 1.15/0, Rule Book Management.

2. SCOPE

This work instruction shall be adhered to by all RTRA Quality Assurance/Quality Control Group (QA/QC) personnel during the preparation, conducting, and closing of all Red Signal/Zero Speed Command rules compliance checks, audits, and observations; and is applicable to all WMATA employees with Class I vehicle operation responsibilities.

3. RULES/POLICY

- 3.1 When encountering a red signal aspect or zero speed commands on mainline, WMATA employees with Class I vehicle operation responsibilities shall be checked for compliance with all applicable safety rules, operating rules, and/or standard operating procedures.
- 3.2 WMATA employees with Class I vehicle operation responsibilities shall be checked for compliance with the following safety rules, operating rules, and/or standard operating procedures listed below:
 - 3.2.1 Metrorail Safety Rules and Procedures Handbook (MSRPH) Operating Rule 3.67;
 - 3.2.2 Metrorail Safety Rules and Procedures Handbook (MSRPH) Operating Rule 3.79;
 - 3.2.3 All active and applicable Permanent Orders, Temporary Orders, and RTRA Operations Personnel Notices.

4. PROCEDURES

- 4.1 The RTRA Quality Assurance/Quality Control Group (QA/QC) shall be responsible for the preparation, conducting, and closing of all Red Signal/Zero Speed Command rules compliance audits.

QA/QC WI 806-01: Red Signal/Zero Speed Command Compliance Audit

- 4.2 The RTRA Operations Support Manager shall identify an RTRA QA/QC Lead Auditor to coordinate and conduct the rules compliance audit.
- 4.3 The RTRA QA/QC Lead Auditor shall adhere with RTRA QA/QC Group Standard Operating Procedures: SOP 106-01 RTRA Rules Efficiency Testing – Train Operations, and SOP 206-01 RTRA QA/QC Internal Auditing Procedures while providing oversight for the compliance audit.
- 4.4 Red Signal/Zero Speed Command Compliance Audit utilizing Signals**
- 4.4.1 The RTRA QA/QC Lead Auditor shall coordinate the compliance audit in cooperation with ROCC, ATC, and SAFE personnel (when applicable).
- 4.4.2 The RTRA QA/QC Lead Auditor shall coordinate with ATC and ROCC when setting up the rules compliance audit date, location, direction, track number, signal numbers and switch numbers; and will be in charge of the compliance audit from start to finish.
- 4.4.3 The RTRA QA/QC Lead Auditor shall compile a team of one (1) additional RTRA QC Officer to conduct the rules compliance audit; all field team members shall have radios and will conduct radio checks with ROCC prior to conducting the compliance audit.
- 4.4.4 Prior to the beginning of the rules compliance audit, the RTRA QA/QC Lead Auditor shall notify the ROCC Assistant Superintendent of the location, track number, switch numbers, and signal numbers that will be affected during the compliance audit; this notification shall also include the desired start time of the compliance audit.
- 4.4.5 The RTRA QA/QC Lead Auditor shall conduct a Safety Briefing with all personnel involved with the rules compliance audit; to include ROCC Controllers and ATC personnel (when applicable).
- 4.4.6 When applicable, prior to the beginning of the rules compliance audit, the RTRA QA/QC Lead Auditor shall instruct the ATC personnel to contact ROCC for permission to clamp switches at the compliance audit location in the normal position.
- The RTRA QA/QC Lead Auditor shall ensure, via ROCC Controller or if ATC personnel on sight, that the signal being used in the compliance audit is fully functioning. The RTRA QA/QC Lead Auditor shall ensure that the signal is in clear/line-of-sight of trains operating into the compliance audit area.
- 4.4.7 The RTRA QA/QC Lead Auditor shall stage the team at the following locations with the following responsibilities:

QA/QC WI 806-01: Red Signal/Zero Speed Command Compliance Audit

- The RTRA QA/QC Lead Auditor shall be located in the ROCC at the line desk where the audit is taking place; monitoring all radio communications and operations for compliance with OR 3.67 and OR 3.79 as operators move through the compliance audit location.
- The additional RTRA QC Officer shall be staged at the station **AFTER** to the compliance audit location.

