



# 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	20170501-WMATA-AG-1		
	2017	05	01				
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]
	[REDACTED]		[REDACTED]		[REDACTED]		[REDACTED]
	[REDACTED]		[REDACTED]		[REDACTED]		[REDACTED]
	[REDACTED]		[REDACTED]		[REDACTED]		[REDACTED]
Inspection Location	E-Line, Track 2						

## Inspection Summary

Inspection Activity #	1	2	3	4	5	6
Activity Code	TRK-RWP-OBS	TRK-GEN-OBS				
Inspection Units	1	1				
Inspection Subunits	1	1				
Defects (Number)	0	0				
Recommended Finding	No	No				
Remedial Action Required <sup>1</sup>	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 # 6014 TRST Unit # 6077 RWIC/Escort				Accompanied Inspector?	Yes	Out Brief Conducted	Yes	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					
	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)	E-Line	Track Number	track 2		Chain Marker and/or Station(s)		From		To					
							Greenbelt Station (E10)		CM E2-590+00					
Vehicles	Head Car Number		Number of Cars		Equipment		N/A							
	N/A		N/A											
Description										Number of Defects		0		

<sup>1</sup> 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 <b>ADAM ANTHONY GIOVANDO</b>		Digitally signed by ADAM ANTHONY GIOVANDO DN: c=US, o=U.S. Government, ou=FRA FRAFTWorthTX, ou=DOT FRAFTWorthTX, cn=ADAM ANTHONY GIOVANDO Date: 2017.05.08 12:51:03 -05'00'		Date
Inspector in Charge – Name Adam Giovando	Inspection Team Alexander Nepa			



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	The TRST unit 6014 conducted a job safety briefing at the Greenbelt Station. The briefing was fully compliant with WMATA's Roadway Worker's Protection Manual (RWPM) requirements. It included WMATA badge-level verification, type of protection, inaccessible track (IT), potential hazards, hot spots and hospital location. No exceptions were taken to the job safety briefing.	Recommended Finding?	No
		Remedial Action Required?	No
		Recommended Reinspection?	No
Remedial Action	N/A		

Activity Summaries

Inspection Activity #	2	Inspection Subject	Track General Observation				Activity Code	TRK	WI	PI						
Job Briefing Employee Name/Title	TRST Unit # 6014 TRST Unit # 6077 RWIC/Escort		Accompanied Inspector?	Yes	Out Brief Conducted	Yes	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 rev. 6															
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	track 2	Chain Marker and/or Station(s)	From			To								
					Greenbelt Station (E10), SafeTrack Surge 14			CM E2-590+00, SafeTrack Surge 14								
Vehicles	Head Car Number		Number of Cars		Equipment	N/A										
	N/A		N/A													
Description	<p>FWSO team members performed an observation of completed track repairs, SafeTrack Surge 14, between Greenbelt Station (E10) and CM E2-590+00.</p> <p><b>Notable Observations:</b></p> <ul style="list-style-type: none"> <li>A 5-inch engine burn-type defect was observed on the running surface, left rail, track two. This is listed as a green color-coded defect in TRST 1000 section 5.11.9. (See attached photo 3.) <ul style="list-style-type: none"> <li>Green defects are monitored by WMATA but no correction is required</li> </ul> </li> <li>All switch timbers in the diamond area of the E10 interlocking had been replaced.</li> <li>Many of the standard 8'6" crossties between the areas observed had been replaced. In some instances, splitting in the wood when lag bolts were installed was observed. (See attached photo 1.)</li> <li>Between CM 624+50 and CM 605+00, relay F-21 fasteners had been reinstalled to new crossties.</li> <li>On several of the newly installed crossties, the gage spike was not driven down completely. (See attached photo 2.)</li> </ul>						Number of Defects		0							
							Recommended Finding?		No							
							Remedial Action Required?		No							
							Recommended Reinspection?		No							
Remedial Action	N/A															



Photo 1: Newly installed crosstie split when lag bolt was installed.



Photo 2: Gage spike not completely driven down.



Photo 3: Four-inch running surface rail defect.





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Federal Transit Administration

## Agency/Department Information

Inspection Date	YYYY	MM	DD	Report Number	20170501-WMATA-AG-2		
	2017	05	01				
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]
	[REDACTED]		[REDACTED]		[REDACTED]		[REDACTED]
	[REDACTED]		[REDACTED]		[REDACTED]		[REDACTED]
Inspection Location	McPherson Square Station (C02) on the C-Line						

## Inspection Summary

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

## Activity Summaries

Inspection Activity #	1	Inspection Subject				Rail Compliance Inspection			Activity Code		RTRA	GEN	OBS
Job Briefing Employee Name/Title	N/A				Accompanied Inspector?	No	Out Brief Conducted	No	Time	0600-1200	Outside Shift	Yes	
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	

<sup>1</sup> 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 <b>ADAM ANTHONY GIOVANDO</b>		Digitally signed by ADAM ANTHONY GIOVANDO DN: c=US, o=U.S. Government, ou=FRA FRAFTWorthTX, ou=DOT FRAFTWorthTX, cn=ADAM ANTHONY GIOVANDO Date: 2017.05.08 12:48:21 -05'00'		Date
Inspector in Charge - Name Adam Giovando		Inspection Team Chris Difatta		



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Line(s)	C-Line	Track Number	1	Chain Marker and/or Station(s)	From McPherson Square Station (C02)	To McPherson Square Station (C02)
Vehicles	Head Car Number N/A	Number of Cars N/A	Equipment	N/A		
Description	<p>The FWSO Inspector conducted Rail Compliance Inspections on the C-Line at McPherson Square Station (C02). The Inspector observed 18 trains for compliance with the Metrorail Safety Rules and Procedures Handbook (MSRPH).</p> <p><b>The FWSO Inspector did not observe any defects during observations.</b></p> <p><b>Other Notable Observations:</b></p> <ul style="list-style-type: none"><li><u>Train Handling:</u><ul style="list-style-type: none"><li>Operated to 8-car station berthing marker at the end of the platform.</li><li>Head out of the window when stopping an 8 car consist.</li><li>Application of good train handling with smooth station stops, and smooth and even acceleration and deceleration.</li></ul></li><li><u>Stations and Doors:</u><ul style="list-style-type: none"><li>Verified platform side of the train by sticking his/her head out of the cab window.</li><li>Looked at doors on platform side of train to verify any activity in front of the doors for 5 seconds before opening the doors.</li><li>Opened the doors on the correct platform side and made station announcements.</li><li>Observed train loading with head outside cab window to ensure that customers were not hit or trapped within doors.</li><li>Closed the window and looked in the direction of travel before moving the train forward.</li></ul></li></ul>				Number of Defects	0
					Recommended Finding?	No
					Remedial Action Required?	No
					Recommended Reinspection?	No
Remedial Action	N/A					



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## Agency/Department Information

Inspection Date	YYYY	MM	DD	Report Number	20170503-WMATA-WP-1		
	2017	05	03				
Rail Agency Name	Washington Metropolitan Area Transit Authority			Rail Agency Department	Car Maintenance	Sub- Department	Inspection
Rail Agency Department Contact Information	Name		Email		Office Phone		Mobile Phone
	[REDACTED]		[REDACTED]		[REDACTED]		[REDACTED]
	[REDACTED]		[REDACTED]		[REDACTED]		[REDACTED]
	[REDACTED]		[REDACTED]		[REDACTED]		[REDACTED]
	[REDACTED]		[REDACTED]		[REDACTED]		[REDACTED]
Inspection Location	New Carrollton Service and Inspection Facility						

## Inspection Summary

Inspection Activity #	1	2	3	4	5	6
Activity Code	VM-SI-WI					
Inspection Units	1					
Inspection Subunits	1					
Defects (Number)	0					
Recommended Finding	No					
Remedial Action Required <sup>1</sup>	No					
Recommended Reinspection	No					

## Activity Summaries

Inspection Activity #	1	Inspection Subject			Shop Observations – New Carrollton Yard			Activity Code		VM	SI	PI
Job Briefing Employee Name/Title	Superintendent Car Inspection			Accompanied Inspector?	Yes	Out Brief Conducted	Yes	Time	0800-1200	Outside Shift	No	
Related Reports				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 (MSRPH)		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		OSHA Standard 1926.100							
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				
						N/A		N/A				
Vehicles	Head Car Number		Number of Cars		Equipment		N/A					

<sup>1</sup> 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		Digitally signed by WINSLOW L. POWELL DN: c=US, o=U.S. Government, ou=DOT Headquarters, ou=FTAHQ, cn=WINSLOW L. POWELL Date: 2017.05.10 14:03:42 -04'00'		Date
Inspector in Charge – Name Winslow Powell		Inspection Team Tom Wozniak, Chris Difatta				



	N/A	N/A		
Description	<p>FWSO inspectors conducted a general observation of shop activities performed by maintenance personnel at the New Carrollton Maintenance Facility. FWSO inspectors noted that all mechanics had the proper personal protective equipment (PPE), proper tooling, current maintenance procedures, bulletins, and engineering modification instructions (EMIs). Also noted was a positive and cooperative attitude, as well as an enthusiastic willingness to demonstrate their skills. FWSO inspectors observed annual maintenance on four (4) rail cars. Inspection activities were performed in the interior and exterior of each car.</p> <p>The exterior inspection included a complete underbody inspection, brake check, air pressure component fluid level check, wheel wear inspection, and electrical component inspection. All tests were performed in compliance with WMATA standards and no defects were noted.</p> <p>A thorough interior inspection was also conducted by the WMATA inspection team. FWSO inspectors observed non-compliant seats being replaced. WMATA inspectors also performed inspections of door function and intercom systems. All tests were performed in compliance with WMATA standards and no defects were noted.</p> <p>Mechanics had easy access to inspection and repair procedures for the car series as well as the appropriate procedures on hand while inspecting each component. The procedures are stored and labeled by task number to allow for easy access for mechanics.</p> <p><b>There were no defects noted during observation.</b></p> <p><b>Other notable observations:</b></p> <ul style="list-style-type: none"><li>FWSO Inspectors observed the use of new securement chocks that will be used at all locations.<ul style="list-style-type: none"><li>These chocks, shown in photo 1 below, are orange to allow for increased visibility.</li></ul></li><li>FWSO inspected shop tools for proper calibration dates. All tools inspected were within calibration limits.</li><li>FWSO observed a very neat and orderly shop atmosphere, proper placement of tools, equipment, and shop material were stored in a manner where it did not foul any working track and did not create a tripping hazard for employees.</li></ul>	Number of Defects	0	
		Recommended Finding?	No	
		Remedial Action Required?	No	
		Recommended Reinspection?	No	
Remedial Action	N/A			



Photo 1: Vehicle Securement Chock





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## Agency/Department Information

Inspection Date	YYYY	MM	DD	Report Number	20170503-WMATA-WP-2		
	2017	05	03				
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]
	[REDACTED]		[REDACTED]		[REDACTED]		[REDACTED]
Inspection Location	Braddock Road (C12), track 1 and Braddock Road TPSS (Traction Power Substation)						

## Inspection Summary

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

## Activity Summaries

Inspection Activity #	1	Inspection Subject	Braddock Road (C12), Pulling two additional negative return cables (1000 kcmil, 2 kV)			Activity Code	TP	RM	OBS	
Job Briefing Employee Name/Title	WMATA RWIC		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			
	ENGINEERING MODIFICATION INSTRUCTIONS (EMI) FOR JUMPER, EXPANSION, AND TRACTION POWER CABLES REPLACEMENT SYSTEMWIDE (REVISION 2, SEPTEMBER 16, 2016)									
	TRACTION POWER DESIGN DRAWING (DD-TP-SSI-013, REVISION 0, AUGUST 2001)									

<sup>1</sup> 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		Digitally signed by WINSLOW L. POWELL. DN: c=US, o=U.S. Government, ou=DOT Headquarters, ou=FTAHQ, cn=WINSLOW L. POWELL Date: 2017.05.10 07:19:10 -04'00'		Date
Inspector in Charge - Name	Winslow Powell		Inspection Team	Tino Sahoo		



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Federal Transit Administration

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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	1	Chain Marker and/or Station(s)	From		To				
					CM 523+00		CM 523+00				
Vehicles	Head Car Number	Number of Cars		Equipment	Negative return cables (1000 kcmil, 2 kV)						
	N/A	N/A									
Description	<p>FWSO Inspectors observed WMATA's power department and electrical contractors performing the task of pulling two additional negative return cables from Braddock Road TPSS (which is adjacent to trackside to a trackside impedance bond). Pulling of cables was done via a tugger. Total distance for pulling each cable is 220 feet. Additional negative return cables were installed to support the upgrade to 100% 7000 series 8-car trains.</p> <p>During the inspection, the FWSO Inspectors observed the contractor pulling and installing negative return cables. This operation was conducted per the Engineering Modification Instruction (EMI) - originally issued on September 16, 2016 - for jumper, expansion, and transition power cable replacement system wide.</p> <p><b>The FWSO Inspector and WMATA personnel did not note any defects during the replacement process.</b></p>							Number of Defects		0	
								Recommended Finding?		No	
								Remedial Action Required?		No	
								Recommended Reinspection?		No	
Remedial Action	N/A										



