



Inspection Form

FOIA Exemption: All (b)(6)

Form FTA-IR-1

United States Department of Transportation
Federal Transit Administration

Agency/Department Information

Inspection Date	YYYY	MM	DD	Report Number	20170201-WMATA-CB-1		
	2017	02	01				
Rail Agency Name	Washington Metropolitan Area Transit Authority			Rail Agency Department	TRST	Sub- Department	TKIN
Rail Agency Department Contact Information	Name			Email		Office Phone	
	[REDACTED]			[REDACTED]		[REDACTED]	
	[REDACTED]			[REDACTED]		[REDACTED]	
	[REDACTED]			[REDACTED]		[REDACTED]	
	[REDACTED]			[REDACTED]		[REDACTED]	
	[REDACTED]			[REDACTED]		[REDACTED]	
Inspection Location	Rockville (A14) to Twinbrook (A13) on the A Line, Track 2						

Inspection Summary

Inspection Activity #	1	2	3	4	5	6
Activity Code	TRK-JSB-OBS	TRK-WI-PI				
Inspection Units	1	1				
Inspection Subunits	0	1				
Defects (Number)	0	4				
Recommended Finding	No	No				
Remedial Action Required ¹	No	Yes				
Recommended Reinspection	No	Yes				

Activity Summaries

Inspection Activity #	1	Inspection Subject					Job Safety Briefing			Activity Code		TRK	JSB	OBS
Job Briefing Employee Name/Title	TRST 6392					Accompanied Inspector?	Yes	Out Brief Conducted	Yes	Time	1000-1330	Outside Shift	No	
Related Reports	N/A					Related CAPS / Findings			No					
Related Rules, SOPs, Standards, or Other	Ref		Rule or SOP			Standard			Other / Title		Checklist Reference			
	RWPM													
	MSRPH													
Inspection Location	Main Track	Yard	Station	OCC	RTA Facility	FTA Office	Track Type	At-grade	Tunnel	Elevated	N/A			
	X							X		X				
Line(s)	A	Track Number	2	Chain Marker and/or Station(s)			From		To					
							799+00		701+00					
Vehicles	Head Car Number		Number of Cars			Equipment	N/A							
	N/A		N/A											
Description	TRST 6392 provided a comprehensive job safety briefing. The briefing included the									Number of Defects		0		

¹ The rail transit agency must provide FTA with the necessary evidence (e.g. maintenance work order system records, photos, documentation, records, data, or other evidence) to close out the Remedial Action. Closeout of Remedial Actions may also be subject to ongoing FTA verification inspections to ensure corrections are sufficient and effective.

Inspector in Charge - Signature	CHAD DAVID BROSKI	Digitally signed by CHAD DAVID BROSKI DN: c=US, o=U.S. Government, ou=FRA FRACHicagoIL, ou=DOT FRACHicagoIL, cn=CHAD DAVID BROSKI Date: 2017.02.02 12:37:55 -06'00'	Date
Inspector in Charge - Name	Chad Broski	Inspection Team Chad Broski, Mike Vitale	



United States Department of Transportation
Federal Transit Administration

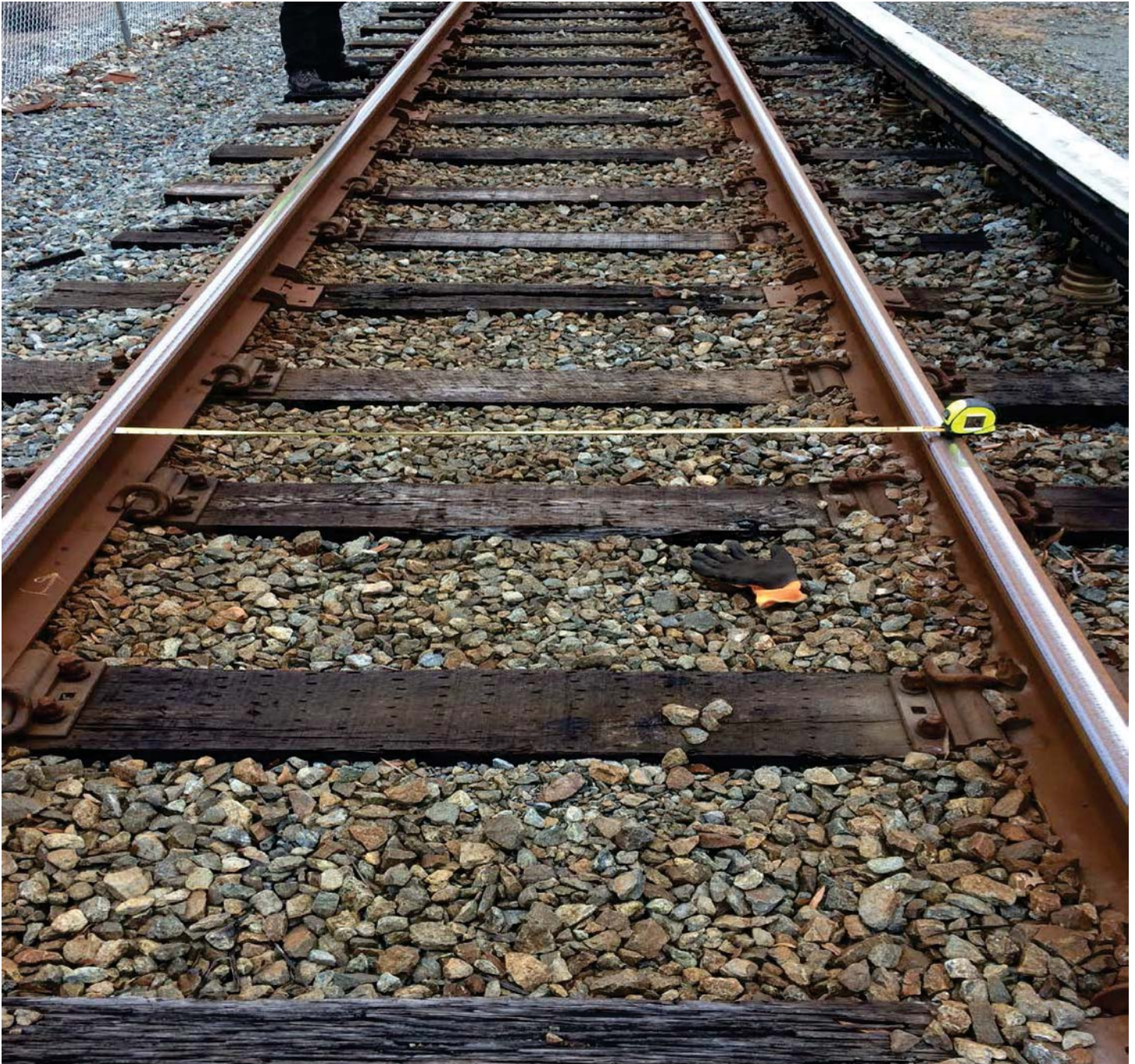
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	work limits, the protection that would be used (Train Approach Warning with an Advanced Watchman/Lookout), hazards that would be encountered, and the required Personal Protective Equipment (PPE). TRST 6392 also reviewed the Roadway Access Guide pertaining to our inspection limits. He then inspected the work group to ensure they had the necessary PPE and Roadway Worker Protection (RWP) training. He also required the work group to acknowledge understanding of the on-track safety procedures.	Recommended Finding?		No							
		Remedial Action Required?		No							
		Recommended Reinspection?		No							
Remedial Action	N/A										

Inspection Activity #	2	Inspection Subject	Remedial Action Verification					Activity Code		TRK	WI	PI
Job Briefing Employee Name/Title	TRST 6392		Accompanied Inspector?	Yes	Out Brief Conducted	Yes	Time	1000-1330	Outside Shift	No		
Related Reports	20160823-WMATA-MKD-1 20161129-WMATA-CF-1 20161201-WMATA-WP-1		Related CAPS / Findings			No						
Related Rules, SOPs, Standards, or Other	Ref		Rule or SOP			Standard		Other / Title		Checklist Reference		
	RWPM					TRST 1000		Permanent Order No. T-16-07, Rev. 1				
	MSRPH											
Inspection Location	Main Track	Yard	Station	OCC	RTA Facility	FTA Office	Track Type	At-grade	Tunnel	Elevated	N/A	
	X							X		X		
Line(s)	A	Track Number	2	Chain Marker and/or Station(s)	From				To			
					799+00				701+00			
Vehicles	Head Car Number		Number of Cars		Equipment	N/A						
	N/A		N/A									
Description	<p>The FWSO inspectors performed remedial action verification between chain markers (CM) 799+00 (Station A14 – Rockville) and 701+00 (Station A13 – Twinbrook) on main track A2.</p> <p>Observations:</p> <ul style="list-style-type: none"> The on-track safety complied with the RWPM. Train Approach Warning Protection with Advanced Watchmen/Lookouts allowed ample time to clear for on-coming trains. All trains complied with Permanent Order No. T-16-07, Rev. 1. FWSO remedial action ID #1021 and #1022 (report number 20161129-WMATA-CF-1) for Track Geometry Vehicle (TGV) testing on main track A2 have not been repaired at CM A2 712+71 and CM A2 798+55. FWSO measured 55 7/8 inch and 55 15/16 inch static gauge respectively at both locations. WMATA TRST representative placed a 15 MPH speed restriction on both locations based on the static gauge measurements in accordance with TRST 1000 (WMATA Track Standards Manual). FWSO remedial action ID #935 & #1031 for vegetation and damaged ETS boxes have not been remediated and/or repaired. FWSO noted numerous concentrated loads under the base of the rail due to spike heads and plate shoulders. This condition is not in accordance with TRST 1000 Manual rule number 7.4.4 which states, "No metal object which causes a concentrated load by solely supporting a rail shall be allowed between the base of the rail and the bearing surface of the tie plate." FWSO noted numerous tie plates unsecured. FWSO noted ineffective 3rd rail anchors, unsecured insulator assemblies, and missing cover boards throughout this section of track. FWSO noted ETS doors for wiring were open and damaged at CM A2 708+00 and CM A2 777+15. 							Number of Defects		4		
								Recommended Finding?		No		
								Remedial Action Required?		Yes		
								Recommended Reinspection?		Yes		
Remedial Action	<ul style="list-style-type: none"> WMATA must verify that the November 29, 2016 TGV loaded tight gauge deviations at CM A2 712+71 and CM A2 798+55 have been properly remediated. WMATA must remove concentrated loads under the base of the rail. 											



- | | |
|--|--|
| | <ul style="list-style-type: none">• WMATA must ensure the 3rd rail is firmly and securely seated in all insulator assemblies and re-secure anchor arms.• WMATA must repair and/or replace damaged ETS doors at CM A2 708+00.• WMATA must repair and/or replace damaged ETS doors at CM A2 777+15. |
|--|--|



Tight Gauge at CM A2 798+55.



Tight Gauge at CM A2 712+71.



Numerous concentrated loads under base of rail due to spike heads and plate shoulders—similar to the photo above—between Stations A14 and A13 on track A2.



ETS box cover off at CM A2 777+15.



ETS box cover off at CM A2 708+00.



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United States Department of Transportation
Federal Transit Administration

Agency/Department Information

Inspection Date	YYYY	MM	DD	Report Number	20170201-WMATA-WP-1		
	2017	02	01				
Rail Agency Name	Washington Metropolitan Area Transit Authority			Rail Agency Department	POWR	Sub- Department	PMI
Rail Agency Department Contact Information	Name		Email		Office Phone		Mobile Phone
	[REDACTED]		[REDACTED]		[REDACTED]		[REDACTED]
	[REDACTED]		[REDACTED]		[REDACTED]		[REDACTED]
	[REDACTED]		[REDACTED]		[REDACTED]		[REDACTED]
Inspection Location	K05 – East Falls Church – AC Room						

Inspection Summary

Inspection Activity #	1	2	3	4	5	6
Activity Code	TP-RM-OBS					
Inspection Units	1					
Inspection Subunits	60					
Defects (Number)	0					
Recommended Finding	No					
Remedial Action Required ¹	No					
Recommended Reinspection	No					

Activity Summaries

Inspection Activity #	1	Inspection Subject			K05 – East Falls Church – AC Room – Bi-Annual Preventive Maintenance Inspection on Battery Banks (Round Cell Lead Acid – Lucent (Manufacturer))			Activity Code		TP	RM	OBS
Job Briefing Employee Name/Title	WMATA Electrician #1 WMATA Electrician #2			Accompanied Inspector?	Yes	Out Brief Conducted	Yes	Time	1500-1800	Outside Shift	No	
Related Reports	20170112-WMATA-AD-2			Related CAPS / Findings								
Related Rules, SOPs, Standards, or Other	Ref		Rule or SOP		Standard		Other / Title		Checklist Reference			
	WMATA Preventive Maintenance Inspection for Bi-Annual Battery Maintenance; Effective June 1, 2012 (Engineering has not officially approved this PMI)											
Inspection Location	Main Track	Yard	Station	OCC	RTA Facility	FTA Office	Track Type	At-grade	Tunnel	Elevated	N/A	
			X									X
Line(s)	N/A		Track Number	N/A	Chain Marker and/or Station(s)		From		To			
							K05 – East Falls Church		K05 – East Falls Church			

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Inspector in Charge - Signature		Date
WINSLOW L. POWELL <small>Digitally signed by WINSLOW L. POWELL DN: cn=W, o=U.S. Government, ou=FTAHQ, cn=WINSLOW L. POWELL Date: 2017.03.01 13:35:51 -0500</small>		
Inspector in Charge – Name Winslow Powell	Inspection Team Tino Sahoo	



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Vehicles	Head Car Number	Number of Cars	Equipment	Round Cell Lead Acid Batteries – Lucent (Manufacturer)	
	N/A	N/A			
Description	<p>The job safety briefing was comprehensive. Potential for chemical burn, electrical shock, and explosion hazard when working with batteries was clearly articulated. No exception was taken to the job safety briefing. An acid resistant apron, rubber gloves, and safety glasses were worn by all personnel present, including the FTA inspector. Fully insulated tools were used by WMATA electricians.</p> <p>Battery Maintenance was done by the crew on 1 battery bank. The battery bank had 60 round cell batteries (Lucent – Manufacturer). These batteries are lead acid based. The batteries are connected in series, which allows the voltage per battery to be additive (60 batteries each at ~2.185V x 60 batteries = 131.1VDC per the bank). The actual voltage reading of the battery bank was 130.2V and within tolerance. Ambient temperature in the room was 73 degrees Fahrenheit, which is acceptable. The electrolyte temperature of the pilot cell was 41 degrees Fahrenheit, which is low, but within set parameters.</p> <p>The following procedures were done for the bi-annual maintenance of these lead based batteries:</p> <p>General Inspection. Check and record the following:</p> <ol style="list-style-type: none">1. Re-torque all battery bolts and hardware to 150 inch-pounds.2. Float voltage for the battery bank on cells number 1 and 60. Float voltage should be 131.0 VDC, adjust as necessary.3. Equalize voltage for the battery bank on cell numbers 1 and 60. Equalize voltage should be 131.0 VDC, adjust as necessary.4. Charger output current.5. Using a cellcorder, or other approved equivalent device, take voltage readings of each cell. Take internal resistance readings of each cell. Take inter-cell resistance readings of each cell.6. Take specific gravity readings on all cells using a digital hydrometer. Record readings on data sheet. Normal readings should be:<ul style="list-style-type: none">• Round cell – 1.215 +/- 0.005 at 77°F (25°C)• If the specific gravity is low on 25% of cells, then the battery bank needs an equalize charge.7. Electrolyte levels – If more than half the cells in the bank are half way between the fluid level lines or lower add clean distilled water to the top-level line; be careful not to fill higher than top level line. If fluid level is higher than top level line use clean hydrometer to remove excess fluid and dispose of properly. Use only new or unopened bottles of water.8. Any evidence of corrosion on posts, intercell connectors, or racks. If any corrosion is found, scrape off visible corrosion and neutralize remaining corrosion with baking soda solution. Clean area and apply approved battery grease. Extensive corrosion to the posts of the batteries is to be corrected using a Battery Breakdown Maintenance Procedure (Appendix A) on a FSR.9. Ambient temperature of room.10. Exhaust fan working. If not working open FSR ticket.11. Electrolyte temperature of pilot cell.12. Unintentional battery grounds on either polarity. Measure positive voltage to ground and negative voltage to ground. Any ground fault condition (more than 100 volts) of the positive or negative should be noted and reported to your Supervisor.13. Broken flame arrestors or missing flame arrestor tops. Replace any found.14. Using a flashlight, check Individual cells for the presence of crystals (sulfation). If lead sulfate crystals appear on all cells in a string, check the following as possible causes for the abnormal condition:<ul style="list-style-type: none">• Charger voltage: the appearance of lead sulfite crystals may indicate a low battery plant float voltage. Check the battery float voltage setting and make proper adjustment.	Number of Defects	0		
		Recommended Finding?	No		
		Remedial Action Required?	No		
		Recommended Reinspection?	No		



	<ul style="list-style-type: none">• Bank discharge: a battery discharge resulting from a power failure or other reasons may produce lead sulfite crystals on the cells. This is normal with all lead acid cells since sulfate is the material produced when a lead acid cell is discharged. If the cause of the lead sulfate crystals is a recent discharge, the crystals will disappear when the cells have been fully recharged on float (usually within two weeks). <ol style="list-style-type: none">15. Clean off all dust, dirt and debris from tops of cells, flame arrestors and racks with clean cotton rag dampened with clean distilled water.16. Check for cracked or leaking cells in the battery bank. Clean spill with baking soda and distilled water solution, open FSR ticket and notify Battery Crew Supervisor.17. Take reading of AC Ripple mV rms. Place meter to AV voltage in auto range if available and record the AC ripple in milli-volts. This measurement should be within the acceptable level shown on the battery charger or UPS nameplate.18. Take reading of DC current running through battery bank. Using an amp-meter, clamp around the wire jumpers in the middle of the battery bank. Record the DC current. <p>The crew followed procedures as stated in Preventative Maintenance Inspection (PMI), and no issues or concerns were noted.</p> <p>The FWSO inspector noted that electricians with battery expertise would also benefit from obtaining the necessary training and expertise for Uninterruptible Power Supplies (UPS), as these pieces of equipment are interconnected. The cross training would be beneficial for the overall efficiency of maintenance because it would allow one crew instead of two crews (one for the UPS and one for the batteries) to properly maintain both pieces of equipment on one visit.</p> <p>The latest battery PMI, "WMATA Preventive Maintenance Inspection for Bi-Annual Battery Maintenance; Effective June 1, 2012," covers the three different types of batteries present in the system and should be officially approved by engineering as stated in the remedial action in related FTA report 20170112-WMATA-AD-2.</p>		
Remedial Action	N/A		



Inspection Form

FOIA Exemption: All (b)(6)

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United States Department of Transportation
Federal Transit Administration

Agency/Department Information

Inspection Date	YYYY	MM	DD	Report Number	20170202-WMATA-AD-1		
	2017	02	02				
Rail Agency Name	Washington Metropolitan Area Transit Authority			Rail Agency Department	TRST	Sub- Department	Maintenance/Safe
Rail Agency Department Contact Information	Name		Email		Office Phone		Mobile Phone
	[REDACTED]		[REDACTED]				
	[REDACTED]		[REDACTED]				
	[REDACTED]		[REDACTED]				
Inspection Location	D Line, track 1, Minnesota Avenue Station						

Inspection Summary

Inspection Activity #	1	2	3	4	5	6
Activity Code	TRK-RWP-OBS	TRK-GEN-INS				
Inspection Units	1	0				
Inspection Subunits	4	0				
Defects (Number)	0	0				
Recommended Finding	No	No				
Remedial Action Required ¹	No	No				
Recommended Reinspection	No	No				

Activity Summaries

Inspection Activity #	1	Inspection Subject					Roadway Worker Protection – Job Safety Briefing			Activity Code		TRK	RWP	OBS
Job Briefing Employee Name/Title	TRST UNIT 685, TRST UNIT 625 SAFE UNIT 206					Accompanied Inspector?	Yes	Out Brief Conducted	Yes	Time	1000-1100	Outside Shift	No	
Related Reports						Related CAPS / Findings								
Related Rules, SOPs, Standards, or Other	Ref		Rule or SOP			Standard			Other / Title		Checklist Reference			
	RWPM													
Inspection Location	Main Track	Yard	Station	OCC	RTA Facility	FTA Office	Track Type	At-grade	Tunnel	Elevated	N/A			
	X		X						X					
Line(s)	D Line		Track Number	1	Chain Marker and/or Station(s)			From		To				
								Minnesota Avenue Station		Minnesota Avenue Station				
Vehicles	Head Car Number		Number of Cars			Equipment		N/A						
	N/A		N/A											
Description	The job safety briefing was provided by TRST Unit 626 at Minnesota Station Platform. The briefing was thorough and fully compliant with WMATA requirements. It included WMATA level 1 ID check, personal protective equipment								Number of Defects		0			
									Recommended Finding?		No			
									Remedial Action Required?		No			

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Inspector in Charge - Signature	AMBURI DALEY <small>Digitally signed by AMBURI DALEY DN: c=US, o=U.S. Government, ou=DOT Headquarters, ou=FMCSAHQ, cn=AMBURI DALEY Date: 2017.02.13 10:32:08 -05'00'</small>	Date
Inspector in Charge – Name Ambur Daley	Inspection Team Alexander Nepa	



United States Department of Transportation
Federal Transit Administration

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	(PPE) inspection, type of protection – train approach warning (TAW), potential hazards and hot spots, and the closest hospital location. No exceptions were taken with the job safety briefing.	Recommended Reinspection?	No
Remedial Action	N/A		

Inspection Activity #	2	Inspection Subject	Track Inspection for restricted, close, no and limited clearance areas within the right-of-way (ROW)				Activity Code	TRK	GEN	INS					
Job Briefing Employee Name/Title	TRST UNIT 685, TRST UNIT 626 and SAFE UNIT # 206		Accompanied Inspector?	Yes	Out Brief Conducted	Yes	Time	1000-1100	Outside Shift	No					
Related Reports	Related CAPS / Findings														
Related Rules, SOPs, Standards, or Other	Ref	Rule or SOP		Standard		Other / Title		Checklist Reference							
	2014 RWP manual revisions.														
Inspection Location	Main Track	Yard	Station	OCC	RTA Facility	FTA Office	Track Type	At-grade	Tunnel	Elevated	N/A				
	X							X	X						
Line(s)	D Line	Track Number	1	Chain Marker and/or Station(s)		From		To							
						Minnesota Ave. Station, D-09		Minnesota Ave. Station D-09							
Vehicles	Head Car Number		Number of Cars		Equipment	N/A									
	N/A		N/A												
Description	An inspection of the D Line, track 1, between Minnesota Avenue Station and Potomac Avenue Station was attempted. The purpose of this special inspection was to review, identify, and confirm areas within the roadway with limited or restricted views and close and/or no clearance for publication in WMATA's revised edition of the Roadway Worker Protection (RWP) manual. After a comprehensive job safety briefing, the roadway worker in charge (RWIC) contacted the Rail Operations Control Center (ROCC) to gain track access. The work group was denied track access due to too many work-groups occupying the roadway. The inspection was called off and re-scheduled for the next day.						Number of Defects		0						
							Recommended Finding?		0						
							Remedial Action Required?		N/A						
							Recommended Reinspection?		N/A						
Remedial Action	N/A														



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FOIA Exemption: All (b)(6)

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United States Department of Transportation
Federal Transit Administration

Agency/Department Information

Inspection Date	YYYY	MM	DD	Report Number	20170202-WMATA-WP-1		
	2017	02	02				
Rail Agency Name	Washington Metropolitan Area Transit Authority			Rail Agency Department	POWR	Sub- Department	CBL. IN.
Rail Agency Department Contact Information	Name		Email		Office Phone		Mobile Phone
	[REDACTED]		[REDACTED]		[REDACTED]		[REDACTED]
Inspection Location	A15 – Shady Grove to A14 – Rockville (Track 2)						