4.4.8 All observations by RTRA QC Officers shall be recorded on pre-developed checklists; the following will be observed and recorded:

- *Adjusts train within platform limits w/o speed commands (OR 3.79) (stations only)*
- *After servicing station, contacts ROCC/Reports red signal aspect (OR 3.67) (stations only)*
- *Reports zero speed commands (OR 3.79)*
- *Keeps train doors open (OR 3.79) (stations only)*
- *Verify switch is clamped Normal (when applicable)*
- *Repeat back permission to pass red signal w/ permissive block (OR 3.67, OR 3.79)*
- *Speed no greater than 5mph over clamped switch (when applicable) (OR 3.67)*
- *ROCC gives a permissive block to move without speed commands (OR 3.79)*

4.4.9 The RTRA QA/QC Lead Auditor shall remain in constant communication with controllers while the compliance audit is in progress.

4.4.10 Upon receiving permission of the ROCC Assistant Superintendent, the ROCC Supervisor will place a red on the signal governing the compliance audit location.

4.4.11 When applicable, at the completion of the compliance audit, the RTRA QA/QC Lead Auditor shall ensure that ATC personnel, with permission of ROCC, unclamps the switches at the compliance audit location.

- The field RTRA QC Lead Auditor and ATC personnel shall not leave the compliance audit location until one train has passed through the area without incident.

4.5 Red Signal/Zero Speed Command Compliance Audit utilizing Turnbacks

4.5.1 The RTRA QA/QC Lead Auditor shall coordinate the compliance audit in cooperation with ROCC and SAFE personnel (when applicable).

QA/QC WI 806-01: Red Signal/Zero Speed Command Compliance Audit

- 4.5.2 The RTRA QA/QC Lead Auditor shall coordinate with ROCC when setting up the rules compliance audit date, location, direction, track number and turnbacks; and will be in charge of the compliance audit from start to finish.
- 4.5.3 The RTRA QA/QC Lead Auditor shall coordinate with ROCC on locations in the rail system where can turnbacks can be turned red and allow operators to properly service the station, but will not provide speed commands on the console after servicing the station.
- 4.5.4 The RTRA QA/QC Lead Auditor shall compile a team of two (2) additional RTRA QC Officers to conduct the rules compliance audit; all field team members shall have radios and will conduct radio checks with ROCC prior to conducting the compliance audit.
- 4.5.5 Prior to the beginning of the rules compliance audit, the RTRA QA/QC Lead Auditor shall notify the ROCC Assistant Superintendent of the location, track number and turnbacks that will be affected during the compliance audit; this notification shall also include the desired start time of the compliance audit.
- 4.5.6 The RTRA QA/QC Lead Auditor shall conduct a Safety Briefing with all personnel involved with the rules compliance audit; to include ROCC Controllers.
- 4.5.7 The RTRA QA/QC Lead Auditor shall stage the team at the following locations with the following responsibilities:
- The RTRA QA/QC Lead Auditor shall be located in the ROCC at the line desk where the audit is taking place; monitoring all radio communications and operations for compliance with OR 3.67 and OR 3.79 as operators move through the compliance audit location.
 - One RTRA QC Officer shall be staged at the audit location (observing Officer) and one RTRA QC Officer shall be staged at the station **AFTER** to the audit location (recording Officer); the recording Officer is responsible for recording observation data.
 - The observing Officer shall monitor trains from an inconspicuous location where station servicing procedures can be clearly seen.
- 4.5.8 All observations by RTRA QC Officers shall be recorded on pre-developed checklists; the following will be observed and recorded:
- *Adjusts train within platform limits w/o speed commands (OR 3.79) (stations only)*
 - *After servicing station, contacts ROCC/Reports red signal aspect (OR 3.67) (stations only)*
 - *Reports zero speed commands (OR 3.79)*