# Inspection Form

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Form FTA-IR-1

United States Department of Transportation  
Federal Transit Administration

## Agency/Department Information

Inspection Date	YYYY	MM	DD	Report Number	20170506-WMATA-WP-1		
	2017	05	06				
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]
	[REDACTED]		[REDACTED]		[REDACTED]		[REDACTED]
Inspection Location	Bethesda (A09) to Tenleytown-AU (A07) track 2; Tenleytown-AU (A07) Station Platform						

## Inspection Summary

Inspection Activity #	1	2	3	4	5	6
Activity Code	TP-AMF-OBS	TP-WI-OBS				
Inspection Units	1	1				
Inspection Subunits	1	1				
Defects (Number)	0	3				
Recommended Finding	No	Yes				
Remedial Action Required <sup>1</sup>	No	Yes				
Recommended Reinspection	No	Yes				

## Activity Summaries

Inspection Activity #	1	Inspection Subject			Tenleytown-AU (A07) Advance Mobile Flagger (AMF) Observation			Activity Code		TP	AMF	OBS
Job Briefing Employee Name/Title	WMATA RWIC			Accompanied Inspector?	Yes	Out Brief Conducted	Yes	Time	0900-1330	Outside Shift	No	
Related Reports				Related CAPS / Findings								
Related Rules, SOPs, Standards, or Other	Ref			Rule or SOP		Standard		Other / Title		Checklist Reference		
	WMATA PERMANENT ORDER R-17-03 ADVANCED MOBILE FLAGGER (FRIDAY APRIL 28, 2017)											
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		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									
Description	The job safety briefing was comprehensive. The hot spots, hazards, clearance areas,							Number of Defects		0		

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Inspector in Charge - Signature		WINSLOW L. POWELL		Digitally signed by WINSLOW L. POWELL DN: c=US, o=U.S. Government, ou=DOT Headquarters, ou=FTAHQ, cn=WINSLOW L. POWELL Date: 2017.05.16 13:48:41 -0400		Date
Inspector in Charge - Name Winslow Powell		Inspection Team Tino Sahoo				



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	<p>communication, and Roadway Access Guide were used as part of the discussion. No exceptions were taken to the job safety briefing.</p> <p>The FWSO Inspector observed the Advance Mobile Flagger (AMF) perform his duties to notify Class I/Class II vehicle operators that a mobile work crew was on the tracks ahead of them per Permanent Order R-17-03. This order was issued on April 28, 2017. The AMF had the proper personal protection equipment (PPE) required in addition to a flashing amber lantern, orange flag (18" x 18"), radio, air horn, and whistle. The AMF read from a script card to alert train operators about a mobile work crew ahead, speed stipulations, blasting of mainline horn requirements, and following the mobile work crew's roadway worker in charge's (RWIC's) hand signals. No issues/concerns or exceptions were taken to the AMF performing his duties.</p> <p><b>The FWSO Inspector did not note any defects.</b></p>						<b>Recommended Finding?</b>	No
							<b>Remedial Action Required?</b>	No
							<b>Recommended Reinspection?</b>	No
<b>Remedial Action</b>	N/A							

<b>Inspection Activity #</b>	2	<b>Inspection Subject</b>			Walking Observation (Cable Inspection)			<b>Activity Code</b>		TP	WI	OBS
<b>Job Briefing Employee Name/Title</b>	WMATA RWIC			<b>Accompanied Inspector?</b>	Yes	<b>Out Brief Conducted</b>	Yes	<b>Time</b>	0900-1330	<b>Outside Shift</b>	No	
<b>Related Reports</b>				<b>Related CAPS / Findings</b>								
<b>Related Rules, SOPs, Standards, or Other</b>	Ref			Rule or SOP		Standard		Other / Title		Checklist Reference		
	TRACK AND STRUCTURES DIVISION – TRST 1000 TRACK MAINTENANCE AND INSPECTION MANUAL (REVISION 7, MARCH 2017)											
<b>Inspection Location</b>	Main Track	Yard	Station	OCC	RTA Facility	FTA Office	<b>Track Type</b>	At-grade	Tunnel	Elevated	N/A	
	X								X			
<b>Line(s)</b>	A-Line	<b>Track Number</b>		track 2	<b>Chain Marker and/or Station(s)</b>		From		To			
							Bethesda (A09)		Friendship Heights (A08)			
<b>Vehicles</b>	Head Car Number		Number of Cars		<b>Equipment</b>		N/A					
	N/A		N/A									
<b>Description</b>	Daily cable inspections are part of the holistic approach WMATA has instituted to prevent cable fires and arcing incidents. The pictures taken and issues noted were							<b>Number of Defects</b>		3		
								<b>Recommended Finding?</b>		Yes		
								<b>Remedial Action Required?</b>		Yes		





	<p>entered into a database for nighttime cable repair crews to fix.</p> <p><b>The following new defects were observed and were not in compliance with TRACK AND STRUCTURES DIVISION – TRST 1000 TRACK MAINTENANCE AND INSPECTION MANUAL (REVISION 7, MARCH 2017). There were no color-coded conditions noted:</b></p> <ul style="list-style-type: none"><li>• TRK 2 CM 325+00 – Mud and standing water surrounding power conduit stub-ups, orange boots, and 3<sup>rd</sup> rail post insulators. (See Figure 1.)</li><li>• TRK 2 CM 304+00 – Mud and standing water surrounding power conduit stub-ups, orange boots, and 3<sup>rd</sup> rail post insulators. (See Figure 2.)</li><li>• TRK 2 CM 382+00 to TRK 2 CM 303+00 – Scuppers, inlets, and catch basin approaches were obstructed with mud or debris.</li></ul> <p><b>Other Notable Observations:</b></p> <ul style="list-style-type: none"><li>• TRK 2 CM 382+00 to TRK 2 CM 380+00 – Standing water by 3<sup>rd</sup> rail and 3<sup>rd</sup> rail insulators</li><li>• TRK 2 CM 376+00 to TRK 2 CM 374+00 – Re-lamping and cleaning of lens of tunnel light fixtures</li><li>• TRK 2 CM 371+50 – Mud and standing water by 3<sup>rd</sup> rail post insulators</li><li>• TRK 2 CM 360+30 – Mud and standing water by 3<sup>rd</sup> rail post insulators</li><li>• TRK 2 CM 358+50 – Standing water by 3<sup>rd</sup> rail post insulators</li><li>• TRK 2 CM 356+00 – Water leaking from tunnel wall</li><li>• TRK 2 CM 352+80 to TRK 2 CM 352+00 – Standing water by 3<sup>rd</sup> rail post insulators</li><li>• TRK 2 CM 351+90 to TRK 2 CM 350+00 – Standing water by 3<sup>rd</sup> rail post insulators</li><li>• TRK 2 CM 348+00 – Standing water by 3<sup>rd</sup> rail post insulators</li><li>• TRK 2 CM 348+00 – Standing water by 3<sup>rd</sup> rail post insulators</li><li>• TRK 2 CM 345+00 – Standing water by 3<sup>rd</sup> rail post insulators</li><li>• TRK 2 CM 344+60 – Standing water by 3<sup>rd</sup> rail post insulators</li><li>• TRK 2 CM 342+50 – Standing water by 3<sup>rd</sup> rail post insulators</li><li>• TRK 2 CM 341+90 – Water leaking from tunnel ceiling</li><li>• TRK 2 CM 341+00 – Standing water by 3<sup>rd</sup> rail post insulators</li><li>• TRK 2 CM 340+00 – Standing water by 3<sup>rd</sup> rail post insulators</li><li>• TRK 2 CM 339+00 – Standing water by 3<sup>rd</sup> rail post insulators</li><li>• TRK 2 CM 336+00 – Standing water by 3<sup>rd</sup> rail post insulators</li><li>• TRK 2 CM 326+00 – Missing 3<sup>rd</sup> rail cover board</li><li>• TRK 2 CM 325+00 – Missing 3<sup>rd</sup> rail cover board</li><li>• TRK 2 CM 323+00 to TRK 2 CM 322+00 – Standing water by 3<sup>rd</sup> rail post insulators</li><li>• TRK 2 CM 305+74 – Missing 3<sup>rd</sup> rail cover board on end approach</li></ul> <p>FWSO will follow up to confirm the conclusion of the work once the cable and tunnel issues have been corrected.</p>	<b>Recommended Reinspection?</b>	Yes
<b>Remedial Action</b>	<p>To achieve compliance with WMATA's requirements:</p> <ul style="list-style-type: none"><li>• WMATA must remove mud and water surrounding power conduit stub-ups, orange boots, and 3<sup>rd</sup> rail post insulators. They must also mitigate water intrusion. (TRK 2 CM 325+00)</li><li>• WMATA must remove mud and water surrounding power conduit stub-ups, orange boots, and 3<sup>rd</sup> rail post insulators. They must also mitigate water intrusion. (TRK 2 CM 304+00)</li><li>• WMATA must clean all scuppers, inlets, and catch basin approaches so accumulated water can be drained as designed. (TRK 2 CM 382+00 to TRK 2 CM 303+00)</li></ul>		



FIGURE 1 - TRK 2 CM 325+00 – MUD AND STANDING WATER SURROUNDING POWER CONDUIT STUB-UPS, ORANGE BOOTS, AND 3<sup>RD</sup> RAIL POST INSULATORS



FIGURE 2 - TRK 2 CM 304+00 – MUD AND STANDING WATER SURROUNDING POWER CONDUIT STUB-UPS, ORANGE BOOTS, AND 3<sup>RD</sup> RAIL POST INSULATORS



# 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	20170508-WMATA-WP-1		
	2017	05	08				
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]
	[REDACTED]		[REDACTED]		[REDACTED]		[REDACTED]
	[REDACTED]		[REDACTED]		[REDACTED]		[REDACTED]
	[REDACTED]		[REDACTED]		[REDACTED]		[REDACTED]
Inspection Location	New Carrollton Rail Facility						


## Inspection Summary

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

## Activity Summaries

Inspection Activity #	1	Inspection Subject	Rules Compliance Observation			Activity Code		RTRA	GEN	OBS	
Job Briefing Employee Name/Title	Patrick Dixon		Accompanied Inspector?	No	Out Brief Conducted	Yes	Time	0800-1200	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	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

<sup>1</sup> 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	 Digitally signed by WINSLOW L. POWELL DN: c=US, o=U.S. Government, ou=DOT Headquarters, ou=FTAHQ, cn=WINSLOW L. POWELL Date: 2017.05.16 13:51:02 -04'00'	Date
Inspector in Charge - Name	Winslow Powell			Inspection Team



United States Department of Transportation  
Federal Transit Administration

Form FTA-IR-1

		x									x					
Line(s)	Orange	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													
Description	<p>The FWSO Inspectors conducted a rail yard inspection at the New Carrollton Rail Yard. During the inspection, the FWSO inspectors observed daily put-ins, radio procedures and safety stops on six train sets.</p> <p><b><u>Yard Observations:</u></b></p> <ul style="list-style-type: none"><li><b><u>Daily Put-ins:</u></b><ul style="list-style-type: none"><li>An FWSO Inspector positioned himself in the interlocking operator's control tower and observed daily put-ins. A total of six train sets arrived into the yard for layover. No exceptions were taken.</li></ul></li><li><b><u>Radio Procedures:</u></b><ul style="list-style-type: none"><li>An FWSO inspector observed compliant radio communication with regards to the "over and out" requirements and positive "word for word" repeat back.</li></ul></li><li><b><u>Safety Stops:</u></b><ul style="list-style-type: none"><li>Observations on six trains arriving at the facility were observed for proper safety stops. All were compliant with Operating Rule 3.89.</li></ul></li></ul> <p><b>No exceptions were taken during observation.</b></p>						<b>Number of Defects</b>		0							
							<b>Recommended Finding?</b>		No							
							<b>Remedial Action Required?</b>		No							
							<b>Recommended Reinspection?</b>		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	20170509-WMATA-WP-1		
	2017	05	09				
Rail Agency Name	Washington Metropolitan Area Transit Authority			Rail Agency Department	Car Maintenance	Sub- Department	Inspection
Rail Agency Department Contact Information	Name		Email		Office Phone		Mobile Phone
	[REDACTED]		[REDACTED]		[REDACTED]		[REDACTED]
	[REDACTED]		[REDACTED]		[REDACTED]		[REDACTED]
	[REDACTED]		[REDACTED]		[REDACTED]		[REDACTED]
	[REDACTED]		[REDACTED]		[REDACTED]		[REDACTED]
	[REDACTED]		[REDACTED]		[REDACTED]		[REDACTED]
Inspection Location	Brentwood Service and Inspection Facility						

## Inspection Summary

Inspection Activity #	1	2	3	4	5	6
Activity Code	VM-SI-WI					
Inspection Units	1					
Inspection Subunits	1					
Defects (Number)	0					
Recommended Finding	No					
Remedial Action Required <sup>1</sup>	No					
Recommended Reinspection	No					

## Activity Summaries

Inspection Activity #	1	Inspection Subject	Shop Observations – Brentwood Yard				Activity Code		VM	SI	PI
Job Briefing Employee Name/Title	Superintendent Car Inspection		Accompanied Inspector?	Yes	Out Brief Conducted	Yes	Time	0800-1200	Outside Shift	No	
Related Reports			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 (MSRPH)	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		OSHA Standard 1926.100							
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			
					N/A			N/A			