Inspection Summary

Inspection Activity #	1	2	3	4	5	6
Activity Code	TP-WI-OBS					
Inspection Units	1					
Inspection Subunits	16					
Defects (Number)	11					
Recommended Finding	Yes					
Remedial Action Required ¹	Yes					
Recommended Reinspection	Yes					

Activity Summaries

Inspection Activity #	1	Inspection Subject					Walking Observation (Cable Inspection)			Activity Code		TP	WI	OBS
Job Briefing Employee Name/Title	WMATA RWIC WMATA Watchman/Lookout WMATA Documenter					Accompanied Inspector?	Yes	Out Brief Conducted	Yes	Time	1000-1400	Outside Shift	No	
Related Reports						Related CAPS / Findings								
Related Rules, SOPs, Standards, or Other	Ref		Rule or SOP			Standard		Other / Title		Checklist Reference				
	RWPM													
Inspection Location	Main Track	Yard	Station	OCC	RTA Facility	FTA Office	Track Type	At-grade	Tunnel	Elevated	N/A			
	X							X						
Line(s)	A-Line	Track Number	TRK 2		Chain Marker and/or Station(s)		From		To					
							A15 – Shady Grove- Track 2		A14 – Rockville – Track 2					
Vehicles	Head Car Number		Number of Cars			Equipment	N/A							
	N/A		N/A											
Description	Daily cable inspections are part of the holistic approach WMATA has instituted to prevent cable fires and arcing incidents. On a typical day there are three different WMATA cable inspection crews that are active, and they include three							Number of Defects		11				
								Recommended Finding?		Yes				
								Remedial Action Required?		Yes				

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Inspector in Charge - Signature WINSLOW L. POWELL		Date	
Inspector in Charge – Name Winslow Powell		Inspection Team Tino Sahoo	



	<p>personnel—the Roadway Worker in Charge (RWIC), the Watchman/Lookout, and a documenter of issues in wayside power cable and/or connections. Each crew inspects a different portion of the mainline from 1000–1400 hours. The pictures taken and issues noted are entered into a database for night time cable repair crews to fix.</p> <p>As outlined below, the following issues with the power cables were noted by the FWSO inspector and WMATA personnel during the course of the normal daily cable inspection process.</p> <ul style="list-style-type: none">• TRK 2 CM 941+00 – Cables lying on the deck (ballast)• TRK 2 CM 940+00 – Cables lying on the deck (ballast)• TRK 2 CM 937+00 – Missing 3rd rail coverboard; cables lying on the deck (ballast)• TRK 2 CM 923+00 – Cables lying on the deck (ballast)• TRK 2 CM 913+00 – 3rd rail coverboard broken; cables lying on the deck; one cable nicked and needs replacement or repair• TRK 2 CM 903+00 – Cables lying on the deck (ballast)• TRK 2 CM 893+00 – Missing 3rd rail coverboard; one cable needs replacement from the insulation rubbing against the 3rd rail insulator as it is too close and causing wear; cables lying on the deck (ballast)• TRK 2 CM 880+00 – Cables lying on the deck (ballast)• TRK 2 CM 879+00 – Heat shrink and OZ Gedney bushing on FRE (Fiberglass) conduit/cable transition (duct line transition – stub-up) compromised; cable with the temporary repair should be replaced; cables lying on the deck (ballast)• TRK 2 CM 868+00 – Cables lying on the deck (ballast); cables nicked and need replacement; fiberglass standoffs held by zip ties and not permanent nut/bolt assembly• TRK 2 CM 858+00 – Missing 3rd rail coverboard; cables lying on the deck (ballast); 3rd Rail porcelain insulator needs immediate replacement under expansion joint• TRK 2 CM 848+00 – Cables lying on the deck (ballast) and too close 3rd rail coverboard bracket, causing wear/tear on cable whenever it rubs against bracket• TRK 2 CM 838+00 – Cables lying on the deck (ballast); cables need replacement due to insulation being degraded• TRK 2 CM 828+00 – Cables lying on the deck (ballast) and buried in ballast; fiberglass standoffs held by zip ties and not permanent nut/bolt assembly• TRK 2 CM 817+00 – Cables lying on the deck (ballast)• TRK 2 CM 816+00 – Cables lying on the deck (ballast) <p>General observations:</p> <ul style="list-style-type: none">• Cables lying on the deck are prone to the vibration of the trains traveling on the running rails (inbound and outbound). This can cause premature degradation of the cables, especially in the outdoor areas where cables are lying on ballast.	Recommended Reinspection?	Yes
Remedial Action	<ul style="list-style-type: none">• TRK 2 CM 913+00 – Replace damaged cable.• TRK 2 CM 893+00 – Replace damaged cable and ensure enough clearance between newly installed cable and insulator.• TRK 2 CM 879+00 – Replace heat shrink and OZ Gedney bushing on the duct line transition (feeder cable stub-up)• TRK 2 CM 879+00 – Replace cable with temporary repair.• TRK 2 CM 868+00 – Replace nicked cables.• TRK 2 CM 868+00 – Install nut/bolt permanent installation on fiberglass standoffs instead of zip ties.• TRK 2 CM 858+00 – Replace 3rd rail porcelain insulator.• TRK 2 CM 848+00 – Provide enough clearance between cables and coverboard bracket and replace any damaged cables.• TRK 2 CM 838+00 – Replace damaged cables.• TRK 2 CM 828+00 – Install permanent nut/bolt assembly on fiberglass standoffs.• TRK 2 CM 828+00 – Unbury cables from the ballast.		



FIGURE 1 - TRK 2 CM 913+00 – DAMAGED CABLE



FIGURE 2 - TRK 2 CM 893+00 – DAMAGED CABLE
AND PROVIDE CLEARANCE WITH INSULATOR



FIGURE 3 - TRK 2 CM 879+00 – HEAT SHRINK AND OZ GEDNEY BUSHING ON DUCT LINE TRANSITION COMPROMISED;
TEMPORARY REPAIRED CABLE NEEDS REPLACEMENT



FIGURE 4 - TRK 2 CM 868+00 – DAMAGED CABLES AND TEMPORARY INSTALL OF STANDOFFS WITH ZIP TIES



FIGURE 5 - TRK 2 CM 858+00 – 3RD RAIL PORCELAIN INSULATOR UNDER EXPANSION JOINT DEFLECTED



FIGURE 6 - TRK 2 CM 848+00 – CABLES TOO CLOSE TO 3RD RAIL COVERBOARD BRACKET



FIGURE 7 - TRK 2 CM 838+00 – DAMAGED CABLES



FIGURE 8 - TRK 2 CM 828+00 – TEMPORARY INSTALL OF ZIP TIES FOR FIBERGLASS CABLE STANDOFFS AND BURIED CABLES



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United States Department of Transportation
Federal Transit Administration

Agency/Department Information

Inspection Date	YYYY	MM	DD	Report Number	20170203-WMATA-AMD-1		
	2017	02	03				
Rail Agency Name	Washington Metropolitan Area Transit Authority			Rail Agency Department	TRST	Sub- Department	Maintenance/Safe
Rail Agency Department Contact Information	Name		Email		Office Phone		Mobile Phone
	[REDACTED]		[REDACTED]		[REDACTED]		[REDACTED]
Inspection Location	D Line, track 1, between Minnesota Avenue Station and Potomac Avenue Station.						

Inspection Summary

Inspection Activity #	1	2	3	4	5	6
Activity Code	TRK-RWP-OBS	TRK-GEN-INS				
Inspection Units	1	0				
Inspection Subunits	4	0				
Defects (Number)	0	0				
Recommended Finding	No	No				
Remedial Action Required ¹	No	No				
Recommended Reinspection	No	No				

Activity Summaries

Inspection Activity #	1	Inspection Subject	Roadway Worker Protection – Job Safety Briefing				Activity Code	TRK	RWP	OBS	
Job Briefing Employee Name/Title	TRST UNIT 685, TRST UNIT 625 SAFE UNIT 206		Accompanied Inspector?	Yes	Out Brief Conducted	Yes	Time	1000-1330	Outside Shift	No	
Related Reports			Related CAPS / Findings								
Related Rules, SOPs, Standards, or Other	Ref	Rule or SOP		Standard		Other / Title		Checklist Reference			
	RWPM										
Inspection Location	Main Track	Yard	Station	OCC	RTA Facility	FTA Office	Track Type	At-grade	Tunnel	Elevated	N/A
	X		X						X		
Line(s)	D Line	Track Number	1	Chain Marker and/or Station(s)		From		To			
						Minnesota Avenue Station D-09		Potomac Avenue Station D-07			
Vehicles	Head Car Number		Number of Cars		Equipment	N/A					
	N/A		N/A								
Description	The job safety briefing was provided by TRST Unit 626 at Minnesota Avenue Station Platform. The briefing was thorough and fully compliant with WMATA requirements. It included WMATA level 1 ID check, personal protective equipment							Number of Defects		0	
								Recommended Finding?		No	
								Remedial Action Required?		No	

¹ The rail transit agency must provide FTA with the necessary evidence (e.g. maintenance work order system records, photos, documentation, records, data, or other evidence) to close out the Remedial Action. Closeout of Remedial Actions may also be subject to ongoing FTA verification inspections to ensure corrections are sufficient and effective.

Inspector in Charge - Signature	ANGELA M DLUGER	Digitally signed by ANGELA M DLUGER DN: c=US, o=U.S. Government, ou=FTA HQ, ou=DOT Headquarters, cn=ANGELA M DLUGER Date: 2017.02.13 12:45:18 -05'00'	Date February 13, 2017
Inspector in Charge – Name Angela Dluger	Inspection Team Alexander Nepa		

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Version date: 8/26/16



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Federal Transit Administration

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	(PPE) inspection, type of protection – train approach warning (TAW), potential hazards and hot spots, and the nearest hospital location. No exceptions were taken with the job safety briefing.	Recommended Reinspection?	No
Remedial Action	N/A		

Inspection Activity #	2	Inspection Subject	Track Inspection for restricted, close, no and limited clearance areas within the roadway.				Activity Code	TRK	GEN	INS					
Job Briefing Employee Name/Title	TRST UNIT 685, TRST UNIT 626 and SAFE UNIT # 206			Accompanied Inspector?	Yes	Out Brief Conducted	Yes	Time	1000-1330	Outside Shift	No				
Related Reports	Related CAPS / Findings														
Related Rules, SOPs, Standards, or Other	Ref	Rule or SOP				Standard		Other / Title		Checklist Reference					
	2014 RWP manual revisions.														
Inspection Location	Main Track	Yard	Station	OCC	RTA Facility	FTA Office	Track Type	At-grade	Tunnel	Elevated	N/A				
	X							X	X						
Line(s)	D Line	Track Number	1	Chain Marker and/or Station(s)			From		To						
							CM 315+00 D-09		CM 174+00 D-07						
Vehicles	Head Car Number		Number of Cars			Equipment	N/A								
	N/A		N/A												
Description	An inspection of D Line, track 1, between Minnesota Avenue Station and Potomac Avenue Station was conducted. The purpose of this special inspection was to review, identify, and confirm areas within the roadway with limited or restricted views and close and/or no clearance to include curves and switches for publication in WMATA's revised edition of the roadway worker protection (RWP) manual. This inspection also reviewed existing areas within the RWP manual that may require additional protection.							Number of Defects		0					
								Recommended Finding?		0					
								Remedial Action Required?		N/A					
	A comprehensive review of track 1 was conducted on all curves, tunnel portals, and switch areas. The WMATA team made several notations and will make appropriate recommendations for changes to the RWP committee.							Recommended Reinspection?		N/A					
Remedial Action	N/A														



Inspection Form

FOIA Exemption: All (b)(6)

Form FTA-IR-1

United States Department of Transportation
Federal Transit Administration

Agency/Department Information

Inspection Date	YYYY	MM	DD	Report Number	20170204-WMATA-AD-1		
	2017	02	04				
Rail Agency Name	Washington Metropolitan Area Transit Authority			Rail Agency Department	TRST	Sub- Department	Maintenance/Safe
Rail Agency Department Contact Information	Name		Email		Office Phone		Mobile Phone
	[REDACTED]		[REDACTED]				
	[REDACTED]		[REDACTED]				
	[REDACTED]		[REDACTED]				
Inspection Location	C-04 to D-06 Shutdown (Smithsonian)						

Inspection Summary

Inspection Activity #	1	2	3	4	5	6
Activity Code	TRK-RWP-OBS	TRK-GEN-INS				
Inspection Units	1	1				
Inspection Subunits	1	4				
Defects (Number)	0	3				
Recommended Finding	No	Yes				
Remedial Action Required ¹	No	Yes				
Recommended Reinspection	No	Yes				

Activity Summaries

Inspection Activity #	1	Inspection Subject					Roadway Worker Protection – Job Safety Briefing			Activity Code		TRK	RWP	OBS
Job Briefing Employee Name/Title	TRST SAFETY BRIEFING TABLE					Accompanied Inspector?	Yes	Out Brief Conducted	Yes	Time	0830-1130	Outside Shift	No	
Related Reports						Related CAPS / Findings								
Related Rules, SOPs, Standards, or Other	Ref		Rule or SOP			Standard			Other / Title		Checklist Reference			
	RWPM													
Inspection Location	Main Track	Yard	Station	OCC	RTA Facility	FTA Office	Track Type	At-grade	Tunnel	Elevated	N/A			
	X		X						X					
Line(s)	Orange, Silver & Blue Line		Track Number	2	Chain Marker and/or Station(s)		From		To					
							Smithsonian Station		Smithsonian Station					
Vehicles	Head Car Number		Number of Cars			Equipment	N/A							
	N/A		N/A											
Description	The job safety briefing was conducted at the Safety Briefing Table at Smithsonian Station. The briefing was thorough and fully compliant with WMATA requirements. It included WMATA level 1 ID check, personal protective equipment (PPE)								Number of Defects		0			
									Recommended Finding?		No			
									Remedial Action Required?		No			

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Inspector in Charge - Signature	AMBUR I DALEY Digitally signed by AMBUR I DALEY DN: c=US, o=U.S. Government, ou=DOT Headquarters, ou=FMCSAHQ, cn=AMBUR I DALEY Date: 2017.02.10 16:26:28 -05'00'	Date
Inspector in Charge – Name Ambur Daley	Inspection Team Alexander Nepa	



United States Department of Transportation
Federal Transit Administration

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	inspection, type of protection – individual train detection (IDT), potential hazards and hot spots, the nearest hospital location, and safety rule. No exceptions were taken with the job safety briefing.	Recommended Reinspection?	No
Remedial Action	N/A		

Inspection Activity #	2	Inspection Subject	Track shutdown observation and inspection and observation of contractors installing a snake tray cable unit.				Activity Code	TRK	GEN	INS							
Job Briefing Employee Name/Title	TRST SAFETY BRIEFING TABLE		Accompanied Inspector?	Yes	Out Brief Conducted	Yes	Time	0830-1130	Outside Shift	No							
Related Reports	Related CAPS / Findings																
Related Rules, SOPs, Standards, or Other	Ref	Rule or SOP			Standard		Other / Title		Checklist Reference								
	TRST 1000																
Inspection Location	Main Track	Yard	Station	OCC	RTA Facility	FTA Office	Track Type	At-grade	Tunnel	Elevated	N/A						
	X								X								
Line(s)	Orange, Silver & Blue Line	Track Number	2	Chain Marker and/or Station(s)			From		To								
							CM D1-103+00		CM D1 107+00								
Vehicles	Head Car Number		Number of Cars		Equipment	N/A											
	N/A		N/A														
Description	<p>An observation of contractors installing a snake tray cable unit on the wall of the tunnel was conducted without exception. However, during the observation, the following safety items were identified:</p> <ul style="list-style-type: none"> At CM D2-107+00, there was no safety hand rail observed to enter (climb) the catwalk. Upon further investigation, it was found that there was a hand rail but it was a flush mount type obstructed by conduit. The FWSO team member observed roadway workers, while climbing, making three-point contact using the conduit. This conduit houses electrical wires posing a potential electrical shock hazard. Additionally, the conduit is not engineered or designed to be used as a hand rail, and it could become unsecured from the wall and pose a fall hazard. At CM D2-107+00, to the left there is an electrical junction box without a cover. The wires are exposed. At CM D2-107+00, there is a tunnel leak allowing water to enter the track area. 						Number of Defects		3								
							Recommended Finding?		Yes								
							Remedial Action Required?		Yes								
							Recommended Reinspection?		Yes								
Remedial Action	<ul style="list-style-type: none"> At CM D2-107+00, WMATA must install a proper grab handle. At CM D2-107+00, WMATA must install a cover on the electrical junction box. At CM D2-107+00, WMATA must repair the tunnel leak. 																



Inspection Form

FOIA Exemption: All (b)(6)

Form FTA-IR-1

United States Department of Transportation
Federal Transit Administration

Agency/Department Information

Inspection Date	YYYY	MM	DD	Report Number	20170208-WMATA-AD-1		
	2017	02	08				
Rail Agency Name	Washington Metropolitan Area Transit Authority			Rail Agency Department	TRST	Sub- Department	Maintenance/Safe
Rail Agency Department Contact Information	Name		Email		Office Phone		Mobile Phone
	[REDACTED]		[REDACTED]				
	[REDACTED]		[REDACTED]				
	[REDACTED]		[REDACTED]				
Inspection Location	Green Line – Mt. Vernon Sq. to Shaw-Howard						

Inspection Summary

Inspection Activity #	1	2	3	4	5	6
Activity Code	TRK-RWP-OBS	TRK-GEN-INS				
Inspection Units	1	1				
Inspection Subunits	3	4				
Defects (Number)	0	3				
Recommended Finding	No	Yes				
Remedial Action Required ¹	No	Yes				
Recommended Reinspection	No	Yes				

Activity Summaries

Inspection Activity #	1	Inspection Subject					Roadway Worker Protection – Job Safety Briefing			Activity Code		TRK	RWP	OBS
Job Briefing Employee Name/Title	TRST UNIT 626 SAFE UNIT 206					Accompanied Inspector?	Yes	Out Brief Conducted	Yes	Time	1000-1300	Outside Shift	No	
Related Reports						Related CAPS / Findings								
Related Rules, SOPs, Standards, or Other	Ref		Rule or SOP			Standard			Other / Title		Checklist Reference			
	RWPM													
Inspection Location	Main Track	Yard	Station	OCC	RTA Facility	FTA Office	Track Type	At-grade	Tunnel	Elevated	N/A			
	X		X						X					
Line(s)	Green Line		Track Number	1 & 2		Chain Marker and/or Station(s)		From		To				
								Mt. Vernon Sq. Station		Shaw-Howard Station				
Vehicles	Head Car Number		Number of Cars			Equipment		N/A						
	N/A		N/A											
Description	The job safety briefing was provided by TRST Unit 626 at Mt. Vernon Sq. Station Platform. The briefing was thorough and fully compliant with WMATA requirements. It included WMATA level 1 ID check, personal protective equipment							Number of Defects		0				
								Recommended Finding?		No				
								Remedial Action Required?		No				

¹ The rail transit agency must provide FTA with the necessary evidence (e.g. maintenance work order system records, photos, documentation, records, data, or other evidence) to close out the Remedial Action. Closeout of Remedial Actions may also be subject to ongoing FTA verification inspections to ensure corrections are sufficient and effective.

Inspector in Charge - Signature	AMBUR I DALEY <small>Digitally signed by AMBURI DALEY DN: c=US, o=U.S. Government, ou=DOT Headquarters, ou=FACSAHQ, cn=AMBURI DALEY Date: 2017.02.10 16:33:43 -0500</small>	Date
Inspector in Charge – Name	Ambur Daley	Inspection Team Alexander Nepa

Form FTA-IR-1

Version date: 8/26/16



United States Department of Transportation
Federal Transit Administration

Form FTA-IR-1

	(PPE) inspection, type of protection – train approach warning (TAW), potential hazards and hot spots, and hospital location. No exceptions were taken with the job safety briefing.	Recommended Reinspection?	No
Remedial Action	N/A		

Inspection Activity #	2	Inspection Subject	Track Inspection for restricted, close, no and limited clearance areas within the ROW.				Activity Code	TRK	GEN	INS						
Job Briefing Employee Name/Title	TRST UNIT 626 & SAFE UNIT 206		Accompanied Inspector?	Yes	Out Brief Conducted	Yes	Time	1000-1300	Outside Shift	No						
Related Reports	Related CAPS / Findings															
Related Rules, SOPs, Standards, or Other	Ref	Rule or SOP		Standard		Other / Title		Checklist Reference								
	2014 RWP manual revisions.															
Inspection Location	Main Track	Yard	Station	OCC	RTA Facility	FTA Office	Track Type	At-grade	Tunnel	Elevated	N/A					
	X							X	X							
Line(s)	Green Line	Track Number	1 & 2	Chain Marker and/or Station(s)	From			To								
					Mt. Vernon Sq. CM E2 & E1-033+00			Shaw-Howard University CM E1 & E2-052+00								
Vehicles	Head Car Number		Number of Cars		Equipment	N/A										
	N/A		N/A													
Description	<p>An FWSO inspector conducted on observation on the Green (E) Line, tracks 1 and 2, between Mt. Vernon Sq. and Shaw-Howard station, including the pocket track. The purpose of this special inspection was to review, identify, and confirm areas within the right-of-way (ROW) with limited or restricted views, close and/or no clearance, and areas that require additional Watchman/Lookout protection. This information was being collected for publication in WMATA's revised edition of the Roadway Worker Protection (RWP) manual.</p> <p>During the inspection the following TRST 1000 defects were identified:</p> <ul style="list-style-type: none"> At CM E2 035+00 in the pocket track, the end 3rd rail cover board is missing. At CM E3 036+00 in the pocket track, the end 3rd rail cover board is missing. At CM E1 052+00 at the switch, the end 3rd rail cover board is missing. <p>Note: The lighting in the inspected area was exceptional and should serve as a model for the rest of the system.</p>						Number of Defects		3							
							Recommended Finding?		Yes							
							Remedial Action Required?		Yes							
							Recommended Reinspection?		Yes							
Remedial Action	<ul style="list-style-type: none"> At CM E2 035+00, WMATA must replace the missing end 3rd rail cover board. At CM E3 036+00, WMATA must replace the missing end 3rd rail cover board. At CM E1 052+00, WMATA must replace the missing end 3rd rail cover board. 															