QA/QC WI 806-01: Red Signal/Zero Speed Command Compliance Audit

- *Keeps train doors open (OR 3.79) (stations only)*
 - *Verify switch is clamped Normal (when applicable)*
 - *Repeat back permission to pass red signal w/ permissive block (OR 3.67, OR 3.79)*
 - *Speed no greater than 5mph over clamped switch (when applicable) (OR 3.67)*
 - *ROCC gives a permissive block to move without speed commands (OR 3.79)*
- 4.5.9 The RTRA QA/QC Lead Auditor shall remain in constant communication with controllers while the compliance audit is in progress.
- 4.5.10 Upon receiving permission of the ROCC Assistant Superintendent, the ROCC Supervisor will place a red on the turnback governing the compliance audit location.
- 4.5.11 At the completion of the compliance audit, the RTRA QA/QC Lead Auditor shall ensure, with coordination of ROCC, the compliance audit location is normalized.
- The RTRA QC Officer staged at the audit location shall not leave the compliance audit location until one train has passed through the area without incident.
- 4.6 In the event that RTRA QA/QC personnel observe a major non-compliance during the rules compliance audit, the RTRA QA/QC Lead Auditor shall coordinate with ROCC to remove the employee from service. (ref. SOP 206-01 RTRA QA/QC Internal Auditing Procedures)
- 4.7 All findings will be recorded and distributed in accordance with RTRA QA/QC Group Standard Operating Procedures: SOP 106-01 RTRA Rules Efficiency Testing – Train Operations, SOP 206-01 RTRA QA/QC Internal Auditing Procedures and SOP 206-02 RTRA QA/QC Corrective Action Request Procedures.

5. ATTACHMENTS

- 1) Attachment A – OR 3.67 & OR 3.79 Red Signal Aspect / Zero Speed Command: Compliance Check Observation Log

Appendix D – RTRA Investigative Report



Employee Corrective Action Plan

Employee Information

Employee Name: [REDACTED] Date: 10/19/2021
Employee ID: [REDACTED] Job Title: Train Operator
Manager: [REDACTED] Division: Glenmont ☒

Corrective Action Request Details

Corrective Action No.: C-RSTO-20210928-01-02 Audit/Observation Type: Red Signal Aspect/Zero Speed Com
Date/Time: 09/28/2021 @ 8:24pm Location: Medical Center

Nonconformance Description:

Operator [REDACTED] violated Operating Rule 3.69, Permanent Order T-20-28 Operating Rule 3.79, 3.79.1 and 3.79.2. The operator failed to keep their train doors open until receiving speed commands and/or a permissive block from ROCC after servicing Medical Center station track two. According to Vehicle Engineering data and interior camera footage, Operator McCarty instead closed the train doors without speed commands, entered Stop and Proceed Mode and moved the consist approximately 5ft. This action was done prior to contacting ROCC to report zero-speed commands and without receiving a permissive block to move without speed commands.

Has employee repeated similar nonconformance in last 365 days? ☐ YES ☒ NO

Corrective Action Plan Details

Root Cause Analysis:

Operator Stated "Didn't realize speed commands at that time."

Plan for Improvement:

Operator recieved 13 DAP points, a 2 day suspension and Train Operator Refresher

Consequences of Further Nonconformance:

Progressive discipline.

Acknowledgment of Receipt of Corrective Action Plan

By signing this form, you confirm that you acknowledge and understand the information in this corrective action request. You also confirm that you and your manager have discussed the corrective action request and a plan for improvement. Signing this form does not ne [REDACTED] agree with this corrective action request.

Employee Signat [REDACTED]

Date

10-20-21

Manager Signat [REDACTED]

Date

10-20-21

Witness Signature (if employee understands corrective action but refuses to sign)

Date

Attachment 1 – RTRA Investigative Report page 1 of 4

Incident Date: 09/28/2021 Time: 20:24 hours.
Final Report – Improper Rail Vehicle Movement
E21474

Drafted By: SAFE 704 – 11/02/2021
Reviewed By: SAFE 71 – 11/24/2021
Approved By: SAFE 71 – 11/26/2021

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WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