<sup>1</sup> 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	Digitally signed by WINSLOW L. POWELL DN: cn=US, o=U.S. Government, ou=DOT Headquarters, ou=FTAHQ, cn=WINSLOW L. POWELL Date: 2017.05.16 13:53:34 -0400	Date
Inspector in Charge – Name Winslow Powell	Inspection Team Tom Wozniak, Chris Difatta			



United States Department of Transportation  
Federal Transit Administration

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Vehicles	Head Car Number	Number of Cars	Equipment	N/A			
	N/A	N/A					
Description	<p>FWSO Inspectors conducted a general observation of shop activities performed by maintenance personnel at the Brentwood Maintenance Facility. FWSO Inspectors noted that all mechanics had the proper personal protective equipment (PPE), proper tooling, current maintenance procedures, bulletins, and engineering modification instructions (EMIs). Also noted was an extremely positive and cooperative attitude, as well as an enthusiastic willingness to demonstrate their skills.</p> <p>FWSO Inspectors observed inspection activities performed in the interior and exterior of each car. The inspectors observed annual maintenance on two 7K series transit vehicles. This maintenance included a complete underbody inspection. This involved checking brakes, fluid levels air pressure components, wheels and all electrical functions. A thorough interior inspection was also conducted. The inspectors observed noncompliant seats being replaced, as well as an inspection of proper door function and intercom systems. Mechanics had easy access to inspection and repair procedures for the car series as well as the appropriate procedures on hand while inspecting each component. The procedures are stored and labeled by task number.</p> <p><b>There were no defects noted during observation.</b></p> <p><b>Other notable observations:</b></p> <ul style="list-style-type: none"><li>FWSO Inspectors examined shop tools for proper calibration dates.</li><li>FWSO Inspectors observed a very neat and orderly shop atmosphere which involved proper placement of tools, equipment and shop material. They were stored in a manner which it did not foul any working track nor create a tripping hazard for employees.</li></ul>			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	20170510-WMATA-AD-1		
	2017	05	10				
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]
	[REDACTED]		[REDACTED]		[REDACTED]		[REDACTED]
Inspection Location	Forest Glen Station (B09) Ballston Station (K04)						

## Inspection Summary

Inspection Activity #	1	2	3	4	5	6
Activity Code	TRST-RWP-OBS	TRST-RWP-OBS				
Inspection Units	1	1				
Inspection Subunits	1	1				
Defects (Number)	1	0				
Recommended Finding	No	No				
Remedial Action Required <sup>1</sup>	Yes	No				
Recommended Reinspection	No	No				

## Activity Summaries

Inspection Activity #	1	Inspection Subject					Advanced Mobile Flagman – Observations			Activity Code		TRST	RWP	OBS
Job Briefing Employee Name/Title	N/A					Accompanied Inspector?	N/A	Out Brief Conducted	No	Time	1110am	Outside Shift	No	
Related Reports						Related CAPS / Findings								
Related Rules, SOPs, Standards, or Other	Ref		Rule or SOP		Standard		Other / Title		Checklist Reference					
	Permanent Order		R-17-03				AMF							
			T-16-07 rev. 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)	B-Line		Track Number	2	Chain Marker and/or Station(s)		From		To					
							B09		B08					
Vehicles	Head Car Number		Number of Cars		Equipment		N/A							
	7127		8											
Description	Observations:							Number of Defects		1				
								Recommended Finding?		No				

<sup>1</sup> 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=FMCSAHQ, ou=DOT Headquarters, cn=AMBUR I DALEY Date: 2017.05.16 09:55:06 -04'00'	Date
Inspector in Charge – Name Ambur Daley	Inspection Team Ambur Daley, Robert Maniuszko			

Form FTA-IR-1

Version date: 8/26/16



United States Department of Transportation  
Federal Transit Administration

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	<ul style="list-style-type: none"> <li>The Forest Glen Advanced Mobile Flagger (AMF) and the Train Operator (TO) of Lead Car 7127 were observed at approximately 1110 hrs.</li> <li>The AMF was not holding the orange flag. The flag was leaning against the wall.</li> <li>The Amber Flashing Lantern/E-Flare was placed as required.</li> <li>The AMF engaged in casual conversation with the TO. The script was not used until the FTA Inspector was observed.</li> <li>The TO did not sound two short bursts of her mainline horn when she observed the AMF</li> <li>The TO did not sound short bursts of the mainline horn when leaving the station until the mobile work crew was observed</li> <li>The TO did not sound the mainline horn when exiting the portal</li> <li>The TO did not reduce speed to one-half of regulated speed</li> <li>The TO did not sound two short blasts when she observed the Mobile Work crew</li> <li>The TO did slow the train, once she observed the Mobile Work Crew, to 10 mph as required by T-16-07 rev. 1.</li> </ul>	<b>Remedial Action Required?</b>	Yes
		<b>Recommended Reinspection?</b>	Yes
<b>Remedial Action</b>	WMATA must follow-up with the Advanced Mobile Flagger (AMF) and the Train Operator (TO) to ensure future compliance with R-17-03.		

<b>Inspection Activity #</b>	2	<b>Inspection Subject</b>	Advanced Mobile Flagman – Observations				<b>Activity Code</b>		TRST	RWP	OBS
<b>Job Briefing Employee Name/Title</b>	N/A		<b>Accompanied Inspector?</b>	N/A	<b>Out Brief Conducted</b>	No	<b>Time</b>	1230pm	<b>Outside Shift</b>	No	
<b>Related Reports</b>			<b>Related CAPS / Findings</b>								
<b>Related Rules, SOPs, Standards, or Other</b>	Ref	Rule or SOP		Standard		Other / Title		Checklist Reference			
	Permanent Order	R-17-03				AMF					
		T-16-07 rev.1									
<b>Inspection Location</b>	Main Track	Yard	Station	OCC	RTA Facility	FTA Office	<b>Track Type</b>	At-grade	Tunnel	Elevated	N/A
	X		X					X	X		
<b>Line(s)</b>	K-Line	<b>Track Number</b>	2	<b>Chain Marker and/or Station(s)</b>		From		To			
						K04 Ballston		K05 East Falls Church			
<b>Vehicles</b>	<b>Head Car Number</b>		<b>Number of Cars</b>		<b>Equipment</b>	N/A					
	2023		8								
<b>Description</b>	The FWSO inspector performed an anonymous observation of the new Advanced Mobile Flagger (AMF) procedure. The AMF and Train Operator (TO) were in complete compliance with the requirements of R-17-03. No exceptions were taken						<b>Number of Defects</b>		0		
							<b>Recommended Finding?</b>		No		
							<b>Remedial Action Required?</b>		No		
							<b>Recommended Reinspection?</b>		No		
<b>Remedial Action</b>	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	20170510-WMATA-AD-2		
	2017	05	10				
Rail Agency Name	Washington Metropolitan Area Transit Authority			Rail Agency Department	TRST PLNT	Sub- Department	Structures Station Rehab
Rail Agency Department Contact Information	Name		Email		Office Phone		Mobile Phone
	[REDACTED]		[REDACTED]		[REDACTED]		[REDACTED]
	[REDACTED]		[REDACTED]		[REDACTED]		[REDACTED]
	[REDACTED]		[REDACTED]		[REDACTED]		[REDACTED]
	[REDACTED]		[REDACTED]		[REDACTED]		[REDACTED]
Inspection Location	Forest Glen (B09) Union Station (B03)						

**Inspection Summary**

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

**Activity Summaries**

Inspection Activity #	1	Inspection Subject					Forest Glen – General Observation Platforms			Activity Code		TRK	GEN	OBS
Job Briefing Employee Name/Title	N/A					Accompanied Inspector?	N/A	Out Brief Conducted	N/A	Time	0900 – 1000	Outside Shift	No	
Related Reports						Related CAPS / Findings								
Related Rules, SOPs, Standards, or Other	Ref		Rule or SOP		Standard		Other / Title		Checklist Reference					
	TRST1000		Section 13											
Inspection Location	Main Track	Yard	Station	OCC	RTA Facility	FTA Office	Track Type	At-grade	Tunnel	Elevated	N/A			
	X		X						X					
Line(s)	B-Line	Track Number	2	Chain Marker and/or Station(s)	From			To						
					B2 CM546+30			B2 CM546+50						
Vehicles	Head Car Number		Number of Cars		Equipment	N/A								
	N/A		N/A											
Description	Observation:								Number of Defects		0			
									Recommended Finding?		No			

<sup>1</sup> 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=FMCSAHQ, ou=DOT Headquarters, cn=AMBUR I DALEY	Date
Inspector in Charge – Name Ambur Daley	Inspection Team Ambur Daley, Robert Maniuszko		Date: 2017.05.16 11:58:03 -04'00'	



United States Department of Transportation  
Federal Transit Administration

Form FTA-IR-1

	At the outbound end of Track #2 there is a water leak from the tunnel ceiling. The leaking water is dropping on top of the third rail cover board. The insulator located approximately 3-feet from this spot is melted to the ground. The third rail is not supported in this section. (See Photos below). Since there is only one (1) defective insulator assembly the TRST 1000 does not require a speed restriction for this condition.	<b>Remedial Action Required?</b>	Yes
		<b>Recommended Reinspection?</b>	Yes
<b>Remedial Action</b>	WMATA must inspect the area noted above.		

<b>Inspection Activity #</b>	2	<b>Inspection Subject</b>	Observation – Four (4) JLG Lifts on Inbound End of the platform at Union Station				<b>Activity Code</b>	TRK	GEN	OBS						
<b>Job Briefing Employee Name/Title</b>	N/A		<b>Accompanied Inspector?</b>	N/A	<b>Out Brief Conducted</b>	Yes	<b>Time</b>	1145am - 1210pm	<b>Outside Shift</b>	No						
<b>Related Reports</b>	<b>Related CAPS / Findings</b>															
<b>Related Rules, SOPs, Standards, or Other</b>	Ref	Rule or SOP		Standard		Other / Title		Checklist Reference								
	MSRPH	Rule 4.3														
<b>Inspection Location</b>	Main Track	Yard	Station	OCC	RTA Facility	FTA Office	<b>Track Type</b>	At-grade	Tunnel	Elevated	N/A					
			X						X							
<b>Line(s)</b>	B-Line	<b>Track Number</b>			<b>Chain Marker and/or Station(s)</b>	From			To							
<b>Vehicles</b>	Head Car Number		Number of Cars		<b>Equipment</b>	N/A										
	N/A		N/A													
<b>Description</b>	General Observations: <ul style="list-style-type: none"> <li>FWSO team noted that there were four (4) JLG Lifts stored on the inbound side of Union Station Platform.</li> <li>The team found one of the lifts with Power still applied.</li> <li>The team also found one of the lifts with a tie wrap secured around the E-Stop button.</li> <li>Photos (See below) were sent to the Deputy Chief of Investigations within SAFE for follow-up. He took immediate action.</li> <li>An onsite PLNT manager reported to the area and reported that:               <ul style="list-style-type: none"> <li>The emergency off switch was pulled out and was in the "on" position. He corrected the condition and notified TRST of the issue.</li> <li>The manager did see the tie wrap but found that the E-Stop button operated as designed. PLNT management will inquire with the Station Rehab crew as to the tie-wrap. If there is a reason that it was placed the equipment will be repaired as required.</li> <li>The manager found no other unsafe conditions with the remaining lifts.</li> </ul> </li> </ul>						<b>Number of Defects</b>		0							
							<b>Recommended Finding?</b>		No							
							<b>Remedial Action Required?</b>		No							
							<b>Recommended Reinspection?</b>		No							
<b>Remedial Action</b>	N/A															

Photos:



Figure 1 - Melted insulator - bottom right of photo shows water dripping into accumulated water



Figure 2 - Water leaking down above light fixture. Small white dots above the right end of the light fixture is water dripping



Figure 3 - JLG Lift - E-Stop Button - Tie-Wrap around button



Figure 4 - JLG Lift - Power was left on





# 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	20170510-WMATA-TW-1		
	2017	05	10				
Rail Agency Name	Washington Metropolitan Area Transit Authority			Rail Agency Department	Car Maintenance	Sub- Department	Inspection
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	Brentwood Rail Yard (B99)						

**Inspection Summary**

Inspection Activity #	1	2	3	4	5	6
Activity Code	VM-SI-OBS					
Inspection Units	1					
Inspection Subunits	1					
Defects (Number)	0					
Recommended Finding	No					
Remedial Action Required <sup>1</sup>	No					
Recommended Reinspection	No					

**Activity Summaries**

Inspection Activity #	1	Inspection Subject				Shop Observations – Brentwood Rail Yard (B99)			Activity Code		VM	SI	OBS
Job Briefing Employee Name/Title	N/A				Accompanied Inspector?	No	Out Brief Conducted	Yes	Time	0800-1100	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				
	N/A		N/A		N/A								
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				
							N/A		N/A				
Vehicles	Head Car Number		Number of Cars		Equipment	N/A							
	5088-89 3056-57 6182-83		6										
Description	FWSO Inspectors observed three rail vehicles undergoing long-term maintenance projects at the Brentwood Rail Yard. Rail vehicles 5088-89 and 3056-57 were							Number of Defects		0			
								Recommended Finding?		No			