Inspection Form

FOIA Exemption: All (b)(6)
Form FTA-IR-1

United States Department of Transportation
Federal Transit Administration

Agency/Department Information

Inspection Date	YYYY	MM	DD	Report Number	20170209-WMATA-WP-1		
	2017	02	09				
Rail Agency Name	Washington Metropolitan Area Transit Authority			Rail Agency Department	TRST	Sub- Department	Maintenance
Rail Agency Department Contact Information	Name		Email		Office Phone		Mobile Phone
	[REDACTED]		[REDACTED]		[REDACTED]		[REDACTED]
	[REDACTED]		[REDACTED]		[REDACTED]		[REDACTED]
	[REDACTED]		[REDACTED]		[REDACTED]		[REDACTED]
Inspection Location	A Line, track 2, between Medical Center (A-10) and Grosvenor-Strathmore (A-11)						

Inspection Summary

Inspection Activity #	1	2	3	4	5	6
Activity Code	TRK-RWP-OBS	TRK-GEN-INS				
Inspection Units	1	1				
Inspection Subunits	27	3				
Defects (Number)	0	2				
Recommended Finding	No	Yes				
Remedial Action Required ¹	No	Yes				
Recommended Reinspection	No	Yes				

Activity Summaries

Inspection Activity #	1	Inspection Subject					Roadway Worker Protection – Job Safety Briefing Work zone set-up			Activity Code		TRK	RWP	OBS
Job Briefing Employee Name/Title	TRST UNIT 654 SAFE UNIT 207					Accompanied Inspector?	Yes	Out Brief Conducted	Yes	Time	1000-1330	Outside Shift	No	
Related Reports						Related CAPS / Findings								
Related Rules, SOPs, Standards, or Other	Ref		Rule or SOP		Standard		Other / Title		Checklist Reference					
	RWPM													
Inspection Location	Main Track	Yard	Station	OCC	RTA Facility	FTA Office	Track Type	At-grade	Tunnel	Elevated	N/A			
	X		X						X					
Line(s)	A Line	Track Number	2	Chain Marker and/or Station(s)		From			To					
						Medical Center A-10			Grosvenor-Strathmore A-11					
Vehicles	Head Car Number		Number of Cars		Equipment	N/A								
	N/A		N/A											
Description	The job safety briefing was provided by TRST Unit 654 at the platform of Medical Center Station. The briefing was thorough and fully compliant with WMATA requirements. It included WMATA level 1 ID check, personal protective equipment								Number of Defects		0			
									Recommended Finding?		No			
									Remedial Action Required?		No			

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Inspector in Charge - Signature WINSLOW L. POWELL <small>Digitally signed by WINSLOW L. POWELL DN: c=US, o=U.S. Government, ou=DOT Headquarters, ou=FTAHQ, cn=WINSLOW L. POWELL Date: 2017.02.15 07:34:09 -05'00'</small>		Date
Inspector in Charge – Name Winslow Powell	Inspection Team Alexander Nepa, Kevin McDonald	



United States Department of Transportation
Federal Transit Administration

Form FTA-IR-1

	(PPE) inspection, type of protection – inaccessible track (IT), potential hazards and hot spots, and nearest hospital location. The FWSO inspector observed the application of shunts, warning lights, and work zone mats. The inspector took exception to the illumination from red lanterns placed at CM 444+00, and the roadway worker in charge (RWIC) immediately changed the lanterns with a set that was fully illuminated. All roadway workers observed had the required PPE.	Recommended Reinspection?	No
Remedial Action	N/A		

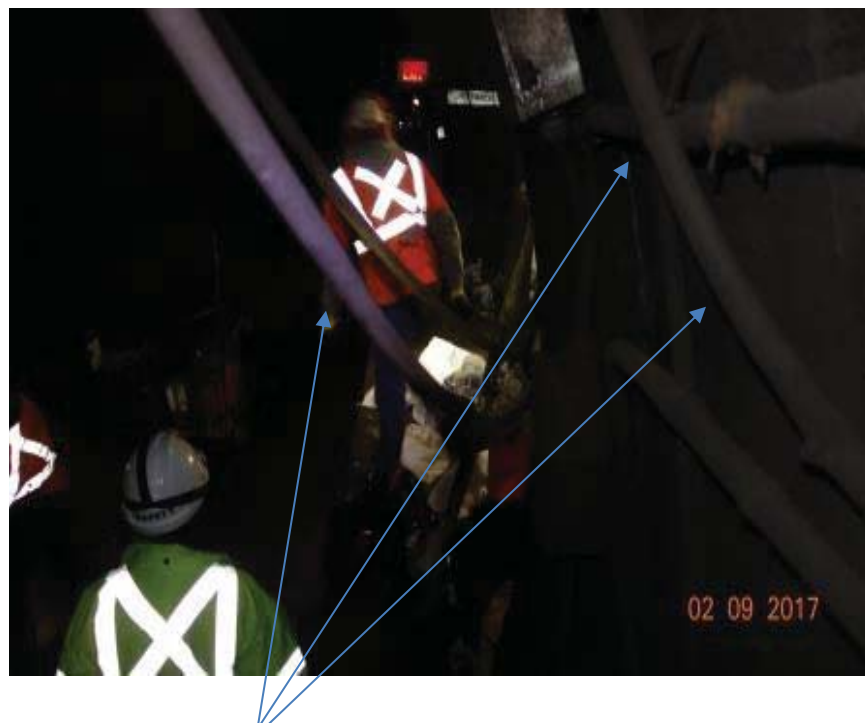
Inspection Activity #	2	Inspection Subject	Track General Inspection				Activity Code	TRK	GEN	INS					
Job Briefing Employee Name/Title	SAFE Unit 207 TRST 6072 Watchman/Lookout TRST 654 RWIC		Accompanied Inspector?	Yes	Out Brief Conducted	Yes	Time	1000-1330	Outside Shift	No					
Related Reports			Related CAPS / Findings												
Related Rules, SOPs, Standards, or Other	Ref	Rule or SOP		Standard		Other / Title		Checklist Reference							
	MSRPH	4.62 & 4.64													
Inspection Location	Main Track	Yard	Station	OCC	RTA Facility	FTA Office	Track Type	At-grade	Tunnel	Elevated	N/A				
	X								X						
Line(s)	A Line	Track Number	2	Chain Marker and/or Station(s)		From		To							
						Medical Center A-10		Grosvenor-Strathmore A-11							
Vehicles	Head Car Number		Number of Cars		Equipment	N/A									
	N/A		N/A												
Description	An inspection of the A Line, track 2, was made between CM 569+00 and CM 449+00. The following defects were observed: <ul style="list-style-type: none"> Between CM 466+00 and 467+00, loose unsecure wires were present. This violates MSRPH 4F – 4.62, which states that designated walkways shall be kept clean and free of obstructions. Between CM 466+00 and 467+00, exposed wires and cables were observed. This violates MSRPH 4G – 4.64, which requires that extension cords and electrical cables passing through work areas, walkways, or passageways shall be covered or elevated to protect them from physical damage, which would create a hazard to employees or the public. 						Number of Defects		2						
							Recommended Finding?		Yes						
							Remedial Action Required?		Yes						
							Recommended Reinspection?		Yes						
Remedial Action	<ul style="list-style-type: none"> Between CM 466+00 and 467+00, WMATA must repair loose unsecure wires. Between CM 466+00 and 467+00, WMATA must repair the exposed wires and cables. 														

Photos:





Live exposed wires with wire caps serving as protection, note condition of wires suggesting an on-going condition.



Dangling electrical cables hindering walkway, individuals using the walkway must physically move the cables to get through.



Inspection Form

FOIA Exemption: All (b)(6)

Form FTA-IR-1

United States Department of Transportation
Federal Transit Administration

Agency/Department Information

Inspection Date	YYYY	MM	DD	Report Number	20170210-WMATA-WP-1		
	2017	02	10				
Rail Agency Name	Washington Metropolitan Area Transit Authority			Rail Agency Department	TRST	Sub- Department	Maintenance/Safe
Rail Agency Department Contact Information	Name		Email		Office Phone		Mobile Phone
	[REDACTED]		[REDACTED]		[REDACTED]		[REDACTED]
	[REDACTED]		[REDACTED]		[REDACTED]		[REDACTED]
	[REDACTED]		[REDACTED]		[REDACTED]		[REDACTED]
Inspection Location	E Line, track 2, between Prince George's Plaza and Fort Totten						

Inspection Summary

Inspection Activity #	1	2	3	4	5	6
Activity Code	TRK-RWP-OBS	TRK-GEN-INS				
Inspection Units	1	1				
Inspection Subunits	4	3				
Defects (Number)	0	2				
Recommended Finding	No	Yes				
Remedial Action Required ¹	No	Yes				
Recommended Reinspection	No	Yes				

Activity Summaries

Inspection Activity #	1	Inspection Subject	Roadway Worker Protection – Job Safety Briefing				Activity Code	TRK	RWP	OBS	
Job Briefing Employee Name/Title	TRST UNIT 685, 626, & SAFE UNIT 206		Accompanied Inspector?	Yes	Out Brief Conducted	Yes	Time	1000-1400	Outside Shift	No	
Related Reports			Related CAPS / Findings								
Related Rules, SOPs, Standards, or Other	Ref	Rule or SOP		Standard		Other / Title		Checklist Reference			
	RWPM										
Inspection Location	Main Track	Yard	Station	OCC	RTA Facility	FTA Office	Track Type	At-grade	Tunnel	Elevated	N/A
	X		X					X	X	X	
Line(s)	E Line	Track Number	2	Chain Marker and/or Station(s)		From		To			
						Prince George's Plaza Station		Fort Totten Station			
Vehicles	Head Car Number		Number of Cars		Equipment	N/A					
	N/A		N/A								
Description	The job safety briefing was provided by TRST Unit 685 at Prince George's Plaza station platform. The briefing was thorough and fully compliant with WMATA requirements. It included WMATA level 1 ID check, personal protective equipment							Number of Defects		0	
								Recommended Finding?		No	
								Remedial Action Required?		No	

¹ The rail transit agency must provide FTA with the necessary evidence (e.g. maintenance work order system records, photos, documentation, records, data, or other evidence) to close out the Remedial Action. Closeout of Remedial Actions may also be subject to ongoing FTA verification inspections to ensure corrections are sufficient and effective.

Inspector in Charge - Signature		Date
WINSLOW L. POWELL <small>Digitally signed by WINSLOW L. POWELL DN: cn=US, o=U.S. Government, ou=DOT Headquarters, ou=FTAHQ, cn=WINSLOW L. POWELL Date: 2017.02.15 09:29:41 -05'00'</small>		
Inspector in Charge – Name	Inspection Team	
Winslow Powell	Alexander Nepa	



United States Department of Transportation
Federal Transit Administration

Form FTA-IR-1

	(PPE) inspection, type of protection – train approach warning (TAW), potential hazards and hot spots, and nearest hospital location. No exceptions were taken with the job safety briefing.	Recommended Reinspection?	No
Remedial Action	N/A		

Inspection Activity #	2	Inspection Subject	Track Inspection for restricted, close, no and limited clearance areas within the roadway				Activity Code	TRK	GEN	INS						
Job Briefing Employee Name/Title	TRST UNIT 685, 626 & SAFE UNIT 206		Accompanied Inspector?	Yes	Out Brief Conducted	Yes	Time	1000-1400	Outside Shift	No						
Related Reports	Related CAPS / Findings															
Related Rules, SOPs, Standards, or Other	Ref	Rule or SOP		Standard		Other / Title		Checklist Reference								
	2014 RWP manual revisions	Permanent Order T-16-07														
Inspection Location	Main Track	Yard	Station	OCC	RTA Facility	FTA Office	Track Type	At-grade	Tunnel	Elevated	N/A					
	X							X	X	X						
Line(s)	E Line	Track Number	2	Chain Marker and/or Station(s)	From			To								
					Prince George Plaza Station E-08 CM E2-428+00			Fort Totten Station E-06 CM E2-384+00								
Vehicles	Head Car Number		Number of Cars		Equipment	N/A										
	N/A		N/A													
Description	<p>An inspection of the E Line, track 2, between Prince George's Plaza and Fort Totten was conducted, including the pocket track. The purpose of this special inspection was to review, identify, and confirm areas of the roadway with limited or restricted views and close or no clearance, to include curves and switches, for publication in WMATA's revised edition of the Roadway Worker Protection (RWP) manual. This inspection also reviewed existing areas within the RWP manual that may require additional protection. Due to the portals and curves in this area, clearance identification stations were taken every 500 feet. The FWSO inspector took no exception to the WMATA work group's findings.</p> <p>During the inspection the following defects were identified:</p> <ul style="list-style-type: none"> At CM 344+65, the ETS telephone box cover was broken and detached from the device. At approximately 1111 hours between CM 383+00 and 384+00, while approaching Prince George's Plaza station in the tunnel, train head-end number 6138 failed to comply with Permanent Order T-16-07. The train operator did not slow to the required 10 MPH, dim lights, or sound horn. (Head-end number may not be accurate due to the speed of this train.) <p>The posted speed in this area is 65 MPH. The work group had a representative from SAFE acting as an advance watchman/lookout, a representative from TRST acting as an intermediate watchman/lookout, and the roadway worker in charge (RWIC) serving as the third group watchman/lookout. The advance watchman/lookout was placed at the required 2640 feet with ample sight distance required for a 15 second clearance at 60 MPH upon approach to his position.</p> <p>WMATA should continue efforts to address remedial action number 916, which states, "WMATA should continue to re-enforce the requirements of Permanent Order T-16-07 to all operators." This remedial action was issued in FTA inspection report 20160812-WMATA-RPM-1.</p>						Number of Defects		2							
							Recommended Finding?		Yes							
							Remedial Action Required?		Yes							
							Recommended Reinspection?		Yes							
Remedial Action	The ETS telephone box cover should be replaced at D1 344+65.															



Inspection Form

FOIA Exemption: All (b)(6)

Form FTA-IR-1

United States Department of Transportation
Federal Transit Administration

Agency/Department Information

Inspection Date	YYYY	MM	DD	Report Number	20170210-WMATA-WP-2		
	2017	02	10				
Rail Agency Name	Washington Metropolitan Area Transit Authority			Rail Agency Department	POWR	Sub- Department	CBL. IN.
Rail Agency Department Contact Information	Name		Email		Office Phone		Mobile Phone
	[REDACTED]		[REDACTED]		[REDACTED]		[REDACTED]
	[REDACTED]		[REDACTED]		[REDACTED]		[REDACTED]
	[REDACTED]		[REDACTED]		[REDACTED]		[REDACTED]
Inspection Location	C05 – Rosslyn to K04 – Ballston (Track 1)						

Inspection Summary

Inspection Activity #	1	2	3	4	5	6
Activity Code	TP-WI-OBS					
Inspection Units	1					
Inspection Subunits	16					
Defects (Number)	7					
Recommended Finding	Yes					
Remedial Action Required ¹	Yes					
Recommended Reinspection	Yes					

Activity Summaries

Inspection Activity #	1	Inspection Subject					Walking Observation (Cable Inspection)			Activity Code		TP	WI	OBS
Job Briefing Employee Name/Title	WMATA RWIC WMATA Watchman/Lookout WMATA Documenter					Accompanied Inspector?	Yes	Out Brief Conducted	Yes	Time	1000-1400	Outside Shift	No	
Related Reports						Related CAPS / Findings								
Related Rules, SOPs, Standards, or Other	Ref		Rule or SOP			Standard			Other / Title		Checklist Reference			
	RWPM													
Inspection Location	Main Track	Yard	Station	OCC	RTA Facility	FTA Office	Track Type	At-grade	Tunnel	Elevated	N/A			
	X								X					
Line(s)	C-Line	Track Number	TRK 1	Chain Marker and/or Station(s)	From				To					
	K-Line				C05 – Rosslyn- Track 1				K04 – Ballston – Track 1					
Vehicles	Head Car Number		Number of Cars		Equipment	N/A								
	N/A		N/A											
Description	The job safety briefing was comprehensive. The hot spots, hazards, clearance areas, communication, and Roadway Access Guide were used as part of the discussion. No exceptions were taken to the job safety briefing.								Number of Defects		7			
									Recommended Finding?		Yes			
									Remedial Action Required?		Yes			

¹ The rail transit agency must provide FTA with the necessary evidence (e.g. maintenance work order system records, photos, documentation, records, data, or other evidence) to close out the Remedial Action. Closeout of Remedial Actions may also be subject to ongoing FTA verification inspections to ensure corrections are sufficient and effective.

Inspector in Charge - Signature WINSLOW L. POWELL <small>Digitally signed by WINSLOW L. POWELL DN: c=US, o=U.S. Government, ou=DOT Headquarters, ou=FTAHQ, cn=WINSLOW L. POWELL Date: 2017.03.03 13:25:11 -05'00'</small>		Date
Inspector in Charge – Name Winslow Powell	Inspection Team Tino Sahoo	



	<p>Daily cable inspections are part of the holistic approach WMATA has instituted to prevent cable fires and arcing incidents. On a typical day there are three different WMATA cable inspection crews that are active, and they include three personnel—the Roadway Worker in Charge (RWIC), the Watchman/Lookout, and a documenter of issues in wayside power cable and/or connections. Each crew inspects a different portion of the mainline from 1000–1400 hours. The pictures taken and issues noted are entered into a database for night time cable repair crews to fix.</p> <p>As outlined below, the following issues with the power cables were noted by the FWSO inspector and WMATA personnel during the course of the normal daily cable inspection process. FWSO will follow up to confirm the conclusion of the work once cable issues have been corrected.</p> <ul style="list-style-type: none">• TRK 1 CM 145+00 – 3rd rail coverboard missing• TRK 1 CM 146+00 – Cables lying on the deck (concrete slab); debris surrounding feeder cables• TRK 1 CM 146+00 to TRK 1 CM 148+00 – 3rd rail coverboard missing• TRK 1 CM 148+00 – Transition or Jumper Cables lying on the deck (concrete slab)• TRK 1 CM 155+00 – Cables lying on the deck (concrete slab)• TRK 1 CM 166+00 – Trash and debris surrounding expansion cables• TRK 1 CM 194+00 – Water intrusion in tunnel very near to cables; cables lying on the deck (concrete slab)• TRK 1 CM 220+00 – Cables lying on the deck (concrete slab)• TRK 1 CM 222+00 – Debris surrounding cables; 3rd end approach needs replacement• TRK 1 CM 223+00 – Cables lying on the deck (concrete slab)• TRK 1 CM 235+00 – Cables lying on the deck (concrete slab); 3rd rail coverboard missing; three cables have temporary repairs• TRK 1 CM 236+00 – Cables lying on the deck; missing 3rd rail coverboard; one cable with temporary repair• TRK 1 CM 246+00 – Cables lying on the deck (concrete slab); 3rd rail end approach badly rusted and needs replacement; dirt and debris surrounding cables• TRK 1 CM 261+00 – Expansion cables lying on the deck; expansion cables that are on the gauge side of 3rd rail to field side need to be moved; cable with electrical tape/heat shrink repair needs to be replaced; missing Kindorf straps on fiberglass standoffs• TRK 1 CM 275+00 – Trash and debris surrounding cables• TRK 1 CM 276+00 – Fiberglass standoff is connected to Kindorf an angle and is hitting 3rd rail tie anchor <p>General Observations:</p> <p>Tunnel lighting was very dim and could benefit from re-lamping of light fixtures and cleaning of lamp reflectors.</p>	Recommended Reinspection?	Yes
Remedial Action	<ul style="list-style-type: none">• TRK 1 CM 194+00 – Mitigate water intrusion in tunnel• TRK 1 CM 222+00 – Replace 3rd rail end approach• TRK 1 CM 235+00 – Replace cables that have temporary repairs• TRK 1 CM 236+00 – Replace cable with temporary repair• TRK 1 CM 246+00 – Replace 3rd rail end approach• TRK 1 CM 261+00 – Replace cable with temporary repair• TRK 1 CM 261+00 – Install missing Kindorf straps		



FIGURE 2 - TRK 1 CM 222+00 – 3RD RAIL END APPROACH CORRODED



FIGURE 1 - TRK 1 CM 194+00 – WATER INTRUSION







United States Department of Transportation
Federal Transit Administration

Form FTA-IR-1



Inspection Form

FOIA Exemption: All (b)(6)

Form FTA-IR-1

United States Department of Transportation
Federal Transit Administration

Agency/Department Information

Inspection Date	YYYY	MM	DD	Report Number	20170212-WMATA-WP-1		
	2017	02	12				
Rail Agency Name	Washington Metropolitan Area Transit Authority			Rail Agency Department	TRST	Sub- Department	Maintenance/Safe
Rail Agency Department Contact Information	Name		Email		Office Phone		Mobile Phone
	[REDACTED]		[REDACTED]		[REDACTED]		[REDACTED]
	[REDACTED]		[REDACTED]		[REDACTED]		[REDACTED]
	[REDACTED]		[REDACTED]		[REDACTED]		[REDACTED]
Inspection Location	K Line, track 2, West Falls Church to Ballston-MU						

Inspection Summary

Inspection Activity #	1	2	3	4	5	6
Activity Code	TRK-RWP-OBS	TRK-GEN-INS				
Inspection Units	1	1				
Inspection Subunits	4	4				
Defects (Number)	0	4				
Recommended Finding	No	Yes				
Remedial Action Required ¹	No	Yes				
Recommended Reinspection	No	Yes				

Activity Summaries

Inspection Activity #	1	Inspection Subject					Roadway Worker Protection – Job Safety Briefing			Activity Code		TRK	RWP	OBS
Job Briefing Employee Name/Title	TRST UNIT 685, 626, & SAFE UNIT 206					Accompanied Inspector?	Yes	Out Brief Conducted	Yes	Time	0700-1500	Outside Shift	No	
Related Reports						Related CAPS / Findings								
Related Rules, SOPs, Standards, or Other	Ref		Rule or SOP			Standard			Other / Title		Checklist Reference			
	RWPM													
Inspection Location	Main Track	Yard	Station	OCC	RTA Facility	FTA Office	Track Type	At-grade	Tunnel	Elevated	N/A			
	X		X					X	X					
Line(s)	K Line	Track Number	2		Chain Marker and/or Station(s)		From		To					
							West Falls Church Station CM-518+00		Ballston-MU Station CM 280+00					
Vehicles	Head Car Number		Number of Cars			Equipment	N/A							
	N/A		N/A											
Description	Job Safety Briefing Observations: <ul style="list-style-type: none">The briefing was provided by TRST Unit 626 at West Falls Church Station								Number of Defects		0			
									Recommended Finding?		No			

¹ The rail transit agency must provide FTA with the necessary evidence (e.g. maintenance work order system records, photos, documentation, records, data, or other evidence) to close out the Remedial Action. Closeout of Remedial Actions may also be subject to ongoing FTA verification inspections to ensure corrections are sufficient and effective.

Inspector in Charge - Signature		Date
WINSLOW L. POWELL <small>Digitally signed by WINSLOW L. POWELL DN: c=US, o=U.S. Government, ou=DOT Headquarters, ou=FTAHQ, cn=WINSLOW L. POWELL Date: 2017.02.15 07:37:59 -05'00'</small>		
Inspector in Charge – Name	Inspection Team	
Winslow Powell	Alexander Nepa	



United States Department of Transportation
Federal Transit Administration

Form FTA-IR-1

	Platform. The briefing was thorough, complete, and fully compliant with WMATA requirements. It included WMATA level 1 ID check, personal protective equipment (PPE) inspection, type of protection – train approach warning (TAW), potential hazards and hot spots, and hospital location. No exceptions were taken with the job safety briefing.	Remedial Action Required?	No
		Recommended Reinspection?	No
Remedial Action	N/A		

Inspection Activity #	2	Inspection Subject	Track Inspection for restricted, close, no and limited clearance areas within the roadway				Activity Code	TRK	GEN	INS						
Job Briefing Employee Name/Title	TRST UNIT 685, 626 & SAFE UNIT 206		Accompanied Inspector?	Yes	Out Brief Conducted	Yes	Time	0700-1500	Outside Shift	No						
Related Reports			Related CAPS / Findings													
Related Rules, SOPs, Standards, or Other	Ref	Rule or SOP		Standard		Other / Title		Checklist Reference								
	2014 RWP manual revisions	Permanent Order T-16-07														
Inspection Location	Main Track	Yard	Station	OCC	RTA Facility	FTA Office	Track Type	At-grade	Tunnel	Elevated	N/A					
	X							X	X	X						
Line(s)	K Line	Track Number	2	Chain Marker and/or Station(s)	From			To								
					West Falls Church Station CM K2-518+00			Ballston MU Station CM K2-280+00								
Vehicles	Head Car Number		Number of Cars		Equipment	N/A										
	N/A		N/A													
Description	<p>An extensive inspection of the K Line, track 2, between West Falls Church station and Ballston-MU station was conducted. The purpose of this special inspection was to review, identify, and confirm areas of the roadway with limited or restricted views and close or no clearance, to include curves and switches, for publication in WMATA's revised edition of the Roadway Worker Protection (RWP) manual. This inspection also reviewed existing areas within the RWP manual that may require additional protection. Due to the portals and curves in this area, clearance identification stations were taken every 500 feet. The FWSO inspector took no exception to the WMATA work group's recommendations.</p> <p>During the inspection the following defects were identified:</p> <ul style="list-style-type: none"> At approximately 0802 hours at the K-98 switch, approaching West Falls Church Station, train head-end number 3168, failed to comply with Permanent Order T-16-07. The train operator did not slow to the required 10 MPH. At approximately 0955 hours at CM K2-350+00, train head-end number 5118 failed to comply with Permanent Order T-16-07. The train operator did not slow to the required 10 MPH, dim lights, or sound horn, passing the work group at track speed. At approximately 1024 hours at CM K2-321+00, train tail end number 5178 failed to comply with Permanent Order T-16-07. The train operator did not slow until after it passed the work group. At K-05 switch, CM 402+00, the third rail power cables making contact with the ground. <p>WMATA should continue efforts to address remedial action number 916, which states, "WMATA should continue to re-enforce the requirements of Permanent Order T-16-07 to all operators." This remedial action was issued in FTA inspection report 20160812-WMATA-RPM-1.</p>						Number of Defects		4							
							Recommended Finding?		Yes							
							Remedial Action Required?		Yes							
							Recommended Reinspection?		Yes							
Remedial Action	At K-05 switch, CM 402+00, the third rail power cables should be insulated from making contact with the ground.															