Investigation Report		DIVISION Glenmont	GARAGE N/A	FILE NO.	
DATE OF OCCURRENCE September 28, 2021	TIME 8:24pm	VEHICLE NO. Lead Car 7722	RUN #	SHIFT PM	BLOCK NO.
LINE Red Line	LOCATION Medical Center Station, Track #2		DESTINATION Twinbrook Platform		
TYPE OF CASE: Violation Permanent Order T-20-28, OR 3.67, OR 3.79, OR 3.79.1			REPORTED BY QA Audit		
NAME OF EMPLOYEE INVOLVED Train Operator [REDACTED]			EMPLOYEE NO. [REDACTED]		
NATURE OF OCCURRENCE Operator moved train with zero speed commands at Medical Center Station, Track #2					
1. SUMMARY OF INVESTIGATION 2. STATEMENT OF EMPLOYEE 3. SUMMARY OF VIOLATION. 4. ANALYSIS OF FACTS / EVIDENCE IN SUPPORT OF RULE VIOLATION 5. ASSESSMENT OF DISCIPLINE.					
<p>1. Train Operator [REDACTED], RTRA's Quality Assurance personnel were conducting a Red Signal Aspect/ Zero Speed Command audit at Medical Center Station, Track #2 on Wednesday, September 28, 2021. Glenmont Management was notified on Thursday, September 29, 2021 that you were operating Train ID 108, lead car 7722 through the audited area. During this audit, you were observed moving the train without speed commands.</p> <p>2. Operator [REDACTED] your incident report stated, "I moved the train coast to carwash to properly berth, ensuring all doors would be on platform. Didn't realize speed commands at that time."</p> <p>3. Operator [REDACTED], you were moving your train without speed readouts. Per established policies and procedures, operators are never to move trains without speed commands unless authorized by ROCC, and you must always verify speed readouts prior to closing train doors. By your own admission, you were the operator on Train ID 108. QA Auditors witnessed you moving your train without speed commands.</p>					
ACTION TAKEN Level III Violation / 13 Points Assessed/ Suspended Two (2) Working Days & Refresher Training					
DATE: October 22, 2021		ACTION TAKEN BY: [REDACTED]		TITLE RTRA Supervisor	
EMPLOYEE SIGNATURE [REDACTED]					
I certify that the above has been called to my attention, and that I understand that my signature does not imply admission of guilt.					
EMPLOYEE MAY WRITE A STATEMENT IN THIS SPACE					

Orig: Office of BUS Service (BUS.) or RAIL,
Green: Employee Division File ,

Yellow : Employee
Pink : Union

068 00 0736 R1
Gold: Marketing/MARK

Attachment 1 – RTRA Investigative Report page 2 of 4

Incident Date: 09/28/2021 Time: 20:24 hours.
Final Report – Improper Rail Vehicle Movement
E21474

Drafted By: SAFE 704 – 11/02/2021
Reviewed By: SAFE 71 – 11/24/2021
Approved By: SAFE 71 – 11/26/2021

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WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY
CONTINUATION INVESTIGATION REPORT

Page 2 of 3

Your actions in this incident are in direct violation of MSRPH
OR 3.67, OR 3.79, OR 3.79.1 and Permanent Order T-20-28:

Permanent Order T-20-28 Modifies Operating Rules:

OR 3.67 Rail vehicles shall not be operated past or closer than a point 10 feet in approach of an interlocking signal or lamp displaying a red aspect, a red flag, or a dark interlocking signal, except at a bump post or entering a pocket track, or unless authorized by ROCC or the Interlocking Operator and the move is consistent with customer safety as specified in Rule 3.1.

OR 3.79 Train Operators shall not move trains with zero speed commands except after notifying ROCC or terminal supervisor and being given permission to move with zero speed commands and either a permissive block going with traffic or an absolute block going against traffic. (See SOP 15)

OR 3.79.1 Upon losing speed commands on the platform, the operator may NOT adjust the train in the same direction of traffic to service the station without contacting ROCC or terminal supervisor for permission. After servicing the station, the operator must keep their train doors open, until such time when the operator has received speed commands, a proper signal aspect, (Lunar or Flashing) along with contacting the ROCC or terminal supervisor for permission to leave and an absolute block for the move if speed commands do not return. (Reference SOP 40)