<sup>1</sup> 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	<b>Thomas Wozniak</b>	Digitally signed by Thomas Wozniak DN: cn=Thomas Wozniak, o=FRA, ou=DOT, email=thomas.wozniak@dot.gov, c=US Date: 2017.05.16 13:23:37 -05'00'	Date
Inspector in Charge – Name Tom Wozniak	Inspection Team Tom Wozniak, Bill Hultsch		





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	<p>undergoing carpet and flooring replacement. All employees were wearing the required personal protective equipment (PPE) and all work was being performed in accordance with WMATA standards. No defects were observed during the replacement process for either trainset.</p> <p>FWSO Inspectors also observed work performed on vehicle 6182-83, which was being modified for use as a “money train” to collect revenue. All employees were wearing the required PPE, and all work was being performed in accordance with WMATA standards. No defects were observed during the modification process.</p> <p>FWSO inspectors also observed modifications being made to re-railing equipment for use on the 7000 series rail cars. Engineering review of the modifications is pending. No defects were observed during the modification process.</p> <p>Finally, FWSO inspectors walked the shop area. Inspectors observed the proper placement of tools, equipment, and shop material which was stored in a manner where it did not foul any working track nor create a tripping hazard for employees. Additionally, the shop floor was clean and free of slip and fall hazards.</p> <p><b>No defects were observed during the inspections.</b></p>	<b>Remedial Action Required?</b>	No
		<b>Recommended Reinspection?</b>	No
<b>Remedial Action</b>	N/A		



# Inspection Form

FOIA Exemption: All (b)(6)

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## Agency/Department Information

Inspection Date	YYYY	MM	DD	Report Number	20170510-WMATA-WP-1		
	2017	05	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]
	[REDACTED]		[REDACTED]		[REDACTED]		[REDACTED]
Inspection Location	East Falls Church (K05) to Ballston-MU (K04) track 2;						


## Inspection Summary

Inspection Activity #	1	2	3	4	5	6
Activity Code	TP-FT-OBS	TP-WI-OBS				
Inspection Units	1	1				
Inspection Subunits	1	1				
Defects (Number)	0	4				
Recommended Finding	No	Yes				
Remedial Action Required <sup>1</sup>	No	Yes				
Recommended Reinspection	No	Yes				

## Activity Summaries

Inspection Activity #	1	Inspection Subject			Walking Observation (Mobile Work Crew Requesting Foul Time)			Activity Code		TP	FT	OBS
Job Briefing Employee Name/Title	WMATA RWIC			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		
	WMATA PERMANENT ORDER R-17-02 GRANTING FOUL TIME (FRIDAY APRIL 28, 2017)											
Inspection Location	Main Track	Yard	Station	OCC	RTA Facility	FTA Office	Track Type	At-grade	Tunnel	Elevated	N/A	
	X							X	X			
Line(s)	K-Line	Track Number	track 2	Chain Marker and/or Station(s)	From			To				
					CM 355+00 (Blind Spot) CM 315+00 (Portal)			CM 328+00 (Blind Spot) CM 308+00 (Portal)				
Vehicles	Head Car Number		Number of Cars		Equipment	N/A						
	N/A		N/A									

<sup>1</sup> 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		 Digitally signed by WINSLOW L. POWELL DN: c=US, o=U.S. Government, ou=DOT Headquarters, ou=FTAHQ, cn=WINSLOW L. POWELL Date: 2017.05.23 11:30:33 -04'00'		Date
Inspector in Charge - Name Winslow Powell		Inspection Team Tino Sahoo				



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<b>Description</b>	<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.</p> <p>The FWSO Inspector observed the WMATA roadway worker in charge (RWIC) request foul time for two "hot spots" encountered during the mobile work crew's cable inspection walk. One hundred percent repeat back did occur on radio communication between the RWIC and the Rail Operations Control Center (ROCC). The RWIC relinquished foul time once the mobile work crew completely walked through the "hot spots." No issues/concerns or exceptions taken to RWIC performing his duties.</p> <p><b>The FWSO Inspector did not note any defects.</b></p>						<b>Number of Defects</b>	0	
							<b>Recommended Finding?</b>	No	
							<b>Remedial Action Required?</b>	No	
								<b>Recommended Reinspection?</b>	No
<b>Remedial Action</b>	N/A								

<b>Inspection Activity #</b>	2	<b>Inspection Subject</b>	Walking Observation (Cable Inspection)			<b>Activity Code</b>		TP	WI	OBS	
<b>Job Briefing Employee Name/Title</b>	WMATA RWIC		<b>Accompanied Inspector?</b>	Yes	<b>Out Brief Conducted</b>	Yes	<b>Time</b>	1000-1400	<b>Outside Shift</b>	No	
<b>Related Reports</b>			<b>Related CAPS / Findings</b>								
<b>Related Rules, SOPs, Standards, or Other</b>	Ref	Rule or SOP	Standard		Other / Title		Checklist Reference				
	TRACK AND STRUCTURES DIVISION – TRST 1000 TRACK MAINTENANCE AND INSPECTION MANUAL (REVISION 7, MARCH 2017)										
	TRACTION POWER DESIGN DRAWING (DD-TP-SSI-013, REVISION 0, AUGUST 2001)										
	ENGINEERING MODIFICATION INSTRUCTIONS (EMI) FOR JUMPER, EXPANSION, AND TRANSITION POWER CABLES REPLACEMENT SYSTEMWIDE (REVISION 2, SEPTEMBER 16, 2016)										
<b>Inspection Location</b>	Main Track	Yard	Station	OCC	RTA Facility	FTA Office	<b>Track Type</b>	At-grade	Tunnel	Elevated	N/A
	X							X	X		
<b>Line(s)</b>	K-Line	<b>Track Number</b>	track 2	<b>Chain Marker and/or Station(s)</b>		From		To			
						East Falls Church (K05)		Ballston-MU (K04)			
<b>Vehicles</b>	<b>Head Car Number</b>		<b>Number of Cars</b>		<b>Equipment</b>	N/A					
	N/A		N/A								
<b>Description</b>	<p>Daily cable inspections are part of the holistic approach WMATA has instituted to prevent cable fires and arcing incidents. The pictures taken and issues noted were</p>						<b>Number of Defects</b>	4			
							<b>Recommended Finding?</b>	Yes			
							<b>Remedial Action Required?</b>	Yes			



	<p>entered into a database for nighttime cable repair crews to fix.</p> <p><b>The following new defects were observed, and there were no color-coded conditions noted:</b></p> <ul style="list-style-type: none"><li>• TRK 2 CM 406+00 – Relay rail too close to 3<sup>rd</sup> rail<sup>1</sup> (See Figure 1)</li><li>• TRK 2 CM 392+00 – Expansion cables on field side of 3<sup>rd</sup> rail<sup>3</sup> (See Figure 2)</li><li>• TRK 2 CM 361+00 – Power conduit stub-up missing heat shrink<sup>2</sup> (See Figure 3)</li><li>• TRK 2 CM 319+00 – Negative return cable conduit stub-up in power duct bank missing OZ Gedney bushing<sup>2</sup> (See Figure 4)</li></ul> <p><sup>1</sup>The above defects should be compliant with: TRACK AND STRUCTURES DIVISION – TRST 1000 TRACK MAINTENANCE AND INSPECTION MANUAL (REVISION 7, MARCH 2017).</p> <p><sup>2</sup>The above defects should be compliant with: TRACTION POWER DESIGN DRAWING (DD-TP-SSI-013, REVISION 0, AUGUST 2001) detail “Cable Connector Assembly.</p> <p><sup>3</sup>The above defects should be compliant with: ENGINEERING MODIFICATION INSTRUCTIONS (EMI) FOR JUMPER, EXPANSION, AND TRANSITION POWER CABLES REPLACEMENT SYSTEMWIDE (REVISION 2, SEPTEMBER 16, 2016).</p> <p><b>Other Notable Observations:</b></p> <ul style="list-style-type: none"><li>• TRK 2 CM 406+00 – Cables were lying on the ballast.</li><li>• TRK 2 CM 405+00 – Cables were lying on the ballast; Kindorf channel and cable clamps used to stand cables off the ground in vertical position in relation to the ballast.</li><li>• TRK 2 CM 403+00 – Cables were lying on the ballast.</li><li>• TRK 2 CM 402+00 – Cables were lying on the ballast</li><li>• TRK 2 CM 392+00 – Cables were lying on the ballast; missing 3<sup>rd</sup> rail coverboard. One fiberglass cable clamp broken.</li><li>• TRK 2 CM 382+00 – 3<sup>rd</sup> rail cover board was missing; broken cable clamp.</li><li>• TRK 1 CM 382+00 – 3<sup>rd</sup> rail cover board was missing.</li><li>• TRK 2 CM 377+00 – 3<sup>rd</sup> rail cover board was missing.</li><li>• TRK 2 CM 372+00 – 3<sup>rd</sup> rail cover board missing; one cable clamp was broken.</li><li>• TRK 2 CM 366+00 – 3<sup>rd</sup> rail cover board was missing.</li><li>• TRK 2 CM 365+00 – 3<sup>rd</sup> rail cover board was missing.</li><li>• TRK 2 CM 361+00 – Cables were lying on the ballast.</li><li>• TRK 1 CM 355+00 – 3<sup>rd</sup> rail cover board was missing.</li><li>• TRK 2 CM 350+00 – 3<sup>rd</sup> rail cover board was missing.</li><li>• TRK 2 CM 340+00 – 3<sup>rd</sup> rail cover board was missing. cables were lying on the ballast.</li><li>• TRK 2 CM 330+00 – Cables were lying on the ballast. Cables entering gauge side of 3<sup>rd</sup> rail and need to be moved.</li><li>• TRK 2 CM 320+00 – There were broken Kindorf straps on cable clamps used to stand cables off the ground.</li><li>• TRK 2 CM 300+00 – There was a cable pigtail lying on the ground.</li><li>• TRK 2 CM 284+00 – There were jumper cables lying on the concrete deck. Trash and debris was observed surrounding the cables.</li></ul>	<b>Recommended Reinspection?</b>	Yes
<b>Remedial Action</b>	<p>To achieve compliance with WMATA’s requirements:</p> <ul style="list-style-type: none"><li>• WMATA must remove relay rail (TRK 2, CM 406+00).</li><li>• WMATA must move expansion cables to field side of 3<sup>rd</sup> rail (TRK 2, CM 392+00).</li><li>• WMATA must install heat shrink on conduit stub-up (TRK 2, CM 361+00).</li><li>• WMATA must install OZ Gedney bushing in conduit stub-up for negative return cable (TRK 2, CM 319+00).</li></ul>		





## Inspection Form

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FIGURE 1 - TRK 2 CM 406+00 – RELAY RAIL TOO CLOSE TO 3<sup>RD</sup> RAIL.



FIGURE 2 - TRK 2 CM 392+00 – EXPANSION CABLES ON FIELD SIDE OF 3<sup>RD</sup> RAIL.



FIGURE 3 - TRK 2 CM 361+00 – POWER CONDUIT STUB-UP MISSING HEAT SHRINK.



FIGURE 4 - TRK 2 CM 319+00 – NEGATIVE RETURN CABLE CONDUIT STUB-UP IN POWER DUCT BANK MISSING O-RING BUSHING.



# 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	20170511-WMATA-TW-1		
	2017	05	11				
Rail Agency Name	Washington Metropolitan Area Transit Authority (WMATA)			Rail Agency Department	Car Maintenance (CMNT)	Sub- Department	Inspection
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	Largo Tail Track (G98)						

## Inspection Summary

Inspection Activity #	1	2	3	4	5	6
Activity Code	VM-SI-OBS					
Inspection Units	1					
Inspection Subunits	1					
Defects (Number)	0					
Recommended Finding	No					
Remedial Action Required <sup>1</sup>	No					
Recommended Reinspection	No					

## Activity Summaries

Inspection Activity #	1	Inspection Subject					Shop Observations – Largo Tail Tracks Light Inspection Facility (G98)			Activity Code		VM	SI	OBS
Job Briefing Employee Name/Title	N/A			Accompanied Inspector?		No	Out Brief Conducted		No	Time	0800-1000	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			
	N/A		N/A			N/A								
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				
								N/A		N/A				
Vehicles	Head Car Number			Number of Cars		Equipment		Car body/truck hoist wheel chocks						
	N/A			N/A										
Description	FWSO Inspectors performed an inspection at the Largo Tail Track. This location, located at the end of the G-Line, is not a full service and inspection facility (like other rail yards) and is only used to perform light inspection and Daily Safety							Number of Defects			0			
								Recommended Finding?			No			
								Remedial Action Required?			No			

<sup>1</sup> 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	Thomas Wozniak		Digitally signed by Thomas Wozniak DN: cn=Thomas Wozniak, o=FRA, ou=DOT, email=thomas.wozniak@dot.gov, c=US Date: 2017.05.16 14:06:49 -05'00'	Date
Inspector in Charge – Name Tom Wozniak	Inspection Team Tom Wozniak, Bill Hultsch			



	<p>Tests (DSTs). FWSO Inspectors performed an inspection of three of the tracks. They also performed an inspection of the attendant suitability to properly perform light inspections and DSTs in the absence of a full service and inspection facility.</p> <p><b>No defects were observed during the inspection.</b></p>	<b>Recommended Reinspection?</b>	No
<b>Remedial Action</b>	N/A		