Inspection Form

FOIA Exemption: All (b)(6)

Form FTA-IR-1

United States Department of Transportation
Federal Transit Administration

Agency/Department Information

Inspection Date	YYYY	MM	DD	Report Number	20170213-WMATA-WP-1		
	2017	02	13				
Rail Agency Name	Washington Metropolitan Area Transit Authority			Rail Agency Department	TRST	Sub- Department	
Rail Agency Department Contact Information	Name		Email		Office Phone		Mobile Phone
	[REDACTED]		[REDACTED]				
	[REDACTED]		[REDACTED]				
	[REDACTED]		[REDACTED]				
Inspection Location	E1 178+00-204+00						

Inspection Summary

Inspection Activity #	1	2	3	4	5	6
Activity Code	TRK-WI-PI					
Inspection Units	1					
Inspection Subunits	1					
Defects (Number)	0					
Recommended Finding	No					
Remedial Action Required ¹	No					
Recommended Reinspection	No					

Activity Summaries

Inspection Activity #	1	Inspection Subject					Vibration Investigation			Activity Code		TRK	WI	PI
Job Briefing Employee Name/Title	TRST 630 TRST 601			Accompanied Inspector?	Yes	Out Brief Conducted	No	Time	1000-1300	Outside Shift	No			
Related Reports	N/A			Related CAPS / Findings		N/A								
Related Rules, SOPs, Standards, or Other	Ref		Rule or SOP		Standard		Other / Title		Checklist Reference					
	RWPM													
	MSRPH													
Inspection Location	Main Track	Yard	Station	OCC	RTA Facility	FTA Office	Track Type	At-grade	Tunnel	Elevated	N/A			
	X								X					
Line(s)	E	Track Number	1	Chain Marker and/or Station(s)		From			To					
						178+00			204+00					
Vehicles	Head Car Number		Number of Cars		Equipment	N/A								
	N/A		N/A											
Description	FWSO revisited the area between Georgia Avenue and Fort Totten where increased vibrations were reported by residents. In previous inspections, FWSO inspectors identified potential causes of these vibrations as rail wear caused by water leaks, as well as the presence of rail joints in the area. During the inspection, FWSO inspectors noted that WMATA had addressed all leaks in the area, including								Number of Defects		0			
									Recommended Finding?		No			
									Remedial Action Required?		No			
									Recommended Reinspection?		No			

¹ The rail transit agency must provide FTA with the necessary evidence (e.g. maintenance work order system records, photos, documentation, records, data, or other evidence) to close out the Remedial Action. Closeout of Remedial Actions may also be subject to ongoing FTA verification inspections to ensure corrections are sufficient and effective.

Inspector in Charge - Signature		Date
WINSLOW L. POWELL <small>Digitally signed by WINSLOW L. POWELL DN: cn=US, ou=U.S. Government, ou=DOT Headquarters, ou=FTAHQ, cn=WINSLOW L. POWELL Date: 2017.02.22 14:52:54 -05'00'</small>		
Inspector in Charge - Name	Inspection Team	
Winslow Powell	Troy Lloyd, Phil Herbert, Mike Vitale	



	installing new leak management hosing to direct water into existing drains. Drains in the area had also been cleared to allow water to flow. Additionally, WMATA has ground the rail in the area and begun the process of welding the joints to create continuously welded rail. FWSO will continue to monitor progress made in the area. As a result of the leak mitigations put in place, FWSO closes remedial actions 1026 and 1038.		
Remedial Action	N/A		

Photos:



Hosing used to direct water flow





Inspection Form

FOIA Exemption: All (b)(6)

Form FTA-IR-1

United States Department of Transportation
Federal Transit Administration

Agency/Department Information

Inspection Date	YYYY	MM	DD	Report Number	20170216-WMATA-WP-1		
	2017	02	16				
Rail Agency Name	Washington Metropolitan Area Transit Authority			Rail Agency Department	TRST	Sub- Department	
Rail Agency Department Contact Information	Name		Email		Office Phone		Mobile Phone
	[REDACTED]		[REDACTED]				
	[REDACTED]		[REDACTED]				
	[REDACTED]		[REDACTED]				
Inspection Location	C line- Surge 12 Work Area						


Inspection Summary

Inspection Activity #	1	2	3	4	5	6
Activity Code	TRK-JSB-OBS	TRK-WI-PI				
Inspection Units	1	1				
Inspection Subunits	1	1				
Defects (Number)	0	0				
Recommended Finding	No	No				
Remedial Action Required ¹	No	No				
Recommended Reinspection	No	No				

Activity Summaries

Inspection Activity #	1	Inspection Subject					Job Safety Briefing			Activity Code		TRK	JSB	OBS
Job Briefing Employee Name/Title	Job Briefer 6198 Safe and TRST representatives ATC 265					Accompanied Inspector?	Yes	Out Brief Conducted	Yes	Time	10:40 to 14:40	Outside Shift	No	
Related Reports						Related CAPS / Findings								
Related Rules, SOPs, Standards, or Other	Ref		Rule or SOP			Standard			Other / Title		Checklist Reference			
	RWPM													
	MSRPH													
Inspection Location	Main Track	Yard	Station	OCC	RTA Facility	FTA Office	Track Type	At-grade	Tunnel	Elevated	N/A			
	X							X						
Line(s)	C	Track Number	1 & 2		Chain Marker and/or Station(s)		From		To					
							255+00		148+40					
Vehicles	Head Car Number		Number of Cars			Equipment	N/A							
	N/A		N/A											
Description	FWSO inspector met representatives from Safety and Track and Structures to conduct an observation of SAFE track surge 12. Job briefer conducted a comprehensive job briefing. Rule of the day was 4.94. RWP was Inaccessible Track. Third rail power outage was a red tag outage as supervised by Mobile Command # 2017042508A. OPS number was given and MC location was Alexandria yard.								Number of Defects		0			
									Recommended Finding?		No			
									Remedial Action Required?		No			
									Recommended Re-inspection?		No			

¹ The rail transit agency must provide FTA with the necessary evidence (e.g. maintenance work order system records, photos, documentation, records, data, or other evidence) to close out the Remedial Action. Closeout of Remedial Actions may also be subject to ongoing FTA verification inspections to ensure corrections are sufficient and effective.

Inspector in Charge – Signature		 <small>Digitally signed by WINSLOW L. POWELL DN: c=US, o=U.S. Government, ou=DOT Headquarters, ou=FAHQ, cn=WINSLOW L. POWELL Date: 2017.02.21 10:14:02 -0500</small>	Date
WINSLOW L. POWELL			
Inspector in Charge – Name	Inspection Team		
Winslow Powell	Kevin McDonald		

Form FTA-IR-1

Version date: 8/26/16



United States Department of Transportation
Federal Transit Administration

Form FTA-IR-1

	Safety representative was granted authority for this team to occupy the track.										
Remedial Action	N/A										
Inspection Activity #	2	Inspection Subject	Safe Track Surge Inspection					Activity Code	TRK	WI	PI
Job Briefing Employee Name/Title	Job Briefer 6198 Safe and TRST representatives ATC 265			Accompanied Inspector?	Yes	Out Brief Conducted	Yes	Time	10:40 to 14:40	Outside Shift	No
Related Reports				Related CAPS / Findings							
Related Rules, SOPs, Standards, or Other	Ref	Rule or SOP			Standard			Other / Title		Checklist Reference	
	RWPM										
	MSRPH										
Inspection Location	Main Track	Yard	Station	OCC	RTA Facility	FTA Office	Track Type	At-grade	Tunnel	Elevated	N/A
	X							X			
Line(s)	C	Track Number	1 & 2	Chain Marker and/or Station(s)	From				To		
					255+00				148+40		
Vehicles	Head Car Number		Number of Cars		Equipment	N/A					
	N/A		N/A								
Description	<p>During the inspection, FWSO inspector observed RMM's moving on track # 1 at less than 5 MPH, as required by Roadway Worker Protection Manual Cardinal Rule 7 (RWMP CR7).</p> <p>In the work area FWSO inspector observed workers using a tie inserter machine to replace wooden crossties in the platform area of track 1. In addition to tie replacement, Surge 12 will also encompass rail grinding, joint elimination, and fastener renewal. FWSO inspector did not observe these activities taking place during this inspection.</p> <p>Safety representative was also granted authority for this team to inspect the C06 interlocking. ATC 265 was gang leader of this piggy back crew and met the team on the platform and approved physical inspection of the interlocking. FWSO inspector observed ATC workers doing signal testing at the C06 interlocking. As part of Surge 12 ATC will be inspecting, repairing, testing and/or replacing ATC's Track Junction boxes, DJ boxes & Interlocking Junction boxes, as well as replacing existing signals with LED.</p> <p>There were no exceptions or defects noted. Surge 12 is scheduled to last through February 28, 2017. FWSO inspectors will continue to monitor progress in the work area, to include post surge inspection to ensure compliance with track safety standards.</p>							Number of Defects		0	
								Recommended Finding?		No	
								Remedial Action Required?		No	
								Recommended Re-inspection?		No	
Remedial Action	N/A										



Photos:



Recently replaced ties in surge area



Tie crew replacing ties in surge area



ATC crew performing work in at C06 interlocking



Inspection Form

FOIA Exemption: All (b)(6)

Form FTA-IR-1

United States Department of Transportation
Federal Transit Administration

Agency/Department Information

Inspection Date	YYYY	MM	DD	Report Number	20170216-WMATA-WP-2		
	2017	02	16				
Rail Agency Name	Washington Metropolitan Area Transit Authority			Rail Agency Department	POWR	Sub- Department	CBL IN.
Rail Agency Department Contact Information	Name		Email		Office Phone		Mobile Phone
	[REDACTED]		[REDACTED]		[REDACTED]		[REDACTED]
Inspection Location	E04 – Columbia Heights to F01 – Gallery Place Chinatown (Track 1)						

Inspection Summary

Inspection Activity #	1	2	3	4	5	6
Activity Code	TP-WI-OBS					
Inspection Units	1					
Inspection Subunits	8					
Defects (Number)	3					
Recommended Finding	Yes					
Remedial Action Required ¹	Yes					
Recommended Reinspection	Yes					

Activity Summaries

Inspection Activity #	1	Inspection Subject					Walking Observation (Cable Inspection)			Activity Code		TP	WI	OBS
Job Briefing Employee Name/Title	WMATA RWIC WMATA Watchman/Lookout WMATA Documenter					Accompanied Inspector?	Yes	Out Brief Conducted	Yes	Time	1000-1400	Outside Shift	No	
Related Reports						Related CAPS / Findings								
Related Rules, SOPs, Standards, or Other	Ref		Rule or SOP			Standard		Other / Title		Checklist Reference				
	RWPM													
Inspection Location	Main Track	Yard	Station	OCC	RTA Facility	FTA Office	Track Type	At-grade	Tunnel	Elevated	N/A			
	X								X					
Line(s)	E-Line	Track Number	TRK 1	Chain Marker and/or Station(s)	From			To						
	F-Line				E04 – Columbia Heights - Track 1			F01 – Gallery Place – Track 1						
Vehicles	Head Car Number		Number of Cars		Equipment	N/A								
	N/A		N/A											
Description	The job safety briefing was comprehensive. The hot spots, hazards, clearance areas, communication, and Roadway Access Guide were used as part of the discussion. No exceptions were taken to the job safety briefing.							Number of Defects		3				
								Recommended Finding?		Yes				
								Remedial Action Required?		Yes				

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Inspector in Charge - Signature		Date
WINSLOW L. POWELL <small>Digitally signed by WINSLOW L. POWELL DN: cn=US, ou=U.S. Government, ou=DOT Headquarters, ou=FTAHQ, ou=WINSLOW L. POWELL Date: 2017.03.03 13:20:52 -0500</small>		
Inspector in Charge – Name Winslow Powell	Inspection Team Tino Sahoo	



	<p>Daily cable inspections are part of the holistic approach WMATA has instituted to prevent cable fires and arcing incidents. On a typical day there are three different WMATA cable inspection crews that are active, and they include three personnel—the Roadway Worker in Charge (RWIC), the Watchman/Lookout, and a documenter of issues in wayside power cable and/or connections. Each crew inspects a different portion of the mainline from 1000–1400 hours. The pictures taken and issues noted are entered into a database for night time cable repair crews to fix.</p> <p>As outlined below, the following issues with the power cables were noted by the FWSO inspector and WMATA personnel during the course of the normal daily cable inspection process. FWSO will follow up to confirm the conclusion of the work once cable issues have been corrected.</p> <ul style="list-style-type: none">• TRK 1 CM 124+00 – Trash and debris surrounding expansion cables• TRK 1 CM 115+00 – Cables lying on the deck (concrete slab)• TRK 1 CM 106+00 – Water intrusion surrounding cables• TRK 1 CM 063+00 – Kindorf channel connected to concrete tunnel wall became loose from bolt/nut assembly• TRK 1 CM 045+00 – Cables lying on the deck (concrete slab); dirt and debris surrounding cables• TRK 1 CM 025+00 – Missing 3rd rail coverboard; trash and debris surrounding cables• TRK 1 CM 023+00 – Trash and debris surrounding cables; heat shrink on cable stub-up (duct line transition) needs to be replaced• TRK 1 CM 014+00 – Cables lying on the deck (concrete slab) and on the tunnel wall; trash surrounding expansion cables	Recommended Reinspection?	Yes
Remedial Action	<ul style="list-style-type: none">• TRK 1 CM 106+00 – Mitigate water intrusion, megger cables to ensure cables have not been compromised and if so, then replace those cables• TRK 1 CM 063+00 – Reattach Kindorf channel to the tunnel wall per Engineering Modification Instruction (EMI)• TRK 1 CM 023+00 – Replace heat shrink on conduit stub-up		



FIGURE 1 - TRK 1 CM 106+00 – WATER INTRUSION SURROUNDING CABLES



FIGURE 2 - TRK 1 CM 063+00 – KINDORF CHANNEL NEEDS REATTACHMENT TO TUNNEL WALL



FIGURE 3 - TRK 1 CM 023+00 – HEAT SHRINK NEEDS REPLACEMENT ON STUB-UP AND TRASH SURROUNDING CABLE



Inspection Form

FOIA Exemption: All (b)(6)
Form FTA-IR-1

United States Department of Transportation
Federal Transit Administration

Agency/Department Information

Inspection Date	YYYY	MM	DD	Report Number	20170217-WMATA-WP-1		
	2017	02	17				
Rail Agency Name	Washington Metropolitan Area Transit Authority			Rail Agency Department	POWR	Sub- Department	CM
Rail Agency Department Contact Information	Name		Email		Office Phone		Mobile Phone
	[REDACTED]		[REDACTED]		[REDACTED]		[REDACTED]
	[REDACTED]		[REDACTED]		[REDACTED]		[REDACTED]
	[REDACTED]		[REDACTED]		[REDACTED]		[REDACTED]
Inspection Location	F06 – Anacostia – Wayside						

Inspection Summary

Inspection Activity #	1	2	3	4	5	6
Activity Code	TP-RM-OBS					
Inspection Units	1					
Inspection Subunits	14					
Defects (Number)	0					
Recommended Finding	No					
Remedial Action Required ¹	No					
Recommended Reinspection	No					

Activity Summaries

Inspection Activity #	1	Inspection Subject	F06 – Anacostia – Pigtail Feeder Cable Replacement			Activity Code	TP	RM	OBS	
Job Briefing Employee Name/Title	WMATA RWIC WMATA Power Supervisor		Accompanied Inspector?	Yes	Out Brief Conducted	Yes	Time	0100-0500	Outside Shift	Yes
Related Reports			Related CAPS / Findings							
Related Rules, SOPs, Standards, or Other	Ref	Rule or SOP	Standard		Other / Title		Checklist Reference			
	PREVENTIVE MAINTENANCE INSPECTION (PMI) FOR TRACK FEEDER CABLE - 1000 KCMIL / 1500 KCMIL (REVISION 4, JUNE 16, 2015)									
	ENGINEERING MODIFICATION INSTRUCTIONS (EMI) FOR JUMPER, EXPANSION, AND TRANSITION POWER CABLES REPLACEMENT SYSTEMWIDE (REVISION 2, SEPTEMBER 16, 2016)									

¹ The rail transit agency must provide FTA with the necessary evidence (e.g. maintenance work order system records, photos, documentation, records, data, or other evidence) to close out the Remedial Action. Closeout of Remedial Actions may also be subject to ongoing FTA verification inspections to ensure corrections are sufficient and effective.

Inspector in Charge - Signature WINSLOW L. POWELL <small>Digitally signed by WINSLOW L. POWELL DN: cn=W.L. Powell, o=U.S. Government, ou=DOT Headquarters, ou=FTAHQ, cn=WINSLOW L. POWELL Date: 2017.03.03 13:46:38 -0500</small>		Date
Inspector in Charge – Name Winslow Powell	Inspection Team Tino Sahoo	



United States Department of Transportation
Federal Transit Administration

Form FTA-IR-1

Inspection Location	Main Track	Yard	Station	OCC	RTA Facility	FTA Office	Track Type	At-grade	Tunnel	Elevated	N/A
	X		X						X		
Line(s)	F-Line	Track Number	1	Chain Marker and/or Station(s)	From		To				
					F06 – Anacostia		F06 – Anacostia				
Vehicles	Head Car Number	Number of Cars	Equipment	Feeder Cable Repair/Replacement							
	N/A	N/A									
Description	<p>The job safety briefing was comprehensive. The hot spots, hazards, clearance areas, communication, and Roadway Access Guide were used as part of the discussion. No exceptions were taken to the job safety briefing.</p> <p>WMATA was replacing the “pigtailed” or “whips” on the traction power feeder cables energizing the 3rd rail. A “pigtail” or “whip” is the horizontal length of cable (flexible stranded as it needs more give/take compared to stranded) that is either cad welded or huck bolted to the 3rd rail, depending on the 3rd rail material construct (steel or composite). The “pigtail” is connected to the traction power feeder cable coming through the power duct bank via an orange boot. In the orange boot, there is a mechanical connection (nuts and bolts) between the two copper lugs of each respective cable.</p> <p>WMATA employs electrical contractors from C3M to complete this switch out of cables. From speaking with the WMATA power maintenance supervisor present, WMATA has trained C3M on the exact installation procedure. C3M had a crew of eight, and WMATA had a crew of three supervising their work. WMATA has four repair cable repairs crews; two crews use contractors to handle cables on the ground (COG), and two crews concentrate on a state of good repair for the cables.</p> <p>In WMATA’s shop before the night of work, 6 feet length portions of 1000kcmil cable are cut and pre-meggered (700 giga-ohm or higher). One end of the cable has a copper lug crimped on. These measures are taken to expedite the installation in the field as the maintenance window during a night shift is short (0100 – 0500 hours). The cables out in the field are cut to their needed length and installed to the 3rd rail, ensuring enough slack in the “pigtail”. In addition, anytime there is a new cable replacement on the feeder cables, 2kV (voltage rating) cables are being used to upgrade the system for the future employment of 100 percent 7000 series 8-car trains.</p> <p>The electrical contractor, C3M, installed 14 pigtails. No issues or concerns were noted and C3M’s crew was very efficient.</p> <p>Section 8.2 in PREVENTIVE MAINTENANCE INSPECTION (PMI) FOR TRACK FEEDER CABLE - 1000 KCMIL / 1500 KCMIL (REVISION 4, JUNE 16, 2015) covers the procedure:</p> <ol style="list-style-type: none"> 1. Remove the 10 peripheral captive screws from the Two-piece Insulating Cover (Orange Boot). 2. Carefully remove the Two-piece Insulating Cover and inspect for damage. If the existing boot is broken, cracked or gasket material is damaged it shall be replaced with new one. 3. Remove the four 1/2” x 2” bolts, washers, lock washer and nuts from the lugs. (This bolt size is applicable for 1000 kcmil cable lugs. Verify/determine the bolt size for 1500 kcmil cable lugs.) 4. Inspect the cable lugs for evidence of overheating and corrosion, if a lug has corrosion it shall be cleaned as per 7.1.6 in this PMI. 5. Apply 1000 V rated electrical tape over the compression lug and cable inside the boot (for each cable) for additional protection of the copper of the cable. The electrical tape shall not interfere with the work of the sealing collar and shall not hamper the installation of the Two-piece Insulating Cover (Orange Boot). 6. If cable and does not have sealing collar, install sealing collar over cable. 7. Install heat shrink tube over the conduit and the cable. 							Number of Defects	0		
								Recommended Finding?	No		
								Remedial Action Required?	No		
								Recommended Reinspection?	No		



	<ol style="list-style-type: none">8. Bolt together the two lugs using four 1/2" x 2" bolts, each bolt shall have one flat washer on the Head side of the bolt, one flat washer, and one split lock washer to the nut side of the bolt. All four bolts, washers and nuts shall be silicon-bronze material. (This bolt size is applicable for 1000 kcmil cable lugs. Verify/determine the bolt size for 1500 kcmil cable lugs.)9. All bolts connecting the cable lugs, shall be torqued according to the specification found in this PMI. (for Track Feeder Cable 1000 kcmil with 1/2" x 2" lug bolts, the torque shall be 40 Foot – Pounds)10. Install the Two-piece Insulating Cover (Orange Boot) along with the cable sealing collars using the 10 peripheral captive screws. If there are stripped or missing screws, replace with new screws. If the Boot is beyond repair replace with new Boot.11. The cable connector size shall correspond to the size of the cable. If 1500 kcmil cable was used for any reason, the cable connector shall be designed to be used with 1500 kcmil cables.		
Remedial Action	N/A		



Inspection Form

FOIA Exemption: All (b)(6)
Form FTA-IR-1

United States Department of Transportation
Federal Transit Administration

Agency/Department Information

Inspection Date	YYYY	MM	DD	Report Number	20170217-WMATA-WP-2		
	2017	02	17				
Rail Agency Name	Washington Metropolitan Area Transit Authority			Rail Agency Department	POWR	Sub- Department	CM
Rail Agency Department Contact Information	Name		Email		Office Phone		Mobile Phone
	[REDACTED]		[REDACTED]		[REDACTED]		[REDACTED]
	[REDACTED]		[REDACTED]		[REDACTED]		[REDACTED]
	[REDACTED]		[REDACTED]		[REDACTED]		[REDACTED]
Inspection Location	G01 – Benning Road - 50 th and Central TPSS; G03 – Addison Road - TPSS						

Inspection Summary

Inspection Activity #	1	2	3	4	5	6
Activity Code	TP-RM-OBS					
Inspection Units	1					
Inspection Subunits	2					
Defects (Number)	0					
Recommended Finding	No					
Remedial Action Required ¹	No					
Recommended Reinspection	No					

Activity Summaries

Inspection Activity #	1	Inspection Subject					Normalization of WMATA AC SWGR at 50 th and Central TPSS and Addison Road TPSS			Activity Code		TP	RM	OBS
Job Briefing Employee Name/Title	N/A					Accompanied Inspector?	Yes	Out Brief Conducted	Yes	Time	1300 - 1700	Outside Shift	No	
Related Reports						Related CAPS / Findings								
Related Rules, SOPs, Standards, or Other	Ref		Rule or SOP			Standard		Other / Title		Checklist Reference				
Inspection Location	Main Track	Yard	Station	OCC	RTA Facility	FTA Office	Track Type	At-grade	Tunnel	Elevated	N/A			
			X									X		
Line(s)	G-Line	Track Number	N/A	Chain Marker and/or Station(s)		From		To						
						G01 – Benning Road TPSS		G03 – Addison Road - TPSS						
Vehicles	Head Car Number		Number of Cars		Equipment	AC Switchgear								
	N/A		N/A											
Description	A WMATA crew consisting of two electricians were at 50 th and Central Traction Power Substation (TPSS), which is closet to G01 – Benning Road Station to normalize the AC Switchgear (SWGR). There was a blowup or explosion of the line							Number of Defects		0				
								Recommended Finding?		No				
								Remedial Action Required?		No				

¹ The rail transit agency must provide FTA with the necessary evidence (e.g. maintenance work order system records, photos, documentation, records, data, or other evidence) to close out the Remedial Action. Closeout of Remedial Actions may also be subject to ongoing FTA verification inspections to ensure corrections are sufficient and effective.