4. Operator [REDACTED] records indicate that you closed the train doors and proceeded in a power mode on a 7000 series consist without verifying speed readouts. Be reminded, when speed commands are not displayed on your console, you must contact ROCC for permission to leave. You moved your train with zero speed commands without contacting ROCC for permission and a permissive block. Operator [REDACTED], in determining the appropriate disciplinary penalty for your actions, the Glenmont Division Managers considered many factors. The records of WMATA indicate you have been an employee since May 27, 2014 and you have been a Train Operator since July 19, 2019. Your performance record indicates that you had one (1) station overrun on November 27, 2019 and on September 5, 2021 you accepted an incorrect route at Farragut North Station tail track. I have reviewed the circumstances of this violation and do not find any mitigating factors to consider that would impact my decision of disciplinary action.

5. Operator [REDACTED], for the above cited DAP Level III Violation of closing train doors and moving your train with zero speed commands without ROCC permission, you are assessed 13 DAP points which will bring your DAP points to a total of 15 points and are suspended for two (2) working days without pay. This suspension will commence on Saturday October 23rd and Sunday October 24th, 2021 you are to return for duty on Wednesday October 27th, 2021. You were scheduled and completed Refresher Training with Training Instructor C. Well at Glenmont Division from 7:00am-3:00pm.

Operator [REDACTED] be advised, Safety, QA and RTRA Supervisors will be conducting random audits to confirm you are following all operating rules and procedures. You are reminded that any future safety-related incidents will result in progressive disciplinary action up to and including disqualification from your position as a train operator or termination of employment from the Washington Metropolitan Area Transit Authority.

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY
CONTINUATION INVESTIGATION REPORT

Page 3 of 3

Attachment 1 – RTRA Investigative Report page 3 of 4

Incident Date: 09/28/2021 Time: 20:24 hours.
Final Report – Improper Rail Vehicle Movement
E21474

Drafted By: SAFE 704 – 11/02/2021
Reviewed By: SAFE 71 – 11/24/2021
Approved By: SAFE 71 – 11/26/2021

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Train Operator [REDACTED] you can elect to use all available vacation leave for lost wages for this suspension. You are aware that invoking the vacation payment for lost wages you have forfeited your right to grieve this suspension as stated in Section 104 d of the Collective Bargaining Agreement.

Yes ☒ No ☐ Initials [REDACTED] Date 10.22.21

A copy of this document will be kept in your personnel file.

- The action taken is specific to the circumstance surrounding this incident and does not set precedent for all other incidents of this nature.
- The results of your post-incident medical test were negative.

EMPLOYEE NAME: [REDACTED]

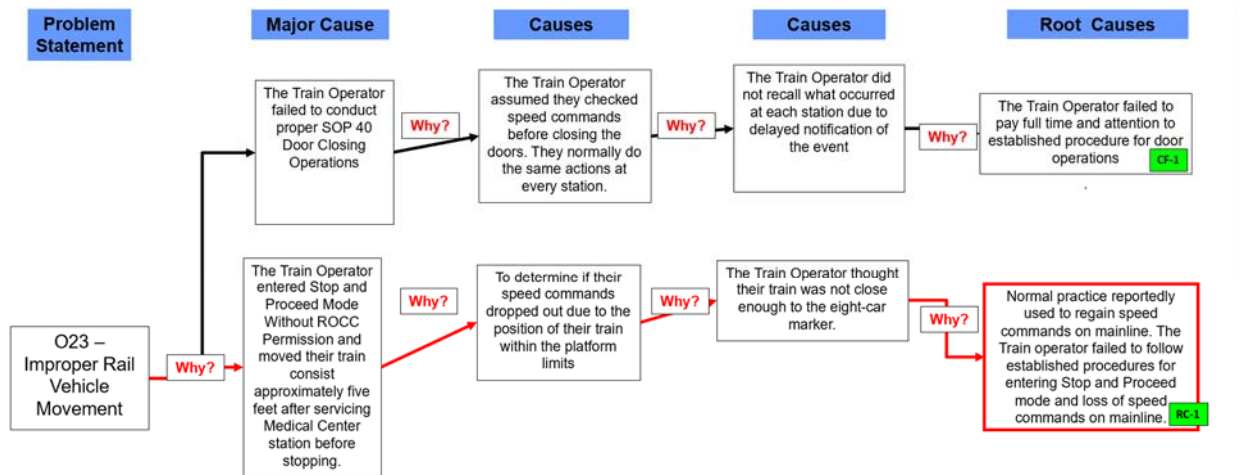
Payroll # [REDACTED]