# Inspection Form

FOIA Exemption: All (b)(6)

Form FTA-IR-1

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## Agency/Department Information

Inspection Date	YYYY	MM	DD	Report Number	20170511-WMATA-WP-1		
	2017	05	11				
Rail Agency Name	Washington Metropolitan Area Transit Authority			Rail Agency Department	RTRA	Sub- Department	ROCC
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	Rail Operations Control Center						

## Inspection Summary

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

## Activity Summaries

Inspection Activity #	1	Inspection Subject					ROCC Rules Compliance Observation			Activity Code		RTRA	RC	OBS
Job Briefing Employee Name/Title	No			Accompanied Inspector?		No	Out Brief Conducted		No	Time	0900-1500	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		MSRPH General Rules 1.79											
	Permanent Order No. T-16-10, No. R-17-03, No. R-17-02													
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			

<sup>1</sup> 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		Digitally signed by WINSLOW L. POWELL DN: c=US, o=U.S. Government, ou=DOT Headquarters, ou=FTAHQ, cn=WINSLOW L. POWELL Date: 2017.05.16 15:31:56 -04'00'		Date
Inspector in Charge - Name Winslow Powell		Inspection Team Chris Difatta				



<b>Vehicles</b>	Head Car Number N/A	Number of Cars N/A	<b>Equipment</b>	N/A		
<b>Description</b>	<p>The FWSO Inspector conducted Rules Compliance Observations at the Rail Operations Control Center (ROCC). The inspector observed activities on Ops Console 2 for compliance with WMATA'S Metrorail Safety Rules and Procedures Handbook.</p> <p>The FWSO Inspector observed the rail traffic controllers (RTC) during each radio broadcast; all of which were compliant. The RTC ensured each unit or operator repeated back each clearance or operating instruction with 100 percent word-for-word read back, as required. There were no defects observed with this finding. The RTC acknowledged all radio requests as, "That is a good copy," and turned over or closed each transmission with "over" and "out" until the communication was concluded.</p> <p>Per policy, RTCs must conduct hourly radio broadcasts that include a full read out of roadway protections (if applicable), time confirmation, rule of the day, cardinal rule 1.79, and all operational anomalies in place. RTCs must also broadcast roadway worker protection (RWP) personnel protection announcements every 20 minutes. The required hourly broadcasts were observed every hour, and the RWP personnel protection announcements were observed every 20 minutes. RTCs also maintained a written log of all personnel on the roadway and recorded all call-on/call-off times.</p> <p><b>No defects were noted during this observation.</b></p> <p><b>Other Notable Observations:</b></p> <p>FWSO Inspector observed the Foul Time requests for eight work groups. All requests were compliant with Permanent Order No. R-17-02 (Granting Foul Time) and Permanent Order No. R-17-03 (Advanced Mobile Flagger).</p>			<b>Number of Defects</b>	0	
				<b>Recommended Finding?</b>	No	
				<b>Remedial Action Required?</b>	No	
				<b>Recommended Reinspection?</b>	No	
<b>Remedial Action</b>	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	20170513-WMATA-WP-1		
	2017	05	13				
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]
	[REDACTED]		[REDACTED]		[REDACTED]		[REDACTED]
	[REDACTED]		[REDACTED]		[REDACTED]		[REDACTED]
Inspection Location	Surge 14 – Greenbelt (E10) – College Park (E09)						

## Inspection Summary

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

## Activity Summaries

Inspection Activity #	1	Inspection Subject	Job Safety Briefing and Work Zone Setup				Activity Code	TRK	RWP	OBS	
Job Briefing Employee Name/Title	Unit # 6031		Accompanied Inspector?	No	Out Brief Conducted	No	Time	0630 – 1030	Outside Shift	Yes	
Related Reports			Related CAPS / Findings								
Related Rules, SOPs, Standards, or Other	Ref	Rule or SOP		Standard		Other / Title		Checklist Reference			
	MSRPH	SOP #30									
	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)	E-Line	Track Number	tracks 1 and 2	Chain Marker and/or Station(s)	From		To				
	E1 CM662+00 E2 CM551+06				E1 CM551+06 E2 CM662+00						
Vehicles	Head Car Number		Number of Cars		Equipment	N/A					
	N/A		N/A								
Description	No issues or concerns were observed with the job safety briefing.						Number of Defects		0		
	<ul style="list-style-type: none"> <li>Safety Discussion pertained to Standard Operating Procedure (SOP) #30</li> </ul>						Recommended Finding?		No		

<sup>1</sup> 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		Digitally signed by WINSLOW L. POWELL DN: c=US, o=U.S. Government, ou=DOT Headquarters, ou=FTAHQ, cn=WINSLOW L. POWELL Date: 2017.05.16 15:43:39 -04'00'	Date
Inspector in Charge – Name Winslow Powell	Inspection Team Robert Maniuszko			



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	(Speed Restrictions), specifically: <ul style="list-style-type: none"> <li>30.2.2 – A speed restriction must be applied to ensure the safe passage of trains over a segment of track(s) where normal operating speeds are unsafe to equipment, personnel or customers.</li> <li>30.2.3 – A speed restriction may be established to protect personnel on the wayside.</li> <li>30.2.4 – Any employee can request a speed restriction or have trains stopped if an unsafe condition is found that would be hazardous for the safe passage of trains.</li> </ul> <ul style="list-style-type: none"> <li>The Red Tag is held by Mobile Command #2017120512A.</li> <li>Unit 6031 provided the briefing.</li> <li>Roadway maintenance machines in the work zone appeared to move at 5 mph or less.</li> </ul>							Remedial Action Required?		No	
	Work Zone Setup: <ul style="list-style-type: none"> <li>The work zone setup at the College Park end was at CM551+56.</li> <li>Work mats were at CM551+06.</li> <li>Inaccessible track was set up using crossties chained to the rail with shunts, e-flares and large red flags mounted in orange construction cones.</li> </ul>							Recommended Reinspection?		No	
Remedial Action	N/A										

Inspection Activity #	2	Inspection Subject	Track – General Observations					Activity Code	TRK	GEN	OBS
Job Briefing Employee Name/Title	Unit # 6031		Accompanied Inspector?	No	Out Brief Conducted	No	Time	0630 – 1030	Outside Shift	Yes	
Related Reports			Related CAPS / Findings								
Related Rules, SOPs, Standards, or Other	Ref	Rule or SOP		Standard		Other / Title		Checklist Reference			
	MSRPH										
	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)	E-Line	Track Number	tracks 1 and 2	Chain Marker and/or Station(s)	From			To			
					E1 CM662+00 E2 CM551+06			E1 CM551+06 E2 CM662+00			
Vehicles	Head Car Number		Number of Cars		Equipment	N/A					
	N/A		N/A								
Description	The following was observed on this final walk through: <ul style="list-style-type: none"> <li>There are no concerns with the work that has been done.</li> <li>WMATA track and structures (TRST) plans to give the tracks to the automatic train control (ATC) team this evening.</li> <li>The ATC team will reconnect the circuits and restore operational systems, as required.</li> </ul> Observations: <ul style="list-style-type: none"> <li>Numerous crossties have been replaced.</li> <li>Ballast has been replaced, added, and regulated as needed.</li> <li>Third rail expansion joint cables are now “huck-bolted” to the third rail.</li> <li>Third rail expansion cables have been replaced and are secured to fiberglass kindorf.</li> <li>Crossties have been replaced in the E10 interlocking. Fasteners appear to be tight and secure.</li> <li>Fasteners and tie plates have been replaced. In a few areas, a new tie plate was observed that appears to be thicker than the original Pandrol</li> </ul>							Number of Defects		0	
								Recommended Finding?		No	
								Remedial Action Required?		No	
								Recommended Reinspection?		No	



	<p>plates. The crossties are set slightly lower than the ties with the Pandrol plates. This is not a concern, just an observation.</p> <ul style="list-style-type: none"><li>• Third rail Insulators were replaced. The shims used under the new insulators are approximately ½" thick. This is an observation, not a concern.</li><li>• The emergency trip station (ETS) boxes appear to have been serviced.</li><li>• Several rail defects were cut out and replaced with 39-foot plugs. The plugs were welded in place.</li><li>• Joint bars were eliminated and the rails are now welded.</li><li>• Signal lamps have been changed to LED lights. They appear to be brighter.</li><li>• A Quality Control Team was assigned in the area to rectify any open punch list items.</li><li>• Any items that were tagged with orange paint were being addressed.</li></ul> <p>The FWSO Inspector did not note any defects.</p>		
Remedial Action	N/A		

Photos:



Figure 1 - Third rail jumper cables bolted to third 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	20170516-WMATA-WP-1		
	2017	05	16				
Rail Agency Name	Washington Metropolitan Area Transit Authority			Rail Agency Department	TRST - SAFE	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	White Flint (A12) to Rockville (A14)						

## Inspection Summary

Inspection Activity #	1	2	3	4	5	6
Activity Code	TRK-JSB-OBS	TRK-RWP-OBS				
Inspection Units	1	1				
Inspection Subunits	1	1				
Defects (Number)	1	3				
Recommended Finding	No	No				
Remedial Action Required <sup>1</sup>	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	TRST Unit 6144				Accompanied Inspector?	Yes	Out Brief Conducted	No	Time	1000 1430	Outside Shift	No	
Related Reports	20161109-WMATA-AD-2				Related CAPS / Findings		Remedial Action 1023						
Related Rules, SOPs, Standards, or Other	Ref		Rule or SOP		Standard		Other / Title		Checklist Reference				
	RWPM		P.O. R-17-03, P.O T-16-10 P.O. R-17-02		Foul Time Protection Radio Communication Advance Mobile Flag								
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)	A-Line	Track Number	track 1		Chain Marker and/or Station(s)		From		To				
							White Flint (A12)		Rockville (A14)				
Vehicles	Head Car Number		Number of Cars		Equipment		N/A						
	N/A		N/A										
Description	A job safety briefing was performed at White Flint Station (A12) by TRST Unit 6144, which also acted as the roadway worker in charge (RWIC). The briefing was partially							Number of Defects		1			
								Recommended Finding?		No			

<sup>1</sup> 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		Digitally signed by WINSLOW L. POWELL DN: c=US, o=U.S. Government, ou=DOT Headquarters, ou=FTAHQ, cn=WINSLOW L. POWELL Date: 2017.05.24 12:15:14 -04'00'	Date
Inspector in Charge - Name Winslow Powell	Inspection Team Alexander Nepa			



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or FTA-IR-1

	compliant with the WMATA Roadway Worker's Protection Manual (RWPM) requirements. It included WMATA badge-level verification, type of protection, and train approach warning (TAW). It did not include hot spots, locations, as well as locations of hospitals.						<b>Remedial Action Required?</b>		No	
	<p>The FWSO Inspector noted the following defects:</p> <ul style="list-style-type: none"> <li>The job safety briefing omitted the location of hot spot locations and the closest hospital location. <b>RWPM Pages 13 and 14.</b></li> </ul> <p>Remedial actions for this defect was previously issued in FWSO report 20161109-WMATA-AD-2.</p>						<b>Recommended Reinspection?</b>		No	
<b>Remedial Action</b>		N/A								

<b>Inspection Activity #</b>	2		<b>Inspection Subject</b>				Rules Compliance Inspection				<b>Activity Code</b>		TRK		RC		OBS			
<b>Job Briefing Employee Name/Title</b>	TRST Unit 6144				<b>Accompanied Inspector?</b>		Yes		<b>Out Brief Conducted</b>		No		<b>Time</b>		1000 1430		<b>Outside Shift</b>		No	
<b>Related Reports</b>	N/A				<b>Related CAPS / Findings</b>		N/A													
<b>Related Rules, SOPs, Standards, or Other</b>	Ref		Rule or SOP				Standard				Other / Title				Checklist Reference					
	RWPM		P.O. R-17-03, P.O. T-16-10 P.O. T-16-10				Foul Time Protection Radio Communication Advance Mobile Flag													
<b>Inspection Location</b>	Main Track	Yard	Station	OCC	RTA Facility	FTA Office	<b>Track Type</b>	At-grade	Tunnel	Elevated	N/A									
	X		X					X	X											
<b>Line(s)</b>	A-Line		<b>Track Number</b>		track 1		<b>Chain Marker and/or Station(s)</b>		From				To							
									White Flint (A12)				Rockville (A14)							
<b>Vehicles</b>	Head Car Number			Number of Cars			<b>Equipment</b>	N/A												
	N/A			N/A																
<b>Description</b>	FWSO inspectors observed WMATA employees understanding of and compliance with the recent Permanent Orders, R-17-02 – use of foul time protection, T-16-10 – radio communication protocol, and R-17-03 – advance mobile flagmen (AMF). The work group consisted of a RWIC, an advance watchman, an AMF, as well as a contractor performing the actual track inspection.												<b>Number of Defects</b>		3					
	During the AMF observation at Rockville Station (A14), the individual in charge was fully compliant. He had in his possession a yellow lantern, orange flag, whistle and air horn. He stopped every train and transmitted from the script, as directed, instructions to the train operators.												<b>Recommended Finding?</b>		Yes					
	During the AMF observation at Rockville Station, thirteen trains were given Permanent Order (P.O.) R-17-03 instructions.												<b>Remedial Action Required?</b>		Yes					
	<p><b>The FWSO Inspector noted the following non-color-coded defects:</b></p> <ul style="list-style-type: none"> <li>Train number seven, lead car number 7242 arriving at Rockville at 1317: The operator did not sound the horn acknowledging the AMF when approaching the station. <b>Defect associated with Class I/Class II Vehicle Operator Procedures, Item 1 of P.O. R-17-03.</b></li> <li>Train number 12, lead car number 7218 arriving Rockville at 1333: The operator did not sound the horn when entering the station. This train operator admitted that he did not attend the class and was unfamiliar with the permanent order. <b>Defect associated with Class I/Class II Vehicle Operator Procedures, Item 1 of P.O. R-17-03.</b></li> <li>On several occasions when communicating with the Rail Operations Control Center (ROCC), the RWIC failed to use the appropriate alphanumeric language, as required in P.O. T-16-10. <b>Defect associated with P.O. T-16-10 and MSRP Rule 1.79.</b></li> </ul>												<b>Recommended Reinspection?</b>		Yes					
<b>Remedial Action</b>		To achieve compliance with WMATA's requirements:																		