Inspector in Charge - Signature		Date
WINSLOW L. POWELL <small>Digitally signed by WINSLOW L. POWELL DN: c=US, o=U.S. Government, ou=DOT Headquarters, ou=FTAHQ, cn=WINSLOW L. POWELL Date: 2017.03.03 13:44:54 -0500</small>		
Inspector in Charge – Name Winslow Powell	Inspection Team Tino Sahoo	



United States Department of Transportation
Federal Transit Administration

Form FTA-IR-1

	<p>side Potential Transformers (PT) on one of the incoming utility feeds to the AC SWGR. The line side PTs are connected to the 27/59 (Under/Over Voltage) relay on the AC SWGR. WMATA believes the PTs may have exploded due to water intrusion from up above (TPSS is 2 flight of stairs from grade) through the core drills that the power cables are fed through to the AC SWGR.</p> <p>Two PT cabinets were replaced and tested on the incoming utility feed cubicle. The control wiring for the cubicle was meggered to ensure all wiring was fine. The utility PEPCO that feeds WMATA's AC SWGR had to ensure their protection (circuit breaker) was working properly (open/closing) before giving the go-ahead on the normalization of the AC SWGR by WMATA.</p> <p>WMATA electricians had proper personal protective equipment (PPE), mainly the full switching suit, when they normalized ("racked in" the secondary main circuit breaker) the AC SWGR. No issues or concerns were noted.</p> <p>In addition, a visit was made to G03 – Addison Road TPSS, as the same PEPCO utility feed that fed the AC SWGR at 50th and Central TPSS also fed Addison Road TPSS. The secondary main breaker had to be racked out here also while PEPCO was doing testing on their equipment.</p> <p>Again, WMATA electricians had proper PPE, mainly the full switching suit, when they normalized ("racked in" the secondary main circuit breaker) the AC SWGR. No issues or concerns were noted.</p>	Recommended Reinspection?	No
Remedial Action	N/A		



Inspection Form

FOIA Exemption: All (b)(6)

Form FTA-IR-1

United States Department of Transportation
Federal Transit Administration

Agency/Department Information

Inspection Date	YYYY	MM	DD	Report Number	20170221-WMATA-WP-1		
	2017	02	21				
Rail Agency Name	Washington Metropolitan Area Transit Authority			Rail Agency Department	TRST	Sub- Department	Production
Rail Agency Department Contact Information	Name		Email		Office Phone		Mobile Phone
	[REDACTED]		[REDACTED]		[REDACTED]		[REDACTED]
Inspection Location	Surge 12 - Rosslyn to Pentagon						

Inspection Summary

Inspection Activity #	1	2	3	4	5	6
Activity Code	TRK-JSB-OBS	TRK-WI-PI				
Inspection Units	1	1				
Inspection Subunits	1	1				
Defects (Number)	0	0				
Recommended Finding	No	No				
Remedial Action Required ¹	No	No				
Recommended Reinspection	No	No				

Activity Summaries

Inspection Activity #	1	Inspection Subject					Job Safety Briefing			Activity Code		TRK	JSB	OBS
Job Briefing Employee Name/Title	Surge 12 Briefing Table					Accompanied Inspector?	Yes	Out Brief Conducted	No	Time	1000-1400	Outside Shift	No	
Related Reports	N/A					Related CAPS / Findings		N/A						
Related Rules, SOPs, Standards, or Other	Ref		Rule or SOP		Standard		Other / Title		Checklist Reference					
	TRST 1000													
	RWPM													
Inspection Location	Main Track	Yard	Station	OCC	RTA Facility	FTA Office	Track Type	At-grade	Tunnel	Elevated	N/A			
	X							X						
Line(s)	Track Number				Chain Marker and/or Station(s)		From		To					
							Rosslyn (C05)		Pentagon (C07)					
Vehicles	Head Car Number		Number of Cars		Equipment		N/A							
	N/A		N/A											
Description	FWSO personnel received a Job Safety Briefing from the Surge 12 briefing table. All personal protective equipment (PPE) and roadway worker protection (RWP) ID were checked, and the working limits were reviewed. The briefer covered the locations and types of work taking place as well as the nearest hospital and safety rule of the day. FWSO personnel were provided a yellow bracelet indicating their receipt of the briefing and were granted access to the roadway. No exceptions were taken.										Number of Defects		0	
											Recommended Finding?		No	
											Remedial Action Required?		No	
											Recommended Reinspection?		No	

¹ The rail transit agency must provide FTA with the necessary evidence (e.g. maintenance work order system records, photos, documentation, records, data, or other evidence) to close out the Remedial Action. Closeout of Remedial Actions may also be subject to ongoing FTA verification inspections to ensure corrections are sufficient and effective.

Inspector in Charge - Signature WINSLOW L. POWELL <small>Digitally signed by WINSLOW L. POWELL DN: cn=US, ou=U.S. Government, ou=DOT Headquarters, ou=FTAHO, cn=WINSLOW L. POWELL Date: 2017.02.24 11:48:00 -05'00'</small>		Date
Inspector in Charge - Name Winslow Powell	Inspection Team Troy Lloyd, Mike Vitale	



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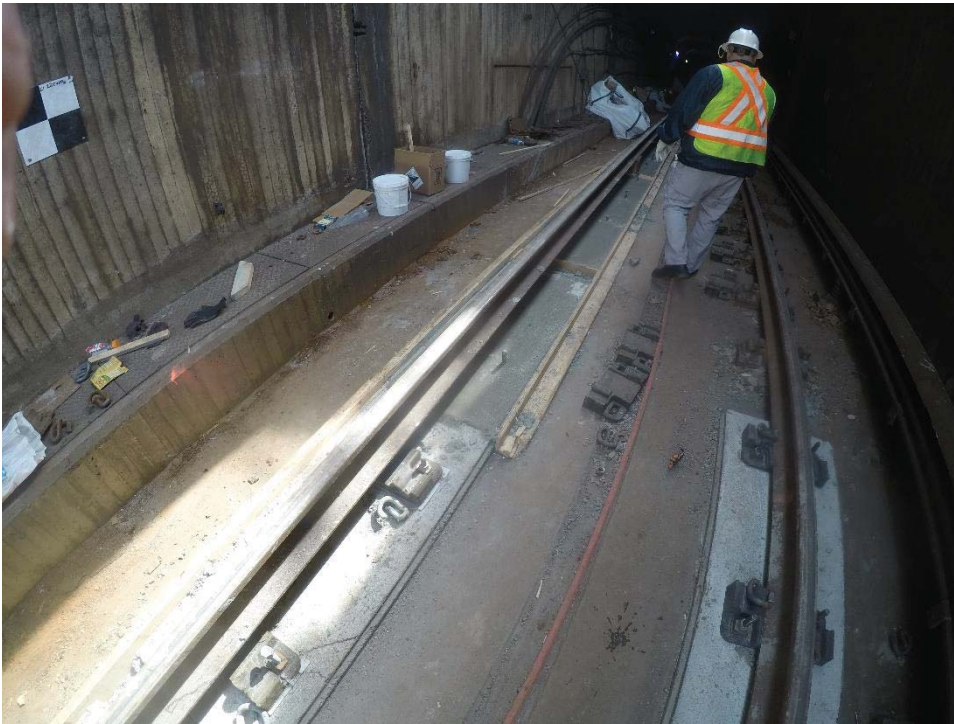
Form FTA-IR-1

Remedial Action	N/A												
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Inspection Activity #	2		Inspection Subject					Safe Track Surge Inspection				Activity Code		TRK	WI	PI		
Job Briefing Employee Name/Title	Surge 12 Briefing Table					Accompanied Inspector?		Yes		Out Brief Conducted		No		Time		1000-1400	Outside Shift	No
Related Reports	N/A					Related CAPS / Findings				N/A								
Related Rules, SOPs, Standards, or Other	Ref		Rule or SOP			Standard			Other / Title				Checklist Reference					
	TRST 1000																	
	RWPM																	
Inspection Location	Main Track	Yard	Station	OCC	RTA Facility	FTA Office	Track Type		At-grade	Tunnel	Elevated	N/A						
	X								X									
Line(s)			Track Number				Chain Marker and/or Station(s)		From		To							
									Rosslyn (C05)		Pentagon (C07)							
Vehicles	Head Car Number		Number of Cars			Equipment		N/A										
	N/A		N/A															
Description	<p>FWSO personnel performed an inspection of SafeTrack Surge #12. At the time of this report, WMATA had completed all tie replacement activities in the area, and has begun to focus on filling and tamping ballast, as well as grout pad and fastener renewal.</p> <p>WMATA is using a new approach to grout pad replacement in this surge. Previously, WMATA would cut and remove the running rail in order to remove the fastener and jackhammer out the existing pad and the studs. WMATA's new approach is to elevate the rail high enough to remove the existing fastener, and then jackhammer out the existing grout pad in the area, but leave the studs in place, assuring that the studs are still structurally sound. WMATA then will build the forms for the new grout pad, pour a resin in place that allows the concrete to bond with the new grout pad, and pour the new pad around the existing studs. Once the concrete has cured, WMATA then puts in a new fastener and lowers the rail. If a new stud is needed, WMATA will core drill the old stud out and install a new one in place. This process has improved the efficiency of the grout pad installation.</p> <p>In this location, WMATA is replacing existing single-fastener grout pads, with a more robust multi-fastener pads, which will also make maintenance operations much easier should a stud need to be replaced at a later date.</p> <p>In addition to grout pad installation, the FWSO team observed ballast tamping and frog welding in the work area. All completed work in the area was of good quality and no exceptions were taken.</p> <p>FWSO inspectors observed low lighting levels inside the tunnel areas where work was taking place as well as the presence of water and poor drainage. WMATA should ensure that sufficient lighting and a dry work environment is provided to work crews prior to surge work. FWSO observed multiple bulbs burnt out and dirty lenses, which reduced the amount of light required. FWSO noted OSHA standard 1926.56(a) as a good reference; it requires a minimum of 5 foot-candles in a tunnel construction area.</p>								Number of Defects			0						
									Recommended Finding?			No						
									Remedial Action Required?			No						
									Recommended Reinspection?			No						
Remedial Action	N/A																	



Photos:



Grout Pad Renewal in Progress



Elevated Rail during grout pad renewal



Old Grout Pads in the process of being jackhammered out



Lighting in Tunnel in surge area



Inspection Form

FOIA Exemption: All (b)(6)

Form FTA-IR-1

United States Department of Transportation
Federal Transit Administration

Agency/Department Information

Inspection Date	YYYY	MM	DD	Report Number	20170221-WMATA-WP-2		
	2017	02	21				
Rail Agency Name	Washington Metropolitan Area Transit Authority			Rail Agency Department	RTRA	Sub- Department	N/A
Rail Agency Department Contact Information	Name		Email		Office Phone		Mobile Phone
	[REDACTED]		[REDACTED]		[REDACTED]		[REDACTED]
Inspection Location	Yellow Line, Red Line, Green Line						

Inspection Summary

Inspection Activity #	1	2	3	4	5	6
Activity Code	RTRA-RI-OBS	RTRA-RI-OBS	RTRA-RI-OBS	RTRA-RI-OBS		
Inspection Units	1	1	1	1		
Inspection Subunits	N/A	N/A	N/A	N/A		
Defects (Number)	1	0	0	0		
Recommended Finding	No	No	No	No		
Remedial Action Required ¹	No	No	No	No		
Recommended Reinspection	No	No	No	No		

Activity Summaries

Inspection Activity #	1	Inspection Subject	Rail Compliance Inspection				Activity Code	RTRA	RI	OBS	
Job Briefing Employee Name/Title	No		Accompanied Inspector?	No	Out Brief Conducted	No	Time	1100-1200	Outside Shift	No	
Related Reports	20161121-WMATA-AD-1		Related CAPS / Findings	N/A							
Related Rules, SOPs, Standards, or Other	Ref	Rule or SOP		Standard		Other / Title		Checklist Reference			
	MetroRail Safety Rules and Procedures Handbook Permanent Order No. T-16-07	MSRPH General Rules 1.46-1.52 1.69-1.84 MSRPH Operating Rules 3.87 3.119, 3.120, 3.121,3.121.1, 3.79.1, 3.141 SOP# 12, 15, 16, 35, 45, 50									
Inspection Location	Main Track	Yard	Station	OCC	RTA Facility	FTA Office	Track Type	At-grade	Tunnel	Elevated	N/A
	x										x
Line(s)	Yellow	Track Number	N/A	Chain Marker and/or Station(s)	From			To			
					Greenbelt			Gallery Place			

¹ The rail transit agency must provide FTA with the necessary evidence (e.g. maintenance work order system records, photos, documentation, records, data, or other evidence) to close out the Remedial Action. Closeout of Remedial Actions may also be subject to ongoing FTA verification inspections to ensure corrections are sufficient and effective.

Inspector in Charge - Signature WINSLOW L. POWELL <small>Digitally signed by WINSLOW L. POWELL DN: cn=W.L. Powell, o=U.S. Government, ou=DOT Headquarters, cn=FTAHQ, cn=WINSLOW L. POWELL Date: 2017.02.27 14:34:03 -0500</small>		Date
Inspector in Charge - Name Winslow Powell	Inspection Team Chris Difatta	



United States Department of Transportation
Federal Transit Administration

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Vehicles	Head Car Number	Number of Cars	Equipment	N/A	
	7218	8			
Description	<p>An FWSO Inspector conducted a rail compliance inspection of one (1) train on the Yellow Line and observed train operations from Greenbelt to Gallery Place. The following was observed:</p> <ul style="list-style-type: none"> <u>Announcements:</u> <ul style="list-style-type: none"> Made proper announcements when departing initial terminal Made proper announcements when berthed at the station Made announcement when train stopped due to another train crossing over Made proper announcements when train would be arriving at terminal <u>Train Operations through Work Zones/Passing Roadway Workers</u> <ul style="list-style-type: none"> The train operator was in compliance with MSRPH Operating Rule 3.87 and Permanent Order No. T-16-07, Rev 1. The train operator acknowledged hand signals and responded with two (2) short horn blasts. <p>FWSO Inspector observed the following Operating Rules not complied with during operations between Greenbelt and Gallery Place.</p> <ul style="list-style-type: none"> <u>Train Horn Communications:</u> <ul style="list-style-type: none"> Train operator did not comply with MSRPH Operating Rule 3.87.1 that states, "A rail vehicle shall sound their horns when entering and exiting tunnel portals." WMATA should continue efforts to address non-compliance to its rules. 			Number of Defects	1
				Recommended Finding?	No
				Remedial Action Required?	No
				Recommended Reinspection?	No
Remedial Action	N/A				

Inspection Activity #	2	Inspection Subject	Rail Compliance Inspection				Activity Code	RTRA	RI	OBS	
Job Briefing Employee Name/Title	No	Accompanied Inspector?	No	Out Brief Conducted	No	Time	1200-1230	Outside Shift	No		
Related Reports	N/A	Related CAPS / Findings	N/A								
Related Rules, SOPs, Standards, or Other	Ref	Rule or SOP	Standard	Other / Title	Checklist Reference						
	MetroRail Safety Rules and Procedures Handbook Permanent Order No. T-16-07	MSRPH General Rules 1.46-1.52 1.69-1.84 MSRPH Operating Rules 3.87 3.119, 3.120, 3.121, 3.121.1, 3.79.1, 3.141 SOP# 12, 15, 16, 35, 45, 50									
Inspection Location	Main Track	Yard	Station	OCC	RTA Facility	FTA Office	Track Type	At-grade	Tunnel	Elevated	N/A
	x										
Line(s)	Red	Track Number	N/A	Chain Marker and/or Station(s)	From		To				
					Gallery Place		Silver Spring				
Vehicles	Head Car Number	Number of Cars	Equipment	N/A							
	3022	8									
Description	An FWSO Inspector conducted a rail compliance inspection of one (1) train on the Red Line and observed train operations from Gallery Place to Silver Spring. The				Number of Defects	0					
					Recommended Finding?	No					



United States Department of Transportation
Federal Transit Administration

Form FTA-IR-1

	following was observed:	Remedial Action Required?	No
	<ul style="list-style-type: none"> <u>Train Operator Adherence to Electronic Device Policy:</u> <ul style="list-style-type: none"> Train Operators were in compliance with MSRP General Rules 1.46-1.52 and MSRP Safety Rule 4.227. <u>Train Handling:</u> <ul style="list-style-type: none"> Operated to 8-car station berthing marker at the end of the platform. Head was out of the window when stopping an 8 car consist. Application of good train handling with smooth station stops and smooth and even acceleration and deceleration. <u>Train Operations through Work Zones/Passing Roadway Workers:</u> <ul style="list-style-type: none"> The train operator was in compliance with MSRP Operating Rule 3.87 and Permanent Order No. T-16-07, Rev 1. The train operator acknowledged hand signals and responded with two (2) short horn blasts. <u>Train Horn Communications:</u> <ul style="list-style-type: none"> Train operator complied with MSRP Operating Rule 3.87.1 that states, "A rail vehicle shall sound their horns when entering and exiting tunnel portals." <p>No exceptions were taken during observation.</p>	Recommended Reinspection?	No
Remedial Action	N/A		

Inspection Activity #	3	Inspection Subject	Rail Compliance Inspection				Activity Code	RTRA	RI	OBS	
Job Briefing Employee Name/Title	No	Accompanied Inspector?	No	Out Brief Conducted	No	Time	1230-1330	Outside Shift	No		
Related Reports	N/A	Related CAPS / Findings	N/A								
Related Rules, SOPs, Standards, or Other	Ref	Rule or SOP		Standard		Other / Title		Checklist Reference			
	MetroRail Safety Rules and Procedures Handbook Permanent Order No. T-16-07	MSRP General Rules 1.46-1.52 1.69-1.84 MSRP Operating Rules 3.87 3.119, 3.120, 3.121,3.121.1, 3.79.1, 3.141 SOP# 12, 15, 16, 35, 45, 50									
Inspection Location	Main Track	Yard	Station	OCC	RTA Facility	FTA Office	Track Type	At-grade	Tunnel	Elevated	N/A
	x										x
Line(s)	Red	Track Number	N/A	Chain Marker and/or Station(s)		From		To			
						Silver Spring		Gallery Place			
Vehicles	Head Car Number		Number of Cars		Equipment	N/A					
	3290		8								
Description	An FWSO Inspector conducted a rail compliance inspection of one (1) train on the Red Line and observed train operations from Silver Spring to Gallery Place. The following was observed: <ul style="list-style-type: none"> <u>Train Handling:</u> <ul style="list-style-type: none"> Operated to 8-car station berthing marker at the end of the 						Number of Defects		0		
							Recommended Finding?		No		
							Remedial Action Required?		No		
							Recommended Reinspection?		No		



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	<ul style="list-style-type: none"> platform. Head was out of the window when stopping an 8 car consist. Application of good train handling with smooth station stops and smooth and even acceleration and deceleration. <ul style="list-style-type: none"> <u>Train Operations through Work Zones/Passing Roadway Workers:</u> <ul style="list-style-type: none"> The train operator was in compliance with MSRP Operating Rule 3.87 and Permanent Order No. T-16-07, Rev 1. The train operator acknowledged hand signals and responded with two (2) short horn blasts. <u>Train Horn Communications:</u> <ul style="list-style-type: none"> Train operator complied with MSRP Operating Rule 3.87.1 that states, "A rail vehicle shall sound their horns when entering and exiting tunnel portals." <p>No exceptions were taken during observation.</p>		
Remedial Action	N/A		

Inspection Activity #	4	Inspection Subject	Rail Compliance Inspection				Activity Code	RTRA	RI	OBS	
Job Briefing Employee Name/Title	No	Accompanied Inspector?	No	Out Brief Conducted	No	Time	1330-1500	Outside Shift	No		
Related Reports	N/A	Related CAPS / Findings	N/A								
Related Rules, SOPs, Standards, or Other	Ref	Rule or SOP	Standard	Other / Title	Checklist Reference						
	MetroRail Safety Rules and Procedures Handbook Permanent Order No. T-16-07	MSRP General Rules 1.46-1.52 1.69-1.84 MSRP Operating Rules 3.87 3.119, 3.120, 3.121, 3.121.1, 3.79.1, 3.141 SOP# 12, 15, 16, 35, 45, 50									
Inspection Location	Main Track	Yard	Station	OCC	RTA Facility	FTA Office	Track Type	At-grade	Tunnel	Elevated	N/A
			x								x
Line(s)	Green	Track Number	N/A	Chain Marker and/or Station(s)	From	To					
					Gallery Place	N/A					
Vehicles	Head Car Number	Number of Cars	Equipment	N/A							
	N/A	N/A									
Description	<p>An FWSO inspector conducted a rail compliance observation of ten (10) trains on the Green Line. The FWSO inspector positioned himself at the 8 car berthing mark on the station platform to observe the following:</p> <ul style="list-style-type: none"> <u>Train Handling:</u> <ul style="list-style-type: none"> Operated to 8-car station berthing marker at the end of the platform. Head was out of the window when stopping an 8 car consist. Application of good train handling with smooth station stops and smooth and even acceleration and deceleration. <u>Stations and Doors:</u> <ul style="list-style-type: none"> Verified platform side of the train by sticking his/her head out of the cab window. Looked at doors on platform side of train to verify any 	Number of Defects		0							
		Recommended Finding?		No							
		Remedial Action Required?		No							
		Recommended Reinspection?		No							



	<p>activity in front of the doors for five (5) seconds before opening the doors.</p> <ul style="list-style-type: none">○ Opened the doors on the correct platform side and made station announcements.○ Observed train loading with head outside cab window to ensure that customers are not hit or trapped within doors.○ Closed the window and looked in the direction of travel before moving the train forward.		
	No exceptions were taken during observation.		
Remedial Action	N/A		



Inspection Form

FOIA Exemption: All (b)(6)

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Agency/Department Information

Inspection Date	YYYY	MM	DD	Report Number	20170221-WMATA-WP-3		
	2017	02	21				
Rail Agency Name	Washington Metropolitan Area Transit Authority			Rail Agency Department	TRST	Sub- Department	Maintenance/Safe
Rail Agency Department Contact Information	Name		Email		Office Phone		Mobile Phone
	[REDACTED]		[REDACTED]		[REDACTED]		[REDACTED]
	[REDACTED]		[REDACTED]		[REDACTED]		[REDACTED]
	[REDACTED]		[REDACTED]		[REDACTED]		[REDACTED]
Inspection Location	Blue Line, between King Street and Franconia-Springfield						

Inspection Summary

Inspection Activity #	1	2	3	4	5	6
Activity Code	TRK-RWP-OBS	TRK-GEN-INS				
Inspection Units	1	1				
Inspection Subunits	4	5				
Defects (Number)	0	5				
Recommended Finding	No	Yes				
Remedial Action Required ¹	No	Yes				
Recommended Reinspection	No	Yes				

Activity Summaries

Inspection Activity #	1	Inspection Subject					Roadway Worker Protection – Job Safety Briefing			Activity Code		TRK	RWP	OBS
Job Briefing Employee Name/Title	TRST Unit 80					Accompanied Inspector?	Yes	Out Brief Conducted	Yes	Time	2300-0700	Outside Shift	Yes	
Related Reports						Related CAPS / Findings								
Related Rules, SOPs, Standards, or Other	Ref		Rule or SOP		Standard		Other / Title		Checklist Reference					
	RWPM													
Inspection Location	Main Track	Yard	Station	OCC	RTA Facility	FTA Office	Track Type	At-grade	Tunnel	Elevated	N/A			
	X							X						
Line(s)	Blue Line	Track Number	2		Chain Marker and/or Station(s)		From		To					
							King Street Station		Franconia-Springfield Station					
Vehicles	Head Car Number		Number of Cars		Equipment		TGV-01							
	TGV-01		1											
Description	The job safety briefing was provided by TRST Unit 80 in the TGV vehicle. The briefing was thorough, complete, and fully compliant with WMATA requirements. It included WMATA level 1 ID check, personal protective equipment (PPE) inspection, type of protection – train approach warning (TAW), potential hazards and hot spots, hospital location. No exceptions were taken with the job safety briefing.										Number of Defects		0	
											Recommended Finding?		No	
											Remedial Action Required?		No	
											Recommended Reinspection?		No	

¹ The rail transit agency must provide FTA with the necessary evidence (e.g. maintenance work order system records, photos, documentation, records, data, or other evidence) to close out the Remedial Action. Closeout of Remedial Actions may also be subject to ongoing FTA verification inspections to ensure corrections are sufficient and effective.