DATE: 10/22/2021

4.21B (3/93)

Attachment 1 – RTRA Investigative Report page 4 of 4

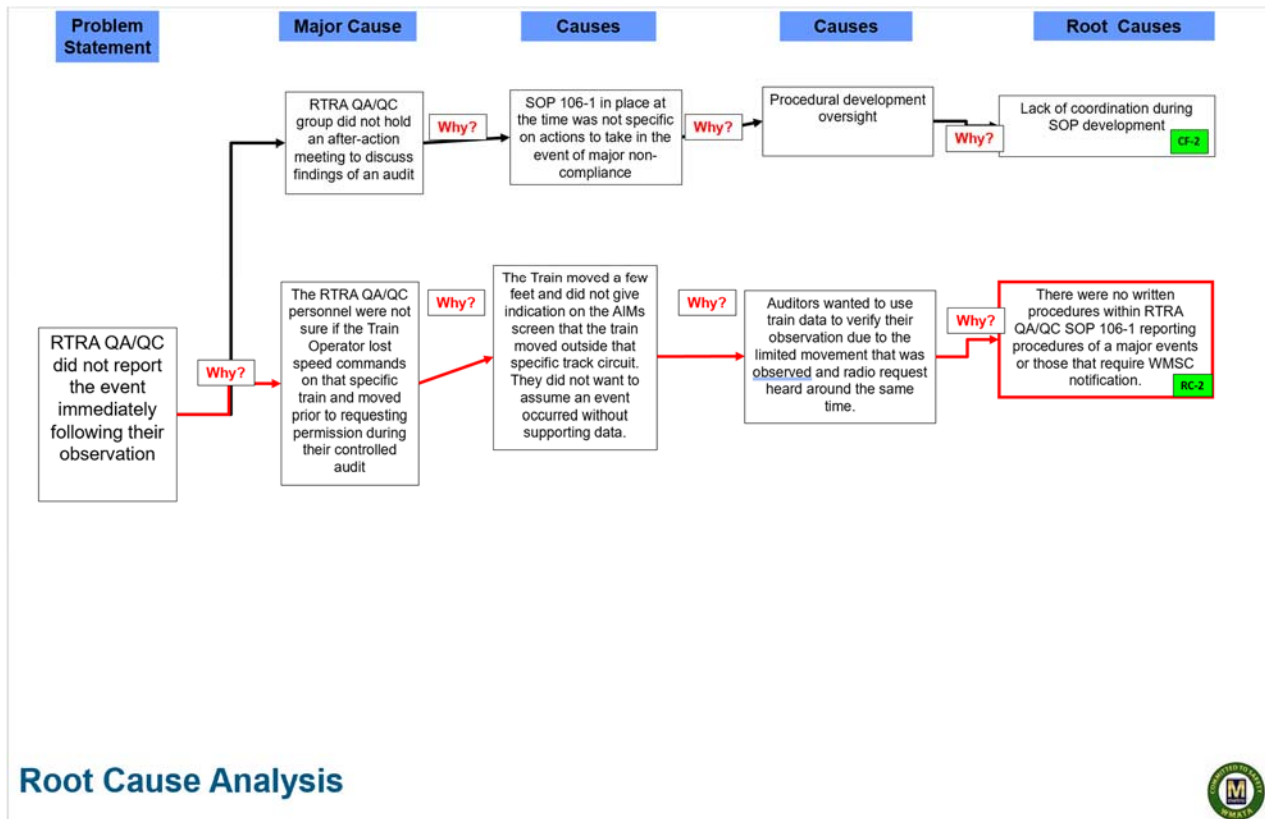
Appendix E – Root Cause Analysis



Root Cause Analysis

Attachment 1 – RCA page 1 of 2.





Attachment 1 – RCA page 2 of 2.