- |  |  |
|--|--|
|  | <ul style="list-style-type: none"><li>• WMATA must comply with Permanent Order R-17-03.</li><li>• WMATA must comply with MSRP Rule 1.79.</li></ul> |
|--|--|



# 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	20170517-WMATA-WP-1		
	2017	05	17				
Rail Agency Name	Washington Metropolitan Area Transit Authority			Rail Agency Department	RTRA	Sub- Department	ROCC
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	Rail Operations Control Center (ROCC) 3500 Pennsy Drive Landover, MD 20785						

## Inspection Summary

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

## Activity Summaries

Inspection Activity #	1	Inspection Subject	ROCC Rules Compliance Observation				Activity Code	RTRA	RC	OBS	
Job Briefing Employee Name/Title	No		Accompanied Inspector?	No	Out Brief Conducted	No	Time	0900-1400	Outside Shift	No	
Related Reports	Safety Management Inspection (SMI), Final Report, June 17, 2015		Related CAPS / Findings		Required Actions: R-1-6-a, R-1-6-b						
Related Rules, SOPs, Standards, or Other	Ref		Rule or SOP		Standard		Other / Title		Checklist Reference		
	MetroRail Safety Rules and Procedures Handbook (MSRPH); and Permanent Orders: No. T-16-10, No. R-17-03, & No. R-17-02		Section 1 – General Rules (Radio Usage and Operation): Rules 1.69 – 1.88								
Inspection Location	Main Track	Yard	Station	OCC	RTA Facility	FTA Office	Track Type	At-grade	Tunnel	Elevated	N/A
				X							X

<sup>1</sup> 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		Date
Inspector in Charge – Name Winslow Powell		Inspection Team Chris Difatta, Tamara Powell		



United States Department of Transportation  
Federal Transit Administration

Form FTA-IR-1

Line(s)	N/A	Track Number	N/A	Chain Marker and/or Station(s)	From	To
Vehicles	Head Car Number	Number of Cars		Equipment	N/A	
	N/A	N/A				
Description	<p>The FWSO Inspectors conducted Rules Compliance Observations at the Rail Operations Control Center (ROCC). The inspector observed activities on Ops Console 3 for compliance with the Metrorail Safety Rules and Procedures Handbook (MSRPH).</p> <ul style="list-style-type: none"> <li>• <i>Radio Usage, MSRPH General Rules 1.69 – 1.88; Permanent Order No. T-16-10;</i> <ul style="list-style-type: none"> <li>➤ The FWSO Inspector observed the rail traffic controllers (RTC) during each radio broadcast; all of which were compliant. There were no defects observed with this finding. The RTC acknowledged all radio requests as: "That is a good copy," and turned over or closed each transmission with "over" and "out" until the communication was concluded.</li> </ul> </li> <li>• <i>SMI - 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"> <li>➤ The RTC ensured each unit or operator repeated back each instruction, clearance or operating instruction, with 100 percent word-for-word read back, as required.</li> </ul> </li> <li>• <i>SMI - 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"> <li>➤ Per policy, RTCs must conduct hourly radio broadcasts that include a full readout of roadway protections (if applicable), time confirmation, rule of the day, cardinal rule 1.79, and all operational anomalies in place. RTCs must also broadcast roadway worker protection (RWP) personnel protection announcements every 20 minutes. The required hourly broadcasts were observed every hour, and the roadway personnel protection announcements were observed every 20 minutes. RTCs also maintained a written log of all personnel on the roadway and recorded all call-on/call-off times.</li> </ul> </li> </ul> <p>The FWSO Inspector did not note any defects.</p> <p>Other Notable Observations:</p> <ul style="list-style-type: none"> <li>• <b>New Permanent Orders: No. R-17-03 &amp; No. R-17-02</b> The FWSO Inspector observed the foul time requests for seven work groups. All requests were compliant with Permanent Order No. R-17-02 (granting foul time) and Permanent Order No. R-17-03 (Advanced Mobile Flagger). <ul style="list-style-type: none"> <li>➤ All personnel followed radio protocol when they called on/off over the radio; including proper identification or self and work crew, location of foul time request (station or chain marker), and reason for request.</li> <li>➤ RTC established red signals and "prohibit exits," as well as human form, via the AIM.</li> <li>➤ RTC required 100% and word-for-word repeat backs, ensuring the track units were in receipt of and repeated back full instructions and clearance.</li> <li>➤ RTC contacted trains in the vicinity regarding the foul time request and the location of personnel, as applicable.</li> <li>➤ RTC ensured that an AMF was assigned to each crew and positioned in proper location/place to warn trains on approach to work/walk zones.</li> <li>➤ RTC documented call on/off times.</li> <li>➤ RTC completed relevant checklists, confirming compliance of permanent orders.</li> </ul> </li> </ul>				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	20170517-WMATA-WP-2		
	2017	05	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]
	[REDACTED]		[REDACTED]		[REDACTED]		[REDACTED]
Inspection Location	Rhode Island (B04) Traction Power Substation (TPSS)						

## Inspection Summary

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

## Activity Summaries

Inspection Activity #	1	Inspection Subject					Rhode Island (B04) – Safety Briefing			Activity Code		TP	JSB	OBS
Job Briefing Employee Name/Title	WMATA RWIC					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				
	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)	B-Line	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											
Description	FWSO personnel received a job safety briefing from the WMATA roadway worker in charge (RWIC). All personal protective equipment (PPE) and roadway worker								Number of Defects		0			
									Recommended Finding?		No			

<sup>1</sup> 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		Digitally signed by WINSLOW L. POWELL DN: c=US, o=U.S. Government, ou=DOT Headquarters, ou=FTAHQ, cn=WINSLOW L. POWELL Date: 2017.05.26 07:35:03 -0400		Date
Inspector in Charge – Name Winslow Powell		Inspection Team Tino Sahoo				



United States Department of Transportation  
Federal Transit Administration

Form FTA-IR-1

	protection (RWP) IDs were checked and the working limits were reviewed. The WMATA RWIC covered the nearest hospital and safety rule of the day. The hot spots, hazards, clearance areas, communication, and Roadway Access Guide were used as part of the discussion. No exceptions were taken.	Remedial Action Required?	No
		Recommended Reinspection?	No
Remedial Action	N/A		

Inspection Activity #	2	Inspection Subject	Emergency Trip Station (ETS) Relay Cabinet Corrective Maintenance				Activity Code	TP	RM	OBS								
Job Briefing Employee Name/Title	WMATA RWIC			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									
Inspection Location	Main Track	Yard	Station	OCC	RTA Facility	FTA Office	Track Type	At-grade	Tunnel	Elevated	N/A							
	X							X		X								
Line(s)	B-Line	Track Number	tracks 1 and 2	Chain Marker and/or Station(s)	From			To										
					Rhode Island (B04) TPSS Rhode Island (B04) Station			Rhode Island (B04) TPSS Brookland-CUA (B05) Station										
Vehicles	Head Car Number		Number of Cars		Equipment	Emergency Trip Station (ETS) Relay Cabinet												
	N/A		N/A															
Description	<p>WMATA Emergency Trip Station (ETS) crew was troubleshooting the ETS relay cabinet to fix the station platform ETS boxes at Brookland (B05) that were inoperable (i.e., If a push button were to be pressed in an ETS box, the 3<sup>rd</sup> rail would not be de-energized.) WMATA personnel were able to diagnose the problem. ETS boxes on the Brookland (B05) station platform are not receiving the needed 130 VDC in order to be able to send the "trip" signal (if the push button in the ETS box were to be depressed) to the ETS relay cabinet located in the Rhode Island (B04) TPSS. The relay(s) in the ETS relay cabinet associated with the ETS box on the station platform would not be able to trip the DC feeder breaker(s) that energize that portion of the 3<sup>rd</sup> rail.</p> <p><b>The FWSO Inspection and WMATA personnel did not note any defects.</b></p> <p><b>Other Notable Observations:</b></p> <p>WMATA ETS crew and WMATA regional crew will use spare conductors from the Rhode Island (B04) TPSS in order to get the needed 130 VDC to station platform ETS boxes at Brookland (B05). Eight hundred feet of new conductor will also have to be pulled in addition to using the spare conductors.</p> <p>FWSO will follow up to confirm the conclusion of the work once issues have been corrected.</p>						Number of Defects		0									
							Recommended Finding?		No									
							Remedial Action Required?		No									
							Recommended Reinspection?		Yes									
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	20170518-WMATA-AG-1		
	2017	05	18				
Rail Agency Name	Washington Metropolitan Area Transit Authority			Rail Agency Department	TRST - SAFE	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]
	[REDACTED]		[REDACTED]		[REDACTED]		[REDACTED]
Inspection Location	Rhode Island Avenue (B04) to Glenmont (B11)						

## Inspection Summary

Inspection Activity #	1	2	3	4	5	6
Activity Code	TRK-RWP-OBS					
Inspection Units	1					
Inspection Subunits	1					
Defects (Number)	5					
Recommended Finding	No					
Remedial Action Required <sup>1</sup>	No					
Recommended Reinspection	No					

## Activity Summaries

Inspection Activity #	1	Inspection Subject					Roadway Worker Protection			Activity Code		TRK	RWP	OBS
Job Briefing Employee Name/Title	Advance Mobile Flagger, TRST Unit 6024					Accompanied Inspector?	No	Out Brief Conducted	No	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		P.O. R-17-03, P.O. T-16-10 P.O. T-16-10			Foul Time Protection Radio Communication Advance Mobile Flagger								
Inspection Location	Main Track	Yard	Station	OCC	RTA Facility	FTA Office	Track Type	At-grade	Tunnel	Elevated	N/A			
	X		X					X						
Line(s)	B-Line		Track Number	track 1		Chain Marker and/or Station(s)	From		To					
							Rhode Island Avenue (B04)		Glenmont (B11)					
Vehicles	Head Car Number		Number of Cars			Equipment								

<sup>1</sup> 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 <b>ADAM ANTHONY GIOVANDO</b>		Digitally signed by ADAM ANTHONY GIOVANDO DN: c=US, o=U.S. Government, ou=FRA FRAfWorthTX, ou=DOT FRAfWorthTX, cn=ADAM ANTHONY GIOVANDO Date: 2017.05.31 10:44:47 -05'00'		Date
Inspector in Charge - Name Adam. Giovando		Inspection Team Adam Giovando, Alexander Nepa, Lee Emard		





Description	<p>The FWSO team performed random on-site platform audits of the advance mobile flagger (AMF) placed on the B-Line. The purpose of this inspection was to observe employee understanding and compliance of Permanent Order R-17-03 with the advance mobile flagger.</p> <p>The following defects observed were not in compliance with Permanent Order R-17-03. There were no color-coded conditions noted:</p> <ul style="list-style-type: none"><li>FWSO team members were in the head unit number 7144 when it approached Takoma Station. Team members observed the AMF walking around the platform and not stationed at the end of the platform, as required.</li><li>The yellow lantern was placed against a yellow sign, making it difficult to see.</li><li>The AMF did not have the 18" X 18" orange flag on his person, as required.</li><li>After the train had passed, the FWSO team observed the AMF not keeping a vigilant watch for oncoming trains, as required.</li><li>The FWSO team observed the AMF using his cell phone during the performance of his duties.</li></ul> <p>Remedial actions for these defects were previously issued in 20170516-WMATA-WP-1 and 20170119-WMATA-WP-2.</p>	Number of Defects	5	
		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	20170518-WMATA-WP-1		
	2017	05	18				
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]
	[REDACTED]		[REDACTED]		[REDACTED]		[REDACTED]
Inspection Location	West Falls Church (K06) to Dunn Loring (K07) Track 1						

## Inspection Summary

Inspection Activity #	1	2	3	4	5	6
Activity Code	TP-JSB-OBS	TP-WI-OBS				
Inspection Units	1	1				
Inspection Subunits	1	1				
Defects (Number)	0	12				
Recommended Finding	No	Yes				
Remedial Action Required <sup>1</sup>	No	Yes				
Recommended Reinspection	No	Yes				