Inspector in Charge - Signature		Date
WINSLOW L. POWELL <small>Digitally signed by WINSLOW L. POWELL DN: cn=W. L. Powell, o=U.S. Government, ou=DOT Headquarters, ou=FTAHQ, c=US, email=winslow.l.powell@dot.gov, ou=FTAHQ, ou=WINSLOW L. POWELL Date: 2017.02.27 14:40:09 -05'00'</small>		
Inspector in Charge – Name	Inspector Team	
Winslow Powell	Alexander Nepa	



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Remedial Action	N/A
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Inspection Activity #	2	Inspection Subject	Track observation of WMATA, TGV-01.					Activity Code	TRK	GEN	INS
Job Briefing Employee Name/Title	TRST Unit 80			Accompanied Inspector?	Yes	Out Brief Conducted	Yes	Time	2300-0700	Outside Shift	Yes
Related Reports				Related CAPS / Findings							
Related Rules, SOPs, Standards, or Other	Ref	Rule or SOP			Standard			Other / Title		Checklist Reference	
	TRST-1000										
Inspection Location	Main Track	Yard	Station	OCC	RTA Facility	FTA Office	Track Type	At-grade	Tunnel	Elevated	N/A
	X							X			
Line(s)	Blue Line	Track Number	2	Chain Marker and/or Station(s)			From		To		
							King Street Station		Franconia-Springfield Station		
Vehicles	Head Car Number		Number of Cars		Equipment	TGV-01					
	TGV-01		1								
Description	<p>The FWSO inspector observed an ultra-sonic rail inspection performed by WMATA TGV-01 of track 2 between King Street Station and Franconia-Springfield. This was a rail flaw test—no geometry testing was performed. During the observation the following defects were identified:</p> <ul style="list-style-type: none">At CM J2-566+00, the end cover board is missing.At CM J2-568+00, the end cover board is missing.At CM J2-682+00 on the right rail, a 25% Transverse Detail Defect (TDD) was detected and field verified. The condition was marked and reported by the TGV crew.At C99-128 signal the end cover board is missingAt C99-128 signal the blue Emergency Trip Station (ETS) light was not operating.						Number of Defects		5		
							Recommended Finding?		Yes		
							Remedial Action Required?		Yes		
							Recommended Reinspection?		Yes		
Remedial Action	<ul style="list-style-type: none">At CM J2-566+00, WMATA must replace the missing cover board.At CM J2-568+00, WMATA must replace the missing cover board.At C99-128, WMATA must replace the missing cover board.At C99-128, WMATA must replace the blue Emergency Trip Station (ETS) light.At CM J2-682+00 on the right rail, WMATA should address the rail defect.										



Inspection Form

FOIA Exemption: All (b)(6)

Form FTA-IR-1

United States Department of Transportation
Federal Transit Administration

Agency/Department Information

Inspection Date	YYYY	MM	DD	Report Number	20170222-WMATA-AD-1		
	2017	02	22				
Rail Agency Name	Washington Metropolitan Area Transit Authority			Rail Agency Department	ROCC	Sub- Department	N/A
Rail Agency Department Contact Information	Name		Email		Office Phone		Mobile Phone
Inspection Location	Carmen Turner Facility 3500 Pennsy Drive, Hyattsville, MD 20785						

Inspection Summary

Inspection Activity #	1	2	3	4	5	6
Activity Code	ROCC-RC-OBS					
Inspection Units	1					
Inspection Subunits	0					
Defects (Number)	0					
Recommended Finding	No					
Remedial Action Required ¹	No					
Recommended Reinspection	No					

Activity Summaries

Inspection Activity #	1	Inspection Subject			Rules Compliance & Safety Management Inspection (SMI) Required Actions Observation of Rail Traffic Controllers (RTC's)			Activity Code		ROCC	RC	OBS
Job Briefing Employee Name/Title	N/A			Accompanied Inspector?	N/A	Out Brief Conducted	Yes	Time	1615-1840	Outside Shift	Yes	
Related Reports	Safety Management Inspection (SMI), Final Report, June 17, 2015			Related CAPS / Findings		Required Actions: R-1-2-a, R-1-6-a, R-1-6-b, R-1-8-a						
Related Rules, SOPs, Standards, or Other	Ref		Rule or SOP		Standard		Other / Title		Checklist Reference			
	MetroRail Safety Rules and Procedures Handbook & Roadway Worker Protection Manual (2014)		Section 1 – General Rules (Radio Usage and Operation): Rules 1.69 – 1.88		X		X		X			
	Permanent Order		NO. T-16-10									
Inspection Location	Main Track	Yard	Station	OCC	RTA Facility	Main Track	Yard	At-grade	Tunnel	Elevated	N/A	
				X							X	
Line(s)	N/A		Track Number	N/A	Chain Marker and/or Station(s)		From		To			
							N/A		N/A			
Vehicles	Head Car Number		Number of Cars		Equipment		N/A					
	N/A		N/A									

¹ The rail transit agency must provide FTA with the necessary evidence (e.g. maintenance work order system records, photos, documentation, records, data, or other evidence) to close out the Remedial Action. Closeout of Remedial Actions may also be subject to ongoing FTA verification inspections to ensure corrections are sufficient and effective.

Inspector in Charge - Signature	AMBUR I DALEY		Digitally signed by AMBUR I DALEY DN: c=US, o=U.S. Government, ou=DOT Headquarters, ou=FMCSAHQ, cn=AMBUR I DALEY Date: 2017.03.02 15:11:08 -05'00'	Date
Inspector in Charge – Name	Ambur Daley			
Inspection Team	Tamara Powell			



Description	General observations:	Number of Defects	0
	The FWSO inspector conducted an observation of two rail traffic controllers (RTC) at the Rail Operations Control Center (ROCC) on the middle shift at the Ops 3 console, which controls and over-sees operations on the Yellow and Green lines. The FWSO inspector observed the radio transmissions and performance of two RTCs.	Recommended Finding?	No
	The observation and compliance check focused mainly on ROCC required actions and radio usage and operation (General Rules, #1.69 – 1.88 and Permanent Order T-16-10). The observation and compliance check was based on findings from the SMI report, as well as rules from the MetroRail Safety Rules & Procedures Handbook.	Remedial Action Required?	No
	Observations related to SMI report findings: <ul style="list-style-type: none">• <i>R-1-2-a: "WMATA must complete and maintain required annual re-certifications for Rail Traffic Controllers."</i><ul style="list-style-type: none">○ RTC #1, the Button Controller, has been employed at WMATA for 15 years, and at the ROCC for 3 years.○ RTC #2, the Radio Controller, has 10 years at WMATA, with 1 year in the ROCC.○ Both RTCs have completed Bridge Training and are current on RTC recertification.• <i>R-1-6-a: "WMATA must establish and enforce a proper protocol for language and terminology that is used over the radio – to include 100 percent word-for-word read-back for safety-related instructions and unusual train movements."</i><ul style="list-style-type: none">○ Starting at 1615 hours (beginning of observation period), both RTCs ensured all train requests were received and communicated properly through read-backs.○ For each communication loop, both RTCs closed out every transmission with "over" until closing out the loop with "Central out."• <i>R-1-6-b: "As part of the radio protocol required in R-1-6-a, WMATA must establish an approach for communicating and managing all speed restrictions that required two-way communication between the ROCC and train operator and takes full advantage of available electronic AIM system features."</i><ul style="list-style-type: none">○ Both RTCs also informed all trains in the area of all speed restrictions and operating changes due to headway adjustments that were made.• <i>R-1-8-a: "WMATA must establish a clear policy that prohibits distractions from the use of cell phones and other electronic devices in the ROCC."</i><ul style="list-style-type: none">○ The FWSO inspector did not observe any violations of the cell phone policy by any ROCC employees at any time during the observation period.	Recommended Reinspection?	No
There were no exceptions or defects observed during this observation.			
Remedial Action	N/A		



Inspection Form

FOIA Exemption: All (b)(6)

Form FTA-IR-1

United States Department of Transportation
Federal Transit Administration

Agency/Department Information

Inspection Date	YYYY	MM	DD	Report Number	20170222-WMATA-WP-1		
	2017	02	22				
Rail Agency Name	Washington Metropolitan Area Transit Authority			Rail Agency Department	RTRA	Sub- Department	N/A
Rail Agency Department Contact Information	Name		Email		Office Phone		Mobile Phone
	[REDACTED]		[REDACTED]		[REDACTED]		[REDACTED]
Inspection Location	E Line and F Line						

Inspection Summary

Inspection Activity #	1	2	3	4	5	6
Activity Code	RTRA-RI-OBS	RTRA-RI-OBS				
Inspection Units	1	1				
Inspection Subunits	N/A	N/A				
Defects (Number)	0	0				
Recommended Finding	No	No				
Remedial Action Required ¹	No	No				
Recommended Reinspection	No	No				

Activity Summaries

Inspection Activity #	1	Inspection Subject				Rail Compliance Inspection			Activity Code		RTRA	RI	OBS
Job Briefing Employee Name/Title	N/A			Accompanied Inspector?	No	Out Brief Conducted	No	Time	0930-1000	Outside Shift	No		
Related Reports	N/A			Related CAPS / Findings		N/A							
Related Rules, SOPs, Standards, or Other	Ref		Rule or SOP			Standard		Other / Title		Checklist Reference			
	MetroRail Safety Rules and Procedures Handbook Permanent Order No. T-16-07		MSRPH General Rules 1.46-1.52 1.69-1.84 MSRPH Operating Rules 3.87 3.119, 3.120, 3.121,3.121.1, 3.79.1, 3.141 SOP# 12, 15, 16, 35, 45, 50										
Inspection Location	Main Track	Yard	Station	OCC	RTA Facility	FTA Office	Track Type	At-grade	Tunnel	Elevated	N/A		
	x											x	
Line(s)	Green	Track Number	N/A	Chain Marker and/or Station(s)	From			To					
					Greenbelt			Gallery Place					

¹ The rail transit agency must provide FTA with the necessary evidence (e.g. maintenance work order system records, photos, documentation, records, data, or other evidence) to close out the Remedial Action. Closeout of Remedial Actions may also be subject to ongoing FTA verification inspections to ensure corrections are sufficient and effective.

Inspector in Charge - Signature		Date
WINSLOW L. POWELL <small>Digitally signed by WINSLOW L. POWELL DN: cn=US, o=U.S. Government, ou=DOT Headquarters, ou=FTAHQ, cn=WINSLOW L. POWELL Date: 2017.02.28 14:58:17 -0500</small>		
Inspector in Charge - Name	Inspection Team	
Winslow Powell	Chris Difatta	



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Vehicles	Head Car Number	Number of Cars	Equipment	N/A	
	3114	8			
Description	<p>An FWSO Inspector observed train operations on one train from Greenbelt to Gallery Place, and the following was observed:</p> <ul style="list-style-type: none"> <u>Train Operator Adherence to Electronic Device Policy:</u> <ul style="list-style-type: none"> Train Operator was in compliance with MSRPH General Rules 1.46-1.52 and MSRPH Safety Rule 4.227. <u>Train Handling:</u> <ul style="list-style-type: none"> Operated to 8-car station berthing marker at the end of the platform. Head out of the window when stopping an 8 car consist. Application of good train handling with smooth station stops and smooth and even acceleration and deceleration. <u>Fitness for Duty:</u> <ul style="list-style-type: none"> Operator was in proper uniform and without the appearance of being under the influence of alcohol or impaired by drugs. <u>Announcements:</u> <ul style="list-style-type: none"> Made proper announcements when departing initial terminal. Made proper announcements when berthed at the station. Made announcement when train stopped due to another train crossing over. Made proper announcements when train would be arriving at terminal. <u>Train Horn Communication:</u> <ul style="list-style-type: none"> Operator was in compliance with MSRPH Operating Rules 3.87 and 3.168. <p>No exceptions were taken during observations.</p>			Number of Defects	0
				Recommended Finding?	No
				Remedial Action Required?	No
				Recommended Reinspection?	No
				Remedial Action	N/A

Inspection Activity #	2	Inspection Subject	Rail Compliance Inspection				Activity Code	RTRA	RI	OBS	
Job Briefing Employee Name/Title	N/A		Accompanied Inspector?	No	Out Brief Conducted	No	Time	1200-1315	Outside Shift	No	
Related Reports	N/A		Related CAPS / Findings	N/A							
Related Rules, SOPs, Standards, or Other	Ref	Rule or SOP	Standard	Other / Title	Checklist Reference						
	MetroRail Safety Rules and Procedures Handbook Permanent Order No. T-16-07	MSRPH General Rules 1.46-1.52 1.69-1.84 MSRPH Operating Rules 3.87 3.119, 3.120, 3.121,3.121.1, 3.79.1, 3.141 SOP# 12, 15, 16, 35, 45, 50									
Inspection Location	Main Track	Yard	Station	OCC	RTA Facility	FTA Office	Track Type	At-grade	Tunnel	Elevated	N/A
	x										
Line(s)	Green	Track Number	N/A	Chain Marker and/or Station(s)	From	To					
					Navy Yard	Greenbelt					
Vehicles	Head Car Number	Number of Cars	Equipment	N/A							
	5037	8									



Description	An FWSO Inspector observed train operations on one train from Navy Yard to Greenbelt, and the following was observed: <ul style="list-style-type: none">• <u>Train Handling:</u><ul style="list-style-type: none">○ Operated to 8-car station berthing marker at the end of the platform.○ Head out of the window when stopping an 8 car consist.○ Application of good train handling with smooth station stops and smooth and even acceleration and deceleration.• <u>Announcements:</u><ul style="list-style-type: none">○ Made proper announcements when departing initial terminal.○ Made proper announcements when berthed at the station.○ Made announcement when train stopped due to another train crossing over.○ Made proper announcements when train would be arriving at terminal.• <u>Train Operations through Work Zones/Passing Roadway Workers between Fort Totten and West Hyattsville:</u><ul style="list-style-type: none">○ The train operator was in compliance with MSRPB Operating Rule 3.87 and Permanent Order No. T-16-07, Rev 1.○ The train operator acknowledged hand signals and responded with two (2) short horn blasts. No exceptions were taken during observations.	Number of Defects	0
		Recommended Finding?	No
		Remedial Action Required?	No
		Recommended Reinspection?	No
Remedial Action	N/A		



Inspection Form

FOIA Exemption: All (b)(6)

Form FTA-IR-1

United States Department of Transportation
Federal Transit Administration

Agency/Department Information

Inspection Date	YYYY	MM	DD	Report Number	20170223-WMATA-AD-1		
	2017	02	23				
Rail Agency Name	Washington Metropolitan Area Transit Authority			Rail Agency Department	ROCC	Sub- Department	N/A
Rail Agency Department Contact Information	Name		Email		Office Phone		Mobile Phone
Inspection Location	Carmen Turner Facility 3500 Pennsy Drive, Hyattsville, MD 20785						

Inspection Summary

Inspection Activity #	1	2	3	4	5	6
Activity Code	ROCC-RC-OBS					
Inspection Units	1					
Inspection Subunits	0					
Defects (Number)	0					
Recommended Finding	No					
Remedial Action Required ¹	No					
Recommended Reinspection	No					

Activity Summaries

Inspection Activity #	1	Inspection Subject			Rules Compliance & Safety Management Inspection (SMI) Required Actions Observation of Rail Traffic Controllers (RTC)			Activity Code		ROCC	RC	OBS
Job Briefing Employee Name/Title	N/A			Accompanied Inspector?	N/A	Out Brief Conducted	Yes	Time	0001 – 0520	Outside Shift	Yes	
Related Reports	Safety Management Inspection (SMI), Final Report, June 17, 2015			Related CAPS / Findings		Required Actions: R-1-3b; R-1-6-a; R-1-9-a						
Related Rules, SOPs, Standards, or Other	Ref		Rule or SOP		Standard		Other / Title		Checklist Reference			
	MetroRail Safety Rules and Procedures Handbook & Roadway Worker Protection Manual (2014)		Section 1 – General Rules (Radio Usage and Operation): Rules 1.69 – 1.88		X		X		X			
	Permanent Order		NO. T-16-10									
Inspection Location	Main Track	Yard	Station	OCC	RTA Facility	Main Track	Yard	At-grade	Tunnel	Elevated	N/A	
				X							X	
Line(s)	N/A	Track Number	N/A	Chain Marker and/or Station(s)		From			To			
						N/A			N/A			
Vehicles	Head Car Number		Number of Cars		Equipment		N/A					
	N/A		N/A									

¹ The rail transit agency must provide FTA with the necessary evidence (e.g. maintenance work order system records, photos, documentation, records, data, or other evidence) to close out the Remedial Action. Closeout of Remedial Actions may also be subject to ongoing FTA verification inspections to ensure corrections are sufficient and effective.

Inspector in Charge - Signature	AMBUR I DALEY		Digitally signed by AMBUR I DALEY DN: c=US, o=U.S. Government, ou=DOT Headquarters, ou=FMCSAHQ, cn=AMBUR I DALEY Date: 2017.03.02 15:16:45 -05'00'	Date
Inspector in Charge – Name	Ambur Daley			
Inspection Team	Tamara Powell			



Description	General observations:	Number of Defects	0
	The FWSO inspector conducted an observation of the rail traffic controllers (RTC) on the overnight shift at the Ops 2 console, which controls and oversees operations on the Orange and Silver lines.	Recommended Finding?	No
	The FWSO inspector performed an observation and compliance check that focused mainly on the Rail Operations Control Center (ROCC) required actions and radio usage and operation (General Rules #1.69 – 1.88 and Permanent Order T-16-10). The observation and compliance check were based on findings from the SMI report, as well as rules from the MetroRail Safety Rules & Procedures Handbook, and from procedures and rules from the Roadway Protection Manual (2014) and Level IV RWP Training Course.	Remedial Action Required?	No
	General observations:		
	<ul style="list-style-type: none">• RTC #1 ensured each transmission was correct, and provided advice and support all night to RTC #2, which included proper call on requirements for power deenergization, testing, and verification.• During the oversight shift, each RTC has distinct responsibilities:<ul style="list-style-type: none">○ Button Controller position is responsible for power (deenergization and energization), fans testing, switches/routing trains & vehicle movement, and all line heaters (switches, etc.).○ Radio Controller position is responsible for communication to and mobilization of all units and equipment/trains on the line, data input in GOTRS—or General Orders & Track Rights System, and administrative duties as required (e.g., making copies of reports and power sheets)• FWSO observed that the Assistant Superintendent was mobile the entire night observing actions of all three Ops stations, asking status of work crews and whether support or assistance was needed.• At times, the FWSO inspector noted that the Assistant Superintendent sat directly at the line console with two controllers to observe, monitor, and support the employees, as they have less experience on the overnight shift than controllers during the day shift.	Recommended Reinspection?	No
	Observations related to SMI report findings:		
	<ul style="list-style-type: none">• R-1-3-b: “WMATA must require all RTCs to obtain and maintain Level 4 Roadway Worker Protection training and certification.”<ul style="list-style-type: none">○ The FWSO inspector observed the radio transmissions and performance of two RTCs.<ul style="list-style-type: none">▪ RTC #1, the Button Controller, has been employed at WMATA for 11 years, with 3 years in the ROCC. RTC #1 also performs “utility” duties (substitute Assistant Superintendent), as needed.▪ RTC #2, the Radio Controller, has 3 years in the ROCC and 21 years employment at WMATA.▪ Both controllers have had RWP Level 4 Training and are RWP qualified.• R-1-6-a: “WMATA must establish and enforce a proper protocol for language and terminology that is used over the radio – to include 100 percent word-for-word read-back for safety-related instructions and unusual train movements.”<ul style="list-style-type: none">○ Starting at 0001 hours (beginning of observation period), track and power personnel began calling the RTC over the radio to request permission to access the roadway to perform maintenance and track activities.○ The RTCs ensured all requests were received properly through read-backs. Power and track personnel each performed word-for-word confirmation of walking rights on the roadway. The RTC closed out each radio check transmission by acknowledging, “That is a good copy,” over the radio.○ For each communication loop, RTC #2 closed out each and every transmission with “over” until she closed the loop with “Central out.”○ When calling in and/or confirming locations, both the RTC and		



	<p>units used the International Civil Aviation Organization (ICAO) standard for communicating accordingly, as warranted by the transmission.</p> <ul style="list-style-type: none">• R-1-9-a <i>"Until such time as electronic transfer records are implemented, WMATA must ensure that its Rail Traffic Controller use paper-based logs with formal signatures."</i><ul style="list-style-type: none">○ At 0500 hours, the inspector observed a transfer of duties. The employee who was relieved of duty informed her relief of all operating conditions and anomalies from the previous day and shift.○ The relieving employee sat down and immediately signed onto the AIM system.• <i>Level IV WMATA Roadway Worker Protection (RWP) Course and Manual:</i><ul style="list-style-type: none">○ The instructor taught participants radio protocol for calling on to the roadway, requesting power deenergization, and 100% read-back and "over" & "out" communication.○ RTC #2 followed all procedures as required by the RWP Manual (See "General RWP Guidelines"), accordingly:<ul style="list-style-type: none">▪ When calling on, each unit provided his/her ID number, exact location (by chain marker), and identified the level of protection he/she would be under for the evening.▪ Once granting permission to the units who were installing shunts, RTC #2 would later confirm that the shunts were visible via circuits that were down.▪ For each power deenergization request, the unit provided exact chain marker of request. RTC #2 requested RTC #1 to take down power in said location. RTC #2 then informed the unit that the power had been taken down. The unit was then instructed to "hot stick" the location, testing the third rail gaps to ensure the power was testing dead.▪ Upon verification of shunts and power testing dead in the field, the units were given permission to proceed with their work and clearing time in the morning.▪ When preparing to close out work for revenue service, the same process occurred in reverse. One notable process in the morning was the power restoration protocol. When third rail power was returned to the ROCC, RTC #2 would request RTC #1 to energize said section.▪ When restoring third rail power, there is a verification process in place – 2 ROCC personnel must verify breakers before the same are restored. RTC #1 called RTC #2 over to verify said power sections, then confirmed the same indicated energized.▪ When signing off, the unit/equipment operator acknowledged and repeated back his/her clearing time.▪ All times for roadway entry, power deenergization and energization, and clearing the roadway were recorded in GOTRS. <p>There were no exceptions noted during this observation shift.</p>		
Remedial Action	N/A		



Inspection Form

FOIA Exemption: All (b)(6)

Form FTA-IR-1

United States Department of Transportation
Federal Transit Administration

Agency/Department Information

Inspection Date	YYYY	MM	DD	Report Number	20170223-WMATA-WP-1		
	2017	02	23				
Rail Agency Name	Washington Metropolitan Area Transit Authority			Rail Agency Department	TRST	Sub- Department	Maintenance
Rail Agency Department Contact Information	Name		Email		Office Phone		Mobile Phone
	[REDACTED]		[REDACTED]		[REDACTED]		[REDACTED]
Inspection Location	D-Line Track 1 Eastern Market (D06) to Smithsonian (D02)						

Inspection Summary

Inspection Activity #	1	2	3	4	5	6
Activity Code	TRK-JSB-OBS	TRK-WI-PI				
Inspection Units	1	1				
Inspection Subunits	1	1				
Defects (Number)	0	2				
Recommended Finding	No	Yes				
Remedial Action Required ¹	No	Yes				
Recommended Reinspection	No	Yes				

Activity Summaries

Inspection Activity #	1	Inspection Subject					Job Safety Briefing			Activity Code		TRK	JSB	OBS
Job Briefing Employee Name/Title	TRST 5					Accompanied Inspector?	Yes	Out Brief Conducted	No	Time	1000-1400	Outside Shift	No	
Related Reports	N/A					Related CAPS / Findings		N/A						
Related Rules, SOPs, Standards, or Other	Ref		Rule or SOP		Standard		Other / Title		Checklist Reference					
	TRST 1000													
	RWPM													
Inspection Location	Main Track	Yard	Station	OCC	RTA Facility	FTA Office	Track Type	At-grade	Tunnel	Elevated	N/A			
	X								X					
Line(s)	D	Track Number	1	Chain Marker and/or Station(s)	From				To					
	Eastern Market (D06)				Smithsonian (D02)									
Vehicles	Head Car Number		Number of Cars		Equipment	N/A								
	N/A		N/A											
Description	FWSO personnel received a Job Safety Briefing from TRST 5 prior to accessing the roadway. All personal protective equipment (PPE) and roadway worker protection (RWP) ID were checked, and the working limits were reviewed. Briefer covered the places of safety as well as the nearest hospital and safety rule of the day. FWSO and WMATA personnel were granted access to the roadway by the Rail Operations Control Center (ROCC). No exceptions were taken.							Number of Defects		0				
								Recommended Finding?		No				
								Remedial Action Required?		No				
								Recommended Reinspection?		No				
Remedial Action	N/A													

¹ The rail transit agency must provide FTA with the necessary evidence (e.g. maintenance work order system records, photos, documentation, records, data, or other evidence) to close out the Remedial Action. Closeout of Remedial Actions may also be subject to ongoing FTA verification inspections to ensure corrections are sufficient and effective.

Inspector in Charge - Signature		Date
WINSLOW L. POWELL <small>Digitally signed by WINSLOW L. POWELL DN: c=US, o=U.S. Government, ou=DOT Headquarters, ou=FTAHQ, cn=WINSLOW L. POWELL Date: 2017.02.28 14:53:53 -0500</small>		
Inspector in Charge - Name	Inspection Team	
Winslow Powell	Winslow Powell, Troy Lloyd, Mike Vitale	

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United States Department of Transportation
Federal Transit Administration

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Inspection Activity #	2	Inspection Subject	Remedial Action Follow Up Inspection					Activity Code		TRK	WI	PI
Job Briefing Employee Name/Title	TRST 5		Accompanied Inspector?	Yes	Out Brief Conducted	No	Time	1000-1400	Outside Shift	No		
Related Reports	N/A		Related CAPS / Findings		N/A							
Related Rules, SOPs, Standards, or Other	Ref		Rule or SOP		Standard		Other / Title		Checklist Reference			
	TRST 1000											
	RWPM											
Inspection Location	Main Track	Yard	Station	OCC	RTA Facility	FTA Office	Track Type	At-grade	Tunnel	Elevated	N/A	
	X								X			
Line(s)	D	Track Number	1	Chain Marker and/or Station(s)	From			To				
					Eastern Market (D06)			Smithsonian (D02)				
Vehicles	Head Car Number		Number of Cars		Equipment	N/A						
	N/A		N/A									
Description	<p>FWSO personnel performed a follow up inspection of Track 1 of the D-Line between Eastern Market and Smithsonian. During previous inspections, FWSO has issued 18 remedial actions for this section of track, mostly related to tunnel lighting, leak mitigation, and grout pad renewal. During the walk, FWSO verified and closed 16 of the 18 remedial actions.</p> <p>FWSO inspectors verified grout pad repairs throughout the area and were able to close remedial actions 1091, 1092, 1093, 1094, and 1095. FWSO inspectors also verified tunnel light cleaning and repairs throughout the area and were able to close remedial actions 174, 177, and 178. Finally, FWSO inspectors verified the repair of tunnel leaks throughout the area and were able to close remedial actions 1096, 1097, and 1098.</p> <p>FWSO inspectors could not close remedial action 1099 as a large leak is still present at D1 115+00. WMATA should continue to work to remedy this issue and monitor leaks in the area.</p> <p>FWSO inspectors were also able to close the following remedial actions:</p> <ul style="list-style-type: none"> 142 - Repair duct line transition at D1 67+00 168 - Replace defective fasteners at D1 99+50 175 - Repair exposed impedance bond cables at D1 45+00 238 - Replace missing bolt in joint bar at D1 88+00 170 - Replace defective fasteners at D1 119+00 <p>FWSO inspectors were not able to close remedial action 1090, which requires WMATA to correct spalling on the low rail at D1 131+00.</p> <p>FWSO noted 2 new defects during the inspection:</p> <ul style="list-style-type: none"> D1 88+00 - Grout pads underneath joint are deteriorated D1 74+30-76+00 - Standing water underneath third rail <p>Finally, Train 611 did not reduce speed to 10 mph when passing watchman at 1250 hours, but slowed to pass the rest of the group. TRST 5 alerted the ROCC to the situation, which was handled internally.</p>						Number of Defects		2			
							Recommended Finding?		Yes			
							Remedial Action Required?		Yes			
							Recommended Reinspection?		Yes			
Remedial Action	<ul style="list-style-type: none"> WMATA must review the rail joint at D1 88+00, right rail, and address the deteriorating grout pads. WMATA must mitigate standing water under third rail from D1 74+30 to 76+00. 											



Photos:



Standing Water underneath third rail at D1 74+30



Inspection Form

FOIA Exemption: All (b)(6)

Form FTA-IR-1

United States Department of Transportation
Federal Transit Administration

Agency/Department Information

Inspection Date	YYYY	MM	DD	Report Number	20170223-WMATA-WP-2		
	2017	02	23				
Rail Agency Name	Washington Metropolitan Area Transit Authority			Rail Agency Department	TRST	Sub- Department	Maintenance/Safe
Rail Agency Department Contact Information	Name		Email		Office Phone		Mobile Phone
	[REDACTED]		[REDACTED]		[REDACTED]		[REDACTED]
	[REDACTED]		[REDACTED]		[REDACTED]		[REDACTED]
	[REDACTED]		[REDACTED]		[REDACTED]		[REDACTED]
Inspection Location	C Line, Surge Area C-05-C-07						

Inspection Summary

Inspection Activity #	1	2	3	4	5	6
Activity Code	TRK-RWP-OBS	TRK-GEN-INS				
Inspection Units	1	1				
Inspection Subunits	2	0				
Defects (Number)	0	0				
Recommended Finding	No	No				
Remedial Action Required ¹	No	No				
Recommended Reinspection	No	No				

Activity Summaries

Inspection Activity #	1	Inspection Subject	Roadway Worker Protection – Job Safety Briefing				Activity Code	TRK	RWP	OBS	
Job Briefing Employee Name/Title	TRST 6014 RWIC 6031 SAFE 207		Accompanied Inspector?	Yes	Out Brief Conducted	Yes	Time	1030-1400	Outside Shift	No	
Related Reports			Related CAPS / Findings								
Related Rules, SOPs, Standards, or Other	Ref	Rule or SOP		Standard		Other / Title		Checklist Reference			
	RWPM										
Inspection Location	Main Track	Yard	Station	OCC	RTA Facility	FTA Office	Track Type	At-grade	Tunnel	Elevated	N/A
	X		X					X	X		
Line(s)	C Line	Track Number	1 & 2	Chain Marker and/or Station(s)		From		To			
						C-05		C-07			
Vehicles	Head Car Number		Number of Cars		Equipment	N/A					
	N/A		N/A								
Description	The job safety briefing was provided by TRST 6014 at Arlington Cemetery Sub-Station. The briefing was thorough, complete, and fully compliant with WMATA requirements. It included WMATA level 1 ID check, personal protective equipment (PPE) inspection, type of protection – inaccessible track (IT), potential hazards and hot spots, hospital location, and a safety rule. No exceptions were taken with the						Number of Defects		0		
							Recommended Finding?		No		
							Remedial Action Required?		No		
							Recommended Reinspection?		No		

¹ The rail transit agency must provide FTA with the necessary evidence (e.g. maintenance work order system records, photos, documentation, records, data, or other evidence) to close out the Remedial Action. Closeout of Remedial Actions may also be subject to ongoing FTA verification inspections to ensure corrections are sufficient and effective.

Inspector in Charge - Signature		Date
WINSLOW L. POWELL <small>Digitally signed by WINSLOW L. POWELL DN: cn=W.L. Powell, o=U.S. Department of Transportation, ou=FTA, email=W.L. POWELL Date: 2017.03.01 11:05:25 -0500</small>		
Inspector in Charge – Name	Inspection Team	
Winslow Powell	Alexander Nepa	

Form FTA-IR-1

Version date: 8/26/16



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Federal Transit Administration

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	job safety briefing.		
Remedial Action	N/A		

Inspection Activity #	2	Inspection Subject	SafeTrack Surge 12 inspection and contractor RWP observation				Activity Code	TRK	GEN	INS						
Job Briefing Employee Name/Title	TRST 6014 RWIC 6031 SAFE 207		Accompanied Inspector?	Yes	Out Brief Conducted	Yes	Time	1030-1400	Outside Shift	No						
Related Reports	Related CAPS / Findings															
Related Rules, SOPs, Standards, or Other	Ref	Rule or SOP			Standard		Other / Title		Checklist Reference							
	TRST 1000 - RWP															
Inspection Location	Main Track	Yard	Station	OCC	RTA Facility	FTA Office	Track Type	At-grade	Tunnel	Elevated	N/A					
	X							X	X							
Line(s)	C Line	Track Number	1 & 2	Chain Marker and/or Station(s)	From			To								
					C-05 CM, C-02-213+00			C-07 CM, C-2-174+50								
Vehicles	Head Car Number		Number of Cars		Equipment	N/A										
	N/A		N/A													
Description	An FWSO inspector observed WMATA and Contractor employees working during SafeTrack Surge 12 between CM 213+00 and CM 174+50. The work included thermite field welds, installation of 3 rd rail cover boards and pouring new grout pads. All work appeared to be within WMATA TRST standards and no exceptions were taken. All roadway workers observed appeared to be working safely with all required PPE.						Number of Defects		0							
							Recommended Finding?		No							
							Remedial Action Required?		No							
							Recommended Reinspection?		No							
Remedial Action	N/A															



Inspection Form

FOIA Exemption: All (b)(6)

Form FTA-IR-1

United States Department of Transportation
Federal Transit Administration

Agency/Department Information

Inspection Date	YYYY	MM	DD	Report Number	20170224-WMATA-WP-1		
	2017	02	24				
Rail Agency Name	Washington Metropolitan Area Transit Authority			Rail Agency Department	POWR	Sub- Department	CM
Rail Agency Department Contact Information	Name		Email		Office Phone		Mobile Phone
	[REDACTED]		[REDACTED]		[REDACTED]		[REDACTED]
	[REDACTED]		[REDACTED]		[REDACTED]		[REDACTED]
	[REDACTED]		[REDACTED]		[REDACTED]		[REDACTED]
Inspection Location	C06 – Arlington Cemetery – Track 2						

Inspection Summary

Inspection Activity #	1	2	3	4	5	6
Activity Code	TP-RM-OBS					
Inspection Units	1					
Inspection Subunits	4					
Defects (Number)	0					
Recommended Finding	No					
Remedial Action Required ¹	No					
Recommended Reinspection	No					

Activity Summaries

Inspection Activity #	1	Inspection Subject	C06 – Arlington Cemetery – Expansion Cable Replacement			Activity Code		TP	RM	OBS
Job Briefing Employee Name/Title	Mobile Command		Accompanied Inspector?	Yes	Out Brief Conducted	Yes	Time	0100-0500	Outside Shift	Yes
Related Reports			Related CAPS / Findings							
Related Rules, SOPs, Standards, or Other	Ref	Rule or SOP	Standard		Other / Title		Checklist Reference			
	PREVENTIVE MAINTENANCE INSPECTION (PMI) FOR TRACK FEEDER CABLE - 1000 KCMIL / 1500 KCMIL (REVISION 4, JUNE 16, 2015)									
	ENGINEERING MODIFICATION INSTRUCTIONS (EMI) FOR JUMPER, EXPANSION, AND TRANSITION POWER CABLES REPLACEMENT SYSTEMWIDE (REVISION 2, SEPTEMBER 16, 2016)									

¹ The rail transit agency must provide FTA with the necessary evidence (e.g. maintenance work order system records, photos, documentation, records, data, or other evidence) to close out the Remedial Action. Closeout of Remedial Actions may also be subject to ongoing FTA verification inspections to ensure corrections are sufficient and effective.

Inspector in Charge - Signature		Date
WINSLOW L. POWELL <small>Digitally signed by WINSLOW L. POWELL DN: cn=W.L. Powell, o=U.S. Government, ou=DOT Headquarters, ou=FTABQ, cn=WINSLOW L. POWELL Date: 2017.03.07 14:56:34 -0500</small>		
Inspector in Charge – Name Winslow Powell	Inspection Team Tino Sahoo	



United States Department of Transportation
Federal Transit Administration

Form FTA-IR-1

Inspection Location	Main Track	Yard	Station	OCC	RTA Facility	FTA Office	Track Type	At-grade	Tunnel	Elevated	N/A
	X								X		
Line(s)	C-Line	Track Number	2	Chain Marker and/or Station(s)	From		To				
					CM 235+00		CM 265+00				
Vehicles	Head Car Number		Number of Cars		Equipment	Expansion Cable Replacement					
	N/A		N/A								
Description	<p>The job safety briefing was comprehensive. The hot spots, hazards, clearance areas, communication, and Roadway Access Guide were used as part of the discussion. Since the inspection location was under a SafeTrack maintenance surge, the mobile command provided the safety briefing. The repair crew was working under Exclusive Track Occupancy (ETO) protection. Work mats, shunts, and watchman with a "W" disk were present. Two Roadway Maintenance Machines (RMM) traveled through the work area at 0215. No exceptions were taken to the job safety briefing nor the handling of ETO protection.</p> <p>WMATA was replacing four expansion cables around an expansion joint. The cables were being replaced, moved to the field side of the 3rd rail, and being stood off the ground per the Engineering Modification Instructions (EMI). The 3rd rail material construct at this expansion joint was steel, so the new cables would have to be welded (CADWELD). The CADWELD procedure and materials for the welding come from the manufacturer ERICO. Demolition of the original cables was done using a sledgehammer. The surface on the field side of the 3rd rail was sanded down and heated with a propane torch to eliminate any moisture. The cables were field cut to the proper length, and a sleeve was placed on the ends where the weld was to occur. A graphite mold used to do the CADWELD was heated vigorously using a propane torch to ensure elimination of any moisture and placed on the 3rd rail with the expansion cable. A "shot," the actual welding material, was poured into the mold and ignited. A minimum of 3 feet of slack was provided where the cables transition to the weld location on the 3rd rail, as stated per WMATA's EMI. The cables were stood off the concrete slab (tunnel floor) properly using fiberglass channel struts (Kindorf), fiberglass cable clamps, and Kindorf straps per the EMI.</p> <p>WMATA employed electrical contractors C3M to complete this switch out of cables. From speaking with the WMATA power maintenance supervisor, WMATA has trained C3M on the exact installation procedure. C3M had a crew of eight and WMATA had a crew of two supervising their work with a watchman. WMATA has four repair cable repairs crews, two crews use contractors to handle cables on the ground (COG) and two crews concentrate on a state of good repair for the cables.</p> <p>In WMATA's shop before the night of work, 20 feet length portions of 1000kcmil cable are cut and pre-meggered (500 giga-ohm minimum reading).</p> <p>No issues or concerns were noted and C3M's crew was very efficient.</p>						Number of Defects		0		
							Recommended Finding?		No		
							Remedial Action Required?		No		
							Recommended Reinspection?		No		
Remedial Action	N/A										



Inspection Form

FOIA Exemption: All (b)(6)

Form FTA-IR-1

United States Department of Transportation
Federal Transit Administration

Agency/Department Information

Inspection Date	YYYY	MM	DD	Report Number	20170224-WMATA-WP-2		
	2017	02	24				
Rail Agency Name	Washington Metropolitan Area Transit Authority			Rail Agency Department	POWR	Sub- Department	CBL IN.
Rail Agency Department Contact Information	Name		Email		Office Phone		Mobile Phone
	[REDACTED]		[REDACTED]		[REDACTED]		[REDACTED]
Inspection Location	J03 – Franconia Springfield to J02 – Van Dorn (Track 2)						

Inspection Summary

Inspection Activity #	1	2	3	4	5	6
Activity Code	TP-WI-OBS					
Inspection Units	1					
Inspection Subunits	21					
Defects (Number)	6					
Recommended Finding	Yes					
Remedial Action Required ¹	Yes					
Recommended Reinspection	Yes					

Activity Summaries

Inspection Activity #	1	Inspection Subject					Walking Observation (Cable Inspection)			Activity Code		TP	WI	OBS
Job Briefing Employee Name/Title	WMATA RWIC WMATA Watchman/Lookout WMATA Documenter					Accompanied Inspector?	Yes	Out Brief Conducted	Yes	Time	1000-1400	Outside Shift	No	
Related Reports	20161221-WMATA-WP-3					Related CAPS / Findings								
Related Rules, SOPs, Standards, or Other	Ref		Rule or SOP			Standard		Other / Title		Checklist Reference				
	RWPM													
Inspection Location	Main Track	Yard	Station	OCC	RTA Facility	FTA Office	Track Type	At-grade	Tunnel	Elevated	N/A			
	X							X						
Line(s)	J-Line	Track Number	TRK 2		Chain Marker and/or Station(s)		From		To					
							J03 – Franconia Springfield		J02 – Van Dorn					
Vehicles	Head Car Number		Number of Cars			Equipment	N/A							
	N/A		N/A											
Description	The job safety briefing was comprehensive. The hot spots, hazards, clearance areas, communication, and Roadway Access Guide were used as part of the discussion. No exceptions were taken to the job safety briefing.							Number of Defects		6				
								Recommended Finding?		Yes				
								Remedial Action Required?		Yes				

¹ The rail transit agency must provide FTA with the necessary evidence (e.g. maintenance work order system records, photos, documentation, records, data, or other evidence) to close out the Remedial Action. Closeout of Remedial Actions may also be subject to ongoing FTA verification inspections to ensure corrections are sufficient and effective.