## Activity Summaries

Inspection Activity #	1	Inspection Subject			West Falls Church (K06) - Job Safety Briefing (Mobile Work Crew)			Activity Code		TP	JSB	OBS
Job Briefing Employee Name/Title	WMATA RWIC			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		
	WMATA PERMANENT ORDER R-17-03 ADVANCE MOBILE FLAGGER (FRIDAY APRIL 28, 2017)											
	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)	K-Line	Track Number		track 1	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									

<sup>1</sup> 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		Digitally signed by WINSLOW L. POWELL DN: c=US, o=U.S. Government, ou=BOT Headquarters, ou=FTAHQ, cn=WINSLOW L. POWELL Date: 2017.05.26 07:44:51 -04'00'		Date
Inspector in Charge - Name Winslow Powell		Inspection Team Tino Sahoo				



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Form FTA-IR-1

<b>Description</b>	<p>FWSO personnel received a job safety briefing from the WMATA roadway worker in charge (RWIC). All personal protective equipment (PPE) and roadway worker protection (RWP) IDs were checked and the working limits reviewed. The WMATA RWIC covered the nearest hospital and safety rule of the day. The hot spots, hazards, clearance areas, communication, and Roadway Access Guide were used as part of the discussion.</p> <p>In addition to the required PPE, the advance mobile flagger (AMF) did have the required equipment and was compliant with "WMATA PERMANENT ORDER R-17-03 ADVANCE MOBILE FLAGGER (FRIDAY APRIL 28, 2017)." This equipment consisted of WMATA-approved flashing amber lantern/e-flare, orange flag (18'x18'), calibrated working radio, air horn, and whistle.</p> <p>The AMF did notify RWIC via positive communication (phone) that he was in place (next station ahead in the direction the mobile crew walked) and the flashing amber lantern /e-flare and orange flag had been positioned at the end of the platform (8-car marker or end gate). No exceptions were taken.</p> <p><b>The FWSO Inspector did not note any defects.</b></p>	<b>Number of Defects</b>	0
		<b>Recommended Finding?</b>	No
		<b>Remedial Action Required?</b>	No
		<b>Recommended Reinspection?</b>	No
<b>Remedial Action</b>	N/A		

<b>Inspection Activity #</b>	2	<b>Inspection Subject</b>	Walking Observation (Cable Inspection)			<b>Activity Code</b>		TP	WI	OBS	
<b>Job Briefing Employee Name/Title</b>	WMATA RWIC		<b>Accompanied Inspector?</b>	Yes	<b>Out Brief Conducted</b>	Yes	<b>Time</b>	1000-1400	<b>Outside Shift</b>	No	
<b>Related Reports</b>			<b>Related CAPS / Findings</b>								
<b>Related Rules, SOPs, Standards, or Other</b>	Ref		Rule or SOP	Standard	Other / Title		Checklist Reference				
	TRACK AND STRUCTURES DIVISION – TRST 1000 TRACK MAINTENANCE AND INSPECTION MANUAL (REVISION 7, MARCH 2017)										
	TRACTION POWER DESIGN DRAWING (DD-TP-SSI-013, REVISION 0, AUGUST 2001)										
	ENGINEERING MODIFICATION INSTRUCTIONS (EMI) FOR JUMPER, EXPANSION, AND TRANSITION POWER CABLES REPLACEMENT SYSTEMWIDE (REVISION 2, SEPTEMBER 16, 2016)										
<b>Inspection Location</b>	Main Track	Yard	Station	OCC	RTA Facility	FTA Office	<b>Track Type</b>	At-grade	Tunnel	Elevated	N/A
	X							X		X	
<b>Line(s)</b>	K-Line	<b>Track Number</b>	track 1	<b>Chain Marker and/or Station(s)</b>	From			To			
	West Falls Church (K06)				Dunn Loring (K07)						
<b>Vehicles</b>	Head Car Number		Number of Cars		<b>Equipment</b>	N/A					
	N/A		N/A								



Description	<p>Daily cable inspections are part of the holistic approach WMATA has instituted to prevent cable fires and arcing incidents. The pictures taken and observations noted were entered into a database for nighttime cable repair crews to fix.</p> <p><b>The following new defects were observed, and there were no color-coded conditions noted:</b></p> <ul style="list-style-type: none"> <li>• TRK 1 CM 526+00 – Conduit stub-up heat shrink compromised<sup>2</sup>. (See Figure 1.)</li> <li>• TRK 1 CM 536+00 – O-Z/Gedney bushing needed in empty/spare conduit stub-ups to prevent water infiltration (5 total)<sup>2</sup>. (See Figure 2)</li> <li>• TRK 1 CM 537+00 – O-Z/Gedney bushing needed in empty/spare conduit stub-ups to prevent water infiltration (3 total). Heat shrink compromised on a conduit stub-up<sup>2</sup>. (See Figures 3 and 4.)</li> <li>• TRK 1 CM 547+50 – O-Z/Gedney bushing needed in negative return cable conduit stub-ups to prevent water infiltration (2 total)<sup>2</sup>. (See Figure 5.)</li> <li>• TRK 1 CM 599+00 – Cable nicked/torn<sup>2</sup>. (See Figure 6.)</li> <li>• TRK 1 CM 610+00 – Cable pigtail has temporary repair, needs replacement<sup>2</sup>. (See Figure 7.)</li> <li>• TRK 1 CM 621+00 – Negative return cables nicked/torn. O-Z/Gedney bushing needed in negative return cable conduit stub-up<sup>2</sup>.</li> <li>• TRK 1&amp;2 CM 623+00 – ETS Boxes (2 total) on aerial structure missing front panel and need complete replacement<sup>1</sup>. (See Figures 8 and 9.)</li> <li>• TRK 1 CM 645+00 – Negative return cables nicked/torn. Conduit stub-up broken<sup>2</sup>. (See Figures 10 and 11.)</li> </ul> <p><sup>1</sup>The above remedial actions should be compliant with: TRACK AND STRUCTURES DIVISION – TRST 1000 TRACK MAINTENANCE AND INSPECTION MANUAL (REVISION 7, MARCH 2017).</p> <p><sup>2</sup>The above remedial actions should be compliant with: TRACTION POWER DESIGN DRAWING (DD-TP-SSI-013, REVISION 0, AUGUST 2001) detail “Cable Connector Assembly.</p> <p><b>Other Notable Observations:</b></p> <ul style="list-style-type: none"> <li>• TRK 1 CM 526+00 – Cables lying on the ballast.</li> <li>• TRK 1 CM 527+50 - Cables lying on the ballast.</li> <li>• TRK 1 CM 528+00 - Cables lying on the ballast.</li> <li>• TRK 1 CM 529+00 - Cables lying on the ballast.</li> <li>• TRK 1 CM 539+00 – Cables lying on the ballast. 3<sup>rd</sup> rail cover board missing.</li> <li>• TRK 1 CM 548+00 - Cables lying on the ballast.</li> <li>• TRK 1 CM 558+00 – Cables lying on the ballast. 3<sup>rd</sup> rail cover board missing.</li> <li>• TRK 1 CM 568+00 – Cables lying on the ballast. Negative return cables lying on the ballast.</li> <li>• TRK 1 CM 569+00 – Cables lying on the ballast.</li> <li>• TRK 1 CM 579+00 – Cables lying on the ballast. Cable clamp broken. 3<sup>rd</sup> rail coverboard broken.</li> <li>• TRK 1 CM 580+00 – 3<sup>rd</sup> rail cover board missing.</li> <li>• TRK 1 CM 584+00 – 3<sup>rd</sup> rail tie anchor needs replacement.</li> <li>• TRK 1 CM 585+00 – Negative return cable has temporary fix, replace with new cable.</li> <li>• TRK 1 CM 584+00 – Cables lying on the ballast. 3<sup>rd</sup> rail cover board missing over 3<sup>rd</sup> rail expansion joint.</li> <li>• TRK 2 CM 589+00 - 3<sup>rd</sup> rail cover board damaged.</li> <li>• TRK 1 CM 599+00 – Cables lying on the ballast. 3<sup>rd</sup> rail cover board missing.</li> <li>• TRK 1 CM 602+00 – Negative return cables lying on the ballast.</li> <li>• TRK 1 CM 609+00 – Cables lying on the ballast.</li> <li>• TRK 1 CM 610+00 – Cables lying on the ballast.</li> <li>• TRK 1 CM 622+00 – Cables lying on the ground (concrete deck of aerial). 3<sup>rd</sup> rail cover board missing.</li> <li>• TRK 1 CM 632+00 – Cables lying on the ground (concrete deck of aerial). 3<sup>rd</sup> rail</li> </ul>	Number of Defects	12
		Recommended Finding?	Yes
		Remedial Action Required?	Yes
		Recommended Reinspection?	Yes



	<p>cover board missing. Cables on the Kindorf channel need to be moved on field side of 3<sup>rd</sup> rail.</p> <ul style="list-style-type: none"><li>• TRK 1 CM 645+00 – Cables lying on ballast. Negative return cables on ballast.</li></ul>		
<b>Remedial Action</b>	<p>To achieve compliance with WMATA's requirements:</p> <ul style="list-style-type: none"><li>• WMATA must replace heat shrink on conduit stub-up (TRK 1 CM 526+00).</li><li>• WMATA must install five O-Z/Gedney bushings in spare/empty conduits (TRK 1 CM 536+00).</li><li>• WMATA must install three O-Z/Gedney bushings in spare/empty conduits (TRK 1 CM 537+00).</li><li>• WMATA must replace heat shrink on conduit stub-up (TRK 1 CM 537+00).</li><li>• WMATA must install two O-Z/Gedney Bushings in negative return cable conduit stub-ups (TRK 1 CM 547+50).</li><li>• WMATA must replace cable (TRK 1 CM 599+00).</li><li>• WMATA must replace cable pigtail (TRK 1 CM 610+00).</li><li>• WMATA must replace negative return cables (TRK 1 CM 621+00).</li><li>• WMATA must install O-Z/Gedney bushings in negative return cable conduit stub-ups (TRK 1 CM 621+00).</li><li>• WMATA must replace the two emergency trip station (ETS) boxes (TRK 1 and 2 CM 623+00).</li><li>• WMATA must replace negative return cable (TRK 1 CM 645+00).</li><li>• WMATA must replace conduit stub-up (TRK 1 CM 645+00).</li></ul>		





FIGURE 1 - TRK 1 CM 526+00 – CONDUIT STUB-UP HEAT SHRINK COMPROMISED



FIGURE 3 - TRK 1 CM 537+00 –  
NEEDED IN EMPTY/SPARE CON  
PREVENT WATER INFILTRATION

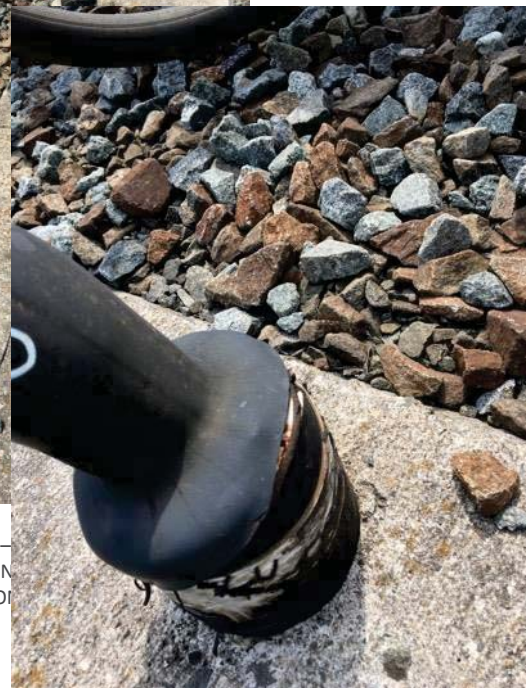


FIGURE 4 - TRK 1 CM 537+00 – HEAT SHRINK COMPROMISED  
ON A CONDUIT STUB-UP





FIGURE 5 - TRK 1 CM 547+50 – O-Z/GEDNEY BUSHING NEEDED IN NEGATIVE RETURN CABLE CONDUIT STUB-UPS TO PREVENT WATER INFILTRATION (2 TOTAL)



FIGURE 6 - TRK 1 CM 599+00 – CABLE NICKED/TORN



FIGURE 7 - TRK 1 CM 610+00 – CABLE PIGTAIL HAS TEMPORARY REPAIR, NEEDS REPLACEMENT



FIGURE 8 - TRK 1 CM 623+00 – ETS BOX ON AERIAL STRUCTURE MISSING FRONT PANEL AND NEED COMPLETE REPLACEMENT





FIGURE 9 - TRK 2 CM 623+00 – ETS BOX ON AERIAL STRUCTURE MISSING FRONT PANEL AND NEED



FIGURE 10 - TRK 1 CM 645+00 – NEGATIVE



FIGURE 11 - TRK 1 CM 645+00 – CONDUIT STUB-UP BROKEN



# 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	20170519-WMATA-AG-1		
	2017	05	19				
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]
	[REDACTED]		[REDACTED]		[REDACTED]		[REDACTED]
	[REDACTED]		[REDACTED]		[REDACTED]		[REDACTED]
Inspection Location	B-Line, track 1						

## Inspection Summary

Inspection Activity #	1	2	3	4	5	6
Activity Code	TRK-RWP-OBS	TRK-GEN-OBS				
Inspection Units	1	1				
Inspection Subunits	1	1				
Defects (Number)	0	9				
Recommended Finding	No	Yes				
Remedial Action Required <sup>1</sup>	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	RWIC, TRST Unit # 6144 Advance Watchman TRST Unit # 6302 AMF, TRST Unit # 6321				Accompanied Inspector?	Yes	Out Brief Conducted	Yes	Time	1000 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)	B-Line	Track Number	track 1		Chain Marker and/or Station(s)		From		To				
							Forest Glenn Station (B09)		Silver Spring Station (B08)				
Vehicles	Head Car Number		Number of Cars		Equipment								

<sup>1</sup> 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		Digitally signed by ADAM ANTHONY GIOVANDO DN: c=US, o=U.S. Government, ou=FRA FRAFTWorthTX, ou=DOT FRAFTWorthTX, cn=ADAM ANTHONY GIOVANDO Date: 2017.05.25 09:54:42 -05'00'		Date
ADAM ANTHONY GIOVANDO				
Inspector in Charge – Name	Adam Giovando			
Inspection Team	Adam Giovando, Alexander Nepa, Lee Emard			



United States Department of Transportation  
Federal Transit Administration

Form FTA-IR-1

Description	TRST unit 6144 conducted a job safety briefing at Forest Glen Station. The briefing was fully compliant with WMATA Roadway Worker's Protection Manual (RWPM) requirements. It included WMATA badge-level verification, type of protection, inaccessible track (IT), potential hazards, hot spots and hospital location. The advance mobile flagger (AMF) was placed at the proper location. No exceptions taken to the job safety briefing.				Number of Defects	0
					Recommended Finding?	No
					Remedial Action Required?	No
					Recommended Reinspection?	No
Remedial Action	N/A					

Activity Summaries

Inspection Activity #	2	Inspection Subject	Track General Observation					Activity Code	TRK	GEN	INS
Job Briefing Employee Name/Title	RWIC, TRST Unit # 6155 Advance Watchman TRST Unit # 6302 AMF, TRST Unit # 6321		Accompanied Inspector?	Yes	Out Brief Conducted	Yes	Time	1000 1500	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 rev. 6										
Inspection Location	Main Track	Yard	Station	OCC	RTA Facility	FTA Office	Track Type	At-grade	Tunnel	Elevated	N/A
	X							X			
	B-Line	Track Number	track 1	Chain Marker and/or Station(s)		From		To			
						Forest Glen Station (B09)		Silver Spring Station (B08)			
Vehicles	Head Car Number		Number of Cars		Equipment						
Description	<p>FWSO team members performed an observation of the B-Line on track 1 between Forest Glen (B09) and Silver Spring (B08).</p> <p>The following new defects were observed, and there were no color coded conditions noted:</p> <ul style="list-style-type: none"> <li><b>TRST 1000 Defect 3.2.2.4:</b> At CM 530+90, tunnel leak allowing water to corrode the Pandrol clip on the left rail. (See attached photo 1.)</li> <li><b>TRST 1000 Defect 10.15:</b> Between Forest Glen Station and Silver Spring Station, track 1, the lighting condition ranges from extremely poor to nonexistent.</li> <li><b>TRST 1000 Defect 10.17.4.1:</b> At CM 500+90, track 1, bench wall field side, relay rail potentially creating a trip-and-fall hazard.</li> <li><b>TRST 1000 Defect 10.17.4.1:</b> At CM 502+00, track 1, bench wall field side, relay rail potentially creating a trip-and-fall hazard.</li> <li><b>TRST 1000 Defect 3.2.1.2:</b> At CM 498+00, track 1, blocked catch basin. (See attached photo 2.)</li> <li><b>TRST 1000 Defect 3.1.2.2:</b> Between CM 500+00 and CM 498+00, standing water not draining as designed. (See attached photo 4.)</li> <li><b>TRST 1000 Defect 10.18:</b> At CM 493+00, track 1. Loose and exposed wires are creating a trip and fall hazard on the catwalk. (See attached photo 3.)</li> <li><b>TRST 1000 Defect 13.3.8:</b> At CM 471+30, track 1, broken third rail insulator.</li> <li><b>TRST 1000 Defect 13.3.14:</b> At the B08 switch, track 1, missing end cover board.</li> </ul>						Number of Defects	9			
							Recommended Finding?	Yes			
							Remedial Action Required?	Yes			
							Recommended Reinspection?	Yes			
Remedial Action	<p>To achieve compliance with WMATA's requirements:</p> <ol style="list-style-type: none"> <li>WMATA must repair tunnel leak and attend to corroding fastening components (CM 530+90).</li> <li>WMATA must repair or replace the lighting between Forest Glen and Silver Spring Stations (track 1).</li> <li>WMATA must collect the relay rail so a potential trip-fall hazard is eliminated (CM 500+90).</li> <li>WMATA must collect the relay rail so a potential trip-fall hazard is eliminated (CM 502+00).</li> </ol>										



- |  |   |
|--|---|
|  | <ol style="list-style-type: none"><li>5. WMATA must clean the debris from the center drain so it can work as designed (CM 498+00).</li><li>6. WMATA must clean the mud and debris from the track center as well as clean the drainage scuppers so they can work as designed (between CM 500+00 and CM 498+00).</li><li>7. WMATA must reposition the wires so as not to create a potential trip, fall and electrical shock hazard (at CM 493+00, track 1, on the catwalk).</li><li>8. WMATA must replace the broken third rail insulator support (CM 471+30).</li><li>9. WMATA must replace the missing end cover board (at the B08 switch).</li></ol> |
|--|---|



Photo 1. Tunnel leak permitting water to back-up to rail base and fastening system.  
Water condition beginning to cause corrosion to Pandrol clip.





Photo 2. Blocked center drain.



Photo 3. Exposed, non-secure wires on the tunnel walkway allowing a potential trip-and -fall hazard. This condition is compounded with the lack of tunnel lighting.



Photo 4. Mud and debris blocking center scupper, not allowing water to drain as designed.





# 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	20170519-WMATA-WP-1		
	2017	05	19				
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]
	[REDACTED]		[REDACTED]		[REDACTED]		[REDACTED]
	[REDACTED]		[REDACTED]		[REDACTED]		[REDACTED]
Inspection Location	Surge 15 – New Carrollton (D13) – Minnesota Ave (D09)						

## Inspection Summary

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

## Activity Summaries

Inspection Activity #	1	Inspection Subject					Job Safety Briefing Observation			Activity Code		TRK	JSB	OBS
Job Briefing Employee Name/Title	Track Unit #6161					Accompanied Inspector?	No	Out Brief Conducted	No	Time	0000 – 0430	Outside Shift	Yes	
Related Reports	N/A					Related CAPS / Findings		N/A						
Related Rules, SOPs, Standards, or Other	Ref		Rule or SOP		Standard		Other / Title		Checklist Reference					
	MSRPH		4.85											
	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	tracks 1 and 2		Chain Marker and/or Station(s)		From		To				
								New Carrollton (D13)		Minnesota Ave. (D09)				
Vehicles	Head Car Number		Number of Cars		Equipment		N/A							
	N/A		N/A											
Description	The job safety briefing at New Carrollton (D13) was comprehensive and covered all pertinent facts for the work zone. They discussed Safety Rule 4.85, hot spots, hazards, local hospital, inaccessible track, barrier ties with e-flares, etc. Safety Rule							Number of Defects		0				
								Recommended Finding?		No				
								Remedial Action Required?		No				

<sup>1</sup> 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		Digitally signed by WINSLOW L. POWELL DN: cn=US, o=U.S. Government, ou=DOT Headquarters, ou=FTAHQ, cn=WINSLOW L. POWELL Date: 2017.05.23 11:15:35 -04'00'		Date
Inspector in Charge – Name Winslow Powell		Inspection Team Robert Maniuszko				



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Form FTA-IR-1

	4.85 states "Employees shall use tools and equipment in the proper manner and for the purpose intended." A Red Tag Outage was in effect. Mobile Command Center (MCC) holds the red tag. The tag number is 2017136510A.							<b>Recommended Reinspection?</b>		No	
<b>Remedial Action</b>		No exceptions were taken.									
<b>Remedial Action</b>		N/A									

<b>Inspection Activity #</b>	2	<b>Inspection Subject</b>	Roadway Worker Protection – Work Zone Setup Verification				<b>Activity Code</b>		TRK	RWP	OBS
<b>Job Briefing Employee Name/Title</b>	Track Unit #6161		<b>Accompanied Inspector?</b>	No	<b>Out Brief Conducted</b>	No	<b>Time</b>	0000 – 0430	<b>Outside Shift</b>	Yes	
<b>Related Reports</b>	N/A		<b>Related CAPS / Findings</b>		N/A						
<b>Related Rules, SOPs, Standards, or Other</b>	Ref	Rule or SOP		Standard		Other / Title		Checklist Reference			
	MSRPH	4.85									
	RWPM										
<b>Inspection Location</b>	Main Track	Yard	Station	OCC	RTA Facility	FTA Office	<b>Track Type</b>	At-grade	Tunnel	Elevated	N/A
	X	X						X			
<b>Line(s)</b>	D-Line	<b>Track Number</b>	tracks 1 and 2	<b>Chain Marker and/or Station(s)</b>	From			To			
					New Carrollton (D13)			Minnesota Ave. (D09)			
<b>Vehicles</b>	Head Car Number		Number of Cars		<b>Equipment</b>	N/A					
	N/A		N/A								
<b>Description</b>	<p>The FWSO inspector reviewed the roadway worker protection (RWP) set up for surge 15. While the scope was initially to inspect both ends of the work zone, the inspection at the Minnesota Ave. end was cancelled due to an ongoing event investigation. All protections are established during pre-surge planning and distributed to employees and FWSO.</p> <ul style="list-style-type: none"> <li>The signed RWP map for Surge 15 has been revised. The latest map corrects a discrepancy that was observed on the map dated 5/15/17 at the New Carrollton Yard (D99) end of the setup. The revised map accurately reflects the location of mats and e-flares just prior to switches 27A and 29B.</li> <li>WMATA has clamped switches 21A and 25 in the reverse position. These clamps are not shown on the map, and provide an added measure of protection from anything that might move out of the loop track.</li> <li>The new map shows a "Last Updated" date of 5/16/2017 at 0747hrs.</li> <li>All work equipment stored at the yard end of track 2 was found to be chocked and secure.</li> <li>There was no active work occurring at the New Carrollton Station (D13) end of the working limits.</li> <li>During the walk three e-flares were noted to be out of order. The MCC was notified and the batteries were replaced immediately and proper function was observed prior to leaving the site.</li> </ul> <p>No exceptions were taken.</p>							<b>Number of Defects</b>		0	
								<b>Recommended Finding?</b>		No	
								<b>Remedial Action Required?</b>		No	
								<b>Recommended Reinspection?</b>		No	
<b>Remedial Action</b>		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	20170520-WMATA-AG-1		
	2017	05	20				
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]
	[REDACTED]		[REDACTED]		[REDACTED]		[REDACTED]
	[REDACTED]		[REDACTED]		[REDACTED]		[REDACTED]
Inspection Location	B-Line, track 2						

## Inspection Summary

Inspection Activity #	1	2	3	4	5	6
Activity Code	TRK-RWP-OBS	TRK-GEN-OBS				
Inspection Units	1	1				
Inspection Subunits	9	6				
Defects (Number)	0	11				
Recommended Finding	No	Yes				
Remedial Action Required <sup>1</sup>	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	RWIC, TRST Unit # 6321 Advance Watchman TRST Unit # 6112 AMF, TRST Unit # 6144 Superintendent TRST Unit #94				Accompanied Inspector?	Yes	Out Brief Conducted	Yes	Time	1000 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)	B-Line	Track Number	track 2		Chain Marker and/or Station(s)		From		To				
							Takoma Station (B07)		Fort Totten Station (B06)				
Vehicles	Head Car Number		Number of Cars		Equipment								

<sup>1</sup> 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		Digitally signed by ADAM ANTHONY GIOVANDO DN: c=US, o=U.S. Government, ou=FRA FRAFTWorthTX, ou=DOT FRAFTWorthTX, cn=ADAM ANTHONY GIOVANDO Date: 2017.05.25 09:56:50 -05'00'		Date
ADAM ANTHONY GIOVANDO				
Inspector in Charge – Name	Adam Giovando			
Inspection Team	Adam Giovando, Alexander Nepa, Lee Emard			

Form FTA-IR-1

Version date: 8/26/16



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Form FTA-IR-1

Description	TRST Unit 6312 conducted a job safety briefing at Takoma Station. The briefing was fully compliant with the WMATA Roadway Worker's Protection Manual(RWPM) requirements. It included WMATA badge-level verification, type of protection, inaccessible track (IT), potential hazards, hot spots and hospital location. The advance mobile flagger (AMF) was placed at the proper location. No exceptions were taken to the job safety briefing.			Number of Defects	0
				Recommended Finding?	No
				Remedial Action Required?	No
				Recommended Reinspection?	No
Remedial Action	N/A				

Activity Summaries

Inspection Activity #	2	Inspection Subject	General Track Observation					Activity Code	TRK	GEN	INS
Job Briefing Employee Name/Title	RWIC, TRST Unit # 6321 Advance Watchman TRST Unit # 6112 AMF, TRST Unit # 6144 Superintendent TRST