Inspector in Charge - Signature		Date
WINSLOW L. POWELL <small>Digitally signed by WINSLOW L. POWELL DN: cn=US, o=U.S. Government, ou=DOT Headquarters, ou=FTAHQ, cn=WINSLOW L. POWELL Date: 2017.03.07 14:39:53 -0500</small>		
Inspector in Charge – Name Winslow Powell	Inspection Team Tino Sahoo	



	<p>Daily cable inspections are part of the holistic approach WMATA has instituted to prevent cable fires and arcing incidents. On a typical day there are three different WMATA cable inspection crews that are active, and they include three personnel—the Roadway Worker in Charge (RWIC), the Watchman/Lookout, and a documenter of issues in wayside power cable and/or connections. Each crew inspects a different portion of the mainline from 1000–1400 hours. The pictures taken and issues noted are entered into a database for night time cable repair crews to fix.</p> <p>As outlined below, the following issues with the power cables were noted by the FWSO inspector and WMATA personnel during the course of the normal daily cable inspection process. FWSO will follow up to confirm the conclusion of the work once cable issues have been corrected.</p> <ul style="list-style-type: none">• TRK 2 CM 858+00 – Cables lying on the ballast• TRK 2 CM 850+00 – Trackside heater control panel with no door, open to the elements• TRK 2 CM 848+00 – 3rd rail coverboard broke; cables lying on the ballast; cables too close to the 3rd rail• TRK 2 CM 838+00 – Cables lying on the ballast and too close to the 3rd rail• TRK 2 CM 827+00 – Cables lying on the ballast; running rail jumper cables (2) need replacement• TRK 2 CM 826+00 – Conduit stub-up broken; 3rd rail coverboard needs replacement; ballast needs to be spread evenly around feeder cables• TRK 2 CM 825+00 – Cable lying on the ballast• TRK 2 CM 815+00 – Cables lying on the ballast and too close to the 3rd rail• TRK 1 CM 804+00 – Cables lying on the ballast; broken Kindorf straps on fiberglass cable clamps elevating cables off the ground• TRK 2 CM 803+00 – Broken Kindorf strap on fiberglass cable clamp elevating cable off the ground• TRK 2 CM 794+00 – Cables lying on the ballast and too close to the 3rd rail• TRK 2 CM 782+00 – Conduit stub-up broken and needs replacement; running rail jumper cables badly worn and need replacement• TRK 2 CM 773+00 – Cables lying on the ballast and too close to the 3rd rail; 3rd rail coverboard needs replacement• TRK 2 CM 762+00 – Cables lying on the ballast and too close to the 3rd rail; 3rd rail coverboard needs replacement• TRK 2 CM 753+00 – Cables lying on the ballast and too close to the 3rd rail• TRK 2 CM 741+00 – Cables lying on the ballast and too close to the 3rd rail• TRK 2 CM 731+00 – Cables lying on the ballast; Conduit/OZ Gedney bushing broken and needs replacement• TRK 2 CM 722+00 – Cables lying on the ballast and too close to the 3rd rail; 3rd rail coverboard needs replacement• TRK 2 CM 714+00 – Cables lying on the ballast• TRK 2 CM 705+00 – Cables lying on the ballast and too close to the 3rd rail; 3rd rail coverboard needs replacement; 3rd rail post insulator not supporting 3rd rail at expansion joint• TRK 2 CM 695+00 – Cables lying on the ballast and buried in the ballast <p>The cable defects noted in FTA inspection report number 20161221-WMATA-WP-3 have not been addressed, nor has WMATA made repairs from J03 – Franconia Springfield - TRK 2 CM 858+00 to J03 – Franconia Springfield - TRK 2 CM 782+00.</p>	Recommended Reinspection?	Yes
Remedial Action	<ul style="list-style-type: none">• TRK 2 CM 850+00 – Replace door to trackside heater panel• TRK 2 CM 827+00 – Replace running rail jumper cables (2)• TRK 2 CM 826+00 – Repair conduit stub-up• TRK 2 CM 782+00 – Repair conduit stub-up and replace running rail jumper cables (2)• TRK 2 CM 731+00 – Repair conduit/OZ Gedney Bushing• TRK 2 CM 705+00 – Replace and adjust 3rd rail post insulator		



FIGURE 1 - TRK 2 CM 850+00 – TRACKSIDE HEATER PANEL DOOR MISSING



FIGURE 2 - TRK 2 CM 827+00 – RUNNING RAIL JUMPER CABLES WORN



FIGURE 3 - TRK 2 CM 826+00 – CONDUIT STUB-UP AND
HEAT SHRINK COMPROMISED



FIGURE 4 - TRK 2 CM 782+00 – CONDUIT STUB-UP BROKEN AND RUNNING RAIL JUMPER CABLES BADLY WORN



FIGURE 5 - TRK 2 CM 731+00 – CONDUIT/OZ GEDNEY BUSHING BROKEN



FIGURE 6 - TRK 2 CM 705+00 – 3RD RAIL INSULATOR NOT SUPPORTING 3RD RAIL



Inspection Form

FOIA Exemption: All (b)(6)

Form FTA-IR-1

United States Department of Transportation
Federal Transit Administration

Agency/Department Information

Inspection Date	YYYY	MM	DD	Report Number	20170227-WMATA-AD-1		
	2017	02	27				
Rail Agency Name	Washington Metropolitan Area Transit Authority			Rail Agency Department	ROCC	Sub- Department	N/A
Rail Agency Department Contact Information	Name		Email		Office Phone		Mobile Phone
Inspection Location	Carmen Turner Facility 3500 Pennsy Drive, Hyattsville, MD 20785						

Inspection Summary

Inspection Activity #	1	2	3	4	5	6
Activity Code	ROCC-RC-OBS					
Inspection Units	1					
Inspection Subunits	0					
Defects (Number)	0					
Recommended Finding	No					
Remedial Action Required ¹	No					
Recommended Reinspection	No					

Activity Summaries

Inspection Activity #	1	Inspection Subject			Rules Compliance & Safety Management Inspection (SMI) Required Actions Observation of Rail Traffic Controllers (RTCs)			Activity Code		ROCC	RC	OBS
Job Briefing Employee Name/Title	N/A			Accompanied Inspector?	N/A	Out Brief Conducted	Yes	Time	1500-1800	Outside Shift	Yes	
Related Reports	Safety Management Inspection (SMI), Final Report, June 17, 2015			Related CAPS / Findings		Required Actions: R-1-2-a, R-1-6-a, R-1-6-b, R-1-8-a						
Related Rules, SOPs, Standards, or Other	Ref		Rule or SOP		Standard		Other / Title		Checklist Reference			
	MetroRail Safety Rules and Procedures Handbook & Roadway Worker Protection Manual (2014)		Section 1 – General Rules (Radio Usage and Operation): Rules 1.69 – 1.88		X		X		X			
	Permanent Order		NO. T-16-10									
Inspection Location	Main Track	Yard	Station	OCC	RTA Facility	Main Track	Yard	At-grade	Tunnel	Elevated	N/A	
				X							X	
Line(s)	N/A	Track Number	N/A	Chain Marker and/or Station(s)		From			To			
						N/A			N/A			
Vehicles	Head Car Number		Number of Cars		Equipment		N/A					
	N/A		N/A									

¹ The rail transit agency must provide FTA with the necessary evidence (e.g. maintenance work order system records, photos, documentation, records, data, or other evidence) to close out the Remedial Action. Closeout of Remedial Actions may also be subject to ongoing FTA verification inspections to ensure corrections are sufficient and effective.

Inspector in Charge - Signature	AMBUR I DALEY		Digitally signed by AMBUR I DALEY DN: c=US, o=U.S. Government, ou=DOT Headquarters, ou=FMCSAHQ, cn=AMBUR I DALEY Date: 2017.03.02 15:06:20 -05'00'	Date
Inspector in Charge – Name Ambur Daley	Inspection Team Tamara Powell			



Description	<p>General observations:</p> <p>The FWSO inspector conducted an observation of two rail traffic controllers (RTC) at the Rail Operations Control Center (ROCC) on the middle shift at the Ops 1 console, which controls and over-sees operations on the Red Line.</p> <p>The FWSO inspector performed an observation and compliance check that focused mainly on ROCC required actions and radio usage and operation (General Rules, #1.69 – 1.88 and Permanent Order T-16-10). The observation and compliance check was based on findings from the SMI report, as well as rules from the MetroRail Safety Rules & Procedures Handbook.</p> <p>Observations related to SMI report findings:</p> <ul style="list-style-type: none">• <i>R-1-2-a: "WMATA must complete and maintain required annual re-certifications for Rail Traffic Controllers."</i><ul style="list-style-type: none">○ The FWSO inspector observed the radio transmissions and performance of two RTCs.<ul style="list-style-type: none">▪ RTC #1, the Button Controller, was an external hire and has been employed at the ROCC for 3 years.▪ RTC #2, the Radio Controller, has 21 years at WMATA, with 1 year in the ROCC.▪ Both RTCs have taken Bridge Training and are current on RTC recertification.• <i>R-1-6-a: "WMATA must establish and enforce a proper protocol for language and terminology that is used over the radio – to include 100 percent word-for-word read-back for safety-related instructions and unusual train movements."</i><ul style="list-style-type: none">○ Starting at 1500 hours (beginning of observation period), RTC #2 ensured all train movement requests were received and communicated properly through read-backs.○ For each communication loop, both RTCs closed out every transmission with "over" until closing out the loop with "Central out."• <i>R-1-6-b: "As part of the radio protocol required in R-1-6-a, WMATA must establish an approach for communicating and managing all speed restrictions that require two-way communication between the ROCC and train operator and takes full advantage of available electronic AIM system features."</i><ul style="list-style-type: none">○ Both RTCs also informed all trains in the area of all speed restrictions and operating changes due to headway adjustments that were made. There were a few exchanges between the RTC and the operators in regard to their understanding and acknowledgement of the notifications.• <i>R-1-8-a: "WMATA must establish a clear policy that prohibits distractions from the use of cell phones and other electronic devices in the ROCC."</i><ul style="list-style-type: none">○ The FWSO inspector did not observe any violations of the cell phone policy by any ROCC employees at any time during the observation period. <p>There were no exceptions or defects observed during this observation.</p>	Number of Defects	0
		Recommended Finding?	No
		Remedial Action Required?	No
		Recommended Reinspection?	No
Remedial Action	N/A		



Inspection Form

FOIA Exemption: All (b)(6)

Form FTA-IR-1

United States Department of Transportation
Federal Transit Administration

Agency/Department Information

Inspection Date	YYYY	MM	DD	Report Number	20170228-WMATA-WP-1		
	2017	02	28				
Rail Agency Name	Washington Metropolitan Area Transit Authority			Rail Agency Department	TRST	Sub- Department	Maintenance
Rail Agency Department Contact Information	Name		Email		Office Phone		Mobile Phone
	[REDACTED]		[REDACTED]		[REDACTED]		[REDACTED]
	[REDACTED]		[REDACTED]		[REDACTED]		[REDACTED]
	[REDACTED]		[REDACTED]		[REDACTED]		[REDACTED]
Inspection Location	A Line, track 1 between White Flint and Rockville Station.						

Inspection Summary

Inspection Activity #	1	2	3	4	5	6
Activity Code	TRK-RWP-OBS	TRK-GEN-INS				
Inspection Units	1	1				
Inspection Subunits	4	10				
Defects (Number)	1	10				
Recommended Finding	No	Yes				
Remedial Action Required ¹	No	Yes				
Recommended Reinspection	No	Yes				

Activity Summaries

Inspection Activity #	1	Inspection Subject					Roadway Worker Protection – Job Safety Briefing			Activity Code		TRK	RWP	OBS
Job Briefing Employee Name/Title	TRST UNIT 6241, RWIC TRST UNIT 6285, Inspector NHTB Contractor					Accompanied Inspector?	Yes	Out Brief Conducted	Yes	Time	1000 1430	Outside Shift	No	
Related Reports						Related CAPS / Findings								
Related Rules, SOPs, Standards, or Other	Ref		Rule or SOP			Standard		Other / Title		Checklist Reference				
	RWPM													
Inspection Location	Main Track	Yard	Station	OCC	RTA Facility	FTA Office	Track Type	At-grade	Tunnel	Elevated	N/A			
	X							X	X					
Line(s)	A Line	Track Number	1	Chain Marker and/or Station(s)			From		To					
							A-12 CM 641+45		A-14 CM 737+00					
Vehicles	Head Car Number		Number of Cars			Equipment	N/A							
	N/A		N/A											
Description	Job Safety Briefing Observations: <ul style="list-style-type: none">The briefing was provided by TRST Unit 6241 at White Flint Station. The briefing was incomplete and did not fully comply with all WMATA							Number of Defects		1				
								Recommended Finding?		Yes				
								Remedial Action Required?		Yes				

¹ The rail transit agency must provide FTA with the necessary evidence (e.g. maintenance work order system records, photos, documentation, records, data, or other evidence) to close out the Remedial Action. Closeout of Remedial Actions may also be subject to ongoing FTA verification inspections to ensure corrections are sufficient and effective.

Inspector in Charge - Signature		Date
WINSLOW L. POWELL <small>Digitally signed by WINSLOW L. POWELL DN: c=US, o=U.S. Government, ou=DOT Headquarters, ou=FTAHQ, cn=WINSLOW L. POWELL Date: 2017.03.07 14:42:19 -0500</small>		
Inspector in Charge – Name	Inspection Team	
Winslow Powell	Alexander Nepa	

Form FTA-IR-1

Version date: 8/26/16



United States Department of Transportation
Federal Transit Administration

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	requirements. It lacked WMATA level 1 ID check, hospital location, and potential hazards. It did not elaborate on hot spots locations.	Recommended Reinspection?	No
Remedial Action	N/A		

Inspection Activity #	2	Inspection Subject	Track General Inspection				Activity Code	TRK	GEN	INS						
Job Briefing Employee Name/Title	TRST Unit 6241, RWIC TRST Unit 6285 Inspector HNTB Contractor		Accompanied Inspector?	Yes	Out Brief Conducted	Yes	Time	1000 1430	Outside Shift	No						
Related Reports			Related CAPS / Findings													
Related Rules, SOPs, Standards, or Other	Ref	Rule or SOP		Standard		Other / Title		Checklist Reference								
	TRST 1000	SOP T-16-07														
Inspection Location	Main Track	Yard	Station	OCC	RTA Facility	FTA Office	Track Type	At-grade	Tunnel	Elevated	N/A					
	X							X	X							
Line(s)	A Line	Track Number	1	Chain Marker and/or Station(s)	From			To								
					A-12 CM 641+45			A-14 CM 737+00								
Vehicles	Head Car Number		Number of Cars		Equipment	N/A										
	N/A		N/A													
Description	<p>An inspection of the A Line, track 2, from White Flint Station to Rockville Station was conducted. The FWSO inspector, WMATA personnel, and a contractor from HNTB were present for the inspection. The following defects were identified:</p> <ul style="list-style-type: none"> At 1048 hours, WMATA train with lead car number 7018 did not appear to reduce speed to the required 10 MPH while passing the watchman and work group, as required by P.O. T-16-07. The Roadway Worker in Charge (RWIC) reported this incident to the Rail Operations Control Center (ROCC). At 1055 hours, WMATA train lead car number 7214 and trailing car number 7272 did not appear to reduce speed to the required 10 MPH while passing the watchman/lookout and workgroup, as required by P.O. T-16-07. Additionally, this train did not comply with a stop signal given by the RWIC. The RWIC reported this incident to ROCC At CM 673+00, ETS box number 31137 had a missing cover At CM 674+30, right rail head defect measuring 1-1/4 X 5/8 X 1/16-inch deep At CM 676+00, broken third rail support cables At CM 679+00, left rail not properly seated in plates allowing 1-inch vertical deflection under load At CM 692+00, by the strap joint bars, four defective non supporting ties in a row Between CM 693+00 and 688+00 in the curve, defective ties allowing 1/4 inch to 3/8-inch plate movement At A1-700+75, welding strap bar is being used to secure a rail joint, allowing a 1/8-inch gage side mismatch At CM A1-737+00, end cover board missing 						Number of Defects		10							
							Recommended Finding?		Yes							
							Remedial Action Required?		Yes							
							Recommended Reinspection?		Yes							
Remedial Action	<ul style="list-style-type: none"> At CM 673+00, ETS box cover should be replaced At CM 674+30, rail head defect should be ground and welded or rail replaced At CM 676+00, support cable should be replaced At CM 679+00, non-seated ties should be tamped and spikes secured At CM 692+00, four ties should be replaced Between CM 693+00 and 688+00, ties in the curve should be changed At A1-700+75, the strap bar should be replaced with a proper angle joint bars At CM A1-737+00, replace missing end cover board 															



Photos:



Welding strap bars being used as angle bars



Welding straps allowing a 1/8 gage side mismatch. A wheel flange could possibly pick this mismatch allowing the wheel climb onto the rail and cause the railcar to derail.



Rail not properly seated in rail plates permitting 1-inch dynamic vertical deflection under load.



3/4 -inch gap between base of rail and rail plate



Broken third rail support cable.





Inspection Form

FOIA Exemption: All (b)(6)

Form FTA-IR-1

United States Department of Transportation
Federal Transit Administration

Agency/Department Information

Inspection Date	YYYY	MM	DD	Report Number	20170228-WMATA-WP-2		
	2017	02	28				
Rail Agency Name	Washington Metropolitan Area Transit Authority			Rail Agency Department	TRST	Sub- Department	Maintenance
Rail Agency Department Contact Information	Name		Email		Office Phone		Mobile Phone
	[REDACTED]		[REDACTED]		[REDACTED]		[REDACTED]
Inspection Location	A-Line Track 2 Grosvenor (A11) to Friendship Heights (A08)						

Inspection Summary

Inspection Activity #	1	2	3	4	5	6
Activity Code	TRK-JSB-OBS	TRK-WI-PI				
Inspection Units	1	1				
Inspection Subunits	1	1				
Defects (Number)	0	4				
Recommended Finding	No	Yes				
Remedial Action Required ¹	No	Yes				
Recommended Reinspection	No	Yes				

Activity Summaries

Inspection Activity #	1	Inspection Subject					Job Safety Briefing			Activity Code		TRK	JSB	OBS
Job Briefing Employee Name/Title	TRST 6431					Accompanied Inspector?	Yes	Out Brief Conducted	No	Time	1000-1500	Outside Shift	No	
Related Reports	N/A					Related CAPS / Findings		N/A						
Related Rules, SOPs, Standards, or Other	Ref		Rule or SOP			Standard			Other / Title		Checklist Reference			
	TRST 1000													
	RWPM													
Inspection Location	Main Track	Yard	Station	OCC	RTA Facility	FTA Office	Track Type	At-grade	Tunnel	Elevated	N/A			
	X								X					
Line(s)	A	Track Number	2	Chain Marker and/or Station(s)	From				To					
	Grosvenor (A11)				Friendship Heights (A08)									
Vehicles	Head Car Number		Number of Cars		Equipment	N/A								
	N/A		N/A											
Description	FWSO personnel received a Job Safety Briefing from TRST 6431 prior to accessing the roadway. All personal protective equipment (PPE) and roadway worker protection (RWP) ID were checked, and the working limits were reviewed. The briefer covered the places of safety as well as the nearest hospital and safety rule of the day. FWSO and WMATA personnel were granted access to the roadway by the Rail Operations Control Center (ROCC). No exceptions were taken. During the briefing, FWSO inspectors were shown the new Roadway Access Guide for the area,								Number of Defects		0			
									Recommended Finding?		No			
									Remedial Action Required?		No			
									Recommended Reinspection?		No			

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Inspector in Charge - Signature		Date
WINSLOW L. POWELL <small>Digitally signed by WINSLOW L. POWELL DN: c=US, o=U.S. Government, ou=DOT Headquarters, ou=FTAHQ, cn=WINSLOW L. POWELL Date: 2017.03.07 14:44:32 -0500</small>		
Inspector in Charge - Name	Inspection Team	
Winslow Powell	Troy Lloyd, Mike Vitale	



United States Department of Transportation
Federal Transit Administration

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	and closed remedial action 28.									
Remedial Action	N/A									

Inspection Activity #	2	Inspection Subject	Remedial Action Follow Up Inspection					Activity Code	TRK	WI	PI
Job Briefing Employee Name/Title	TRST 6431		Accompanied Inspector?	Yes	Out Brief Conducted	No	Time	1000-1500	Outside Shift	No	
Related Reports	N/A		Related CAPS / Findings		N/A						
Related Rules, SOPs, Standards, or Other	Ref	Rule or SOP		Standard		Other / Title		Checklist Reference			
	TRST 1000										
	RWPM										
Inspection Location	Main Track	Yard	Station	OCC	RTA Facility	FTA Office	Track Type	At-grade	Tunnel	Elevated	N/A
	X								X		
Line(s)	A	Track Number	2	Chain Marker and/or Station(s)	From			To			
					Grosvenor (A11)			Friendship Heights (A08)			
Vehicles	Head Car Number		Number of Cars		Equipment	N/A					
	N/A		N/A								
Description	<p>FWSO personnel performed a follow up inspection of Track 2 of the A-Line between Grosvenor and Friendship Heights. During previous inspections, FWSO has issued 33 remedial actions for this section of track, mostly related to tunnel lighting, drainage, and Emergency Trip Station (ETS) box maintenance. During the walk, FWSO verified and closed 26 of the 33 remedial actions.</p> <p>FWSO inspectors verified lighting repairs throughout the area and were able to close remedial actions 730, 524, 620, 591, and 621. WMATA should continue to ensure that the lighting in the area is kept clean. While much progress has been made to address this issue, FWSO was not able to close remedial action 592, as the lighting was still out at A2 345+00. FWSO inspectors also noted a non-functioning light at A2 332+70.</p> <p>FWSO inspectors were able to close remedial actions 531 and 623 related to blue lights on ETS boxes in the area. However, FWSO could not close remedial actions 731 and 751 related to ETS box function. FWSO will schedule a follow up inspection with the communications department to verify the ETS boxes are functioning properly in the area.</p> <p>FWSO inspectors were also able to close remedial actions 683 and 685 related to leaks and drainage, but were not able to close remedial action 528 due to standing water under the third rail at A2 434+20. Additionally, FWSO noted a leak coming from a compromised drainage pipe at A2 451+00, standing water between A2 439+00 and 438+40, and a clog under ATC equipment restricting drainage at A2 351+90.</p> <p>FWSO inspectors were also able to close the following remedial actions:</p> <ul style="list-style-type: none"> • 962 – Repair joint bar at A2 527+60 • 741 – Correct rail surface defects at A2 516+00 • 743 – Correct rail surface defects at A2 515+80 • 1144 and 1145 – Secure loose wires at A2 466+00 • 538 – Elevate expansion cables 418+30 (WMATA Eliminated Joint) • 544 – Elevate expansion cables 408+80 (WMATA Eliminated Joint) • 1019 – Replace defective plant weld at A2 400+30 • 595, 629, and 632 – Replace cover and correct exposed wire in junction box at A2 381+50 • 576 – Repair damaged grout pad at A2 369+20 • 598 – Correct 3rd rail end approach height at A2 363+30 • 640 – Correct exposed wires and cover junction box at A2 347+89 • 600 – Correct 3rd rail gauge at A2 309+20 • 601 – Mitigate 3rd rail corrosion at A2 307+00 							Number of Defects		4	
								Recommended Finding?		Yes	
								Remedial Action Required?		Yes	
								Recommended Reinspection?		Yes	



	<p>FWSO inspectors were not able to close the following remedial actions:</p> <ul style="list-style-type: none">• 734 – Replace end approach cover board at A2 556+30• 738 – Replace end approach cover board at A2 547+30• 742 – Replace end approach cover board at A2 516+00 <p>FWSO noted 2 new defects during the inspection:</p> <ul style="list-style-type: none">• A2 551+40 – Negative return cables have compromised insulation and should be replaced.• A2 517+20 – Mismatch in joint bar types and rail end mismatch. WMATA made required repairs. <p>FWSO inspectors noted significant improvement in the condition of the fasteners and the drainage in the tunnel following the track quality improvement program shutdowns in January of 2017. WMATA should ensure that it continues to prioritize drainage in the area.</p>		
Remedial Action	<ul style="list-style-type: none">• WMATA must replace negative return cables at A2 551+40.• WMATA must repair compromised drainage pipe at A2 451+00• WMATA must mitigate staging water between A2 439+00 and 438+40• WMATA must clear clog under ATC equipment restricting drainage at A2 351+90.		

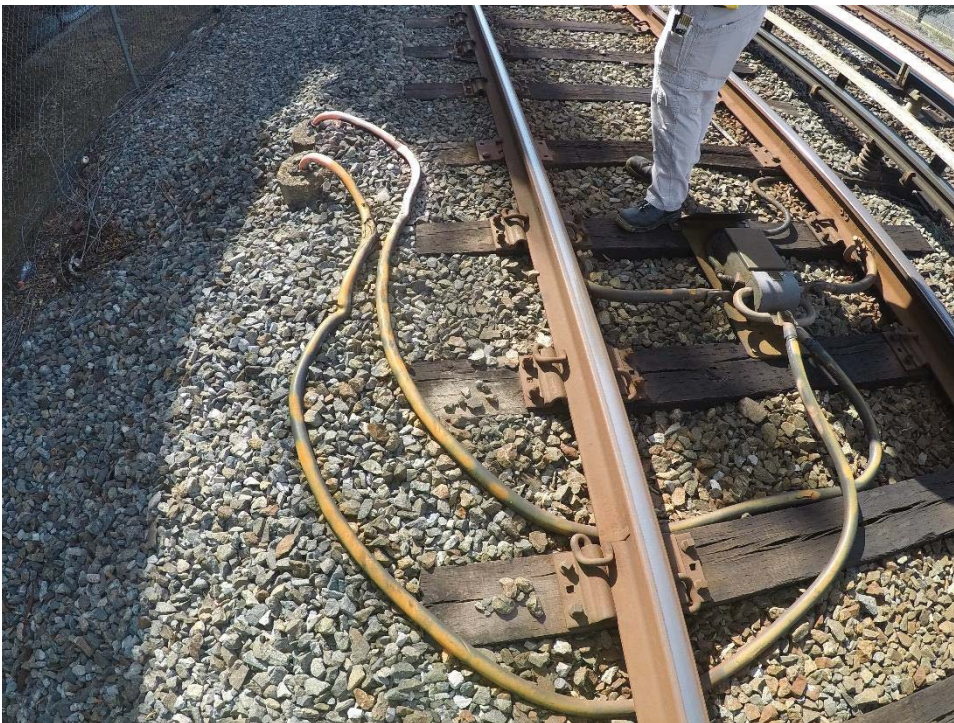
Photos:



Joint Bar mismatch at A2 517+20



Broken Pipe at A2 451+00



Deteriorating insulation on negative return cables at A2 551+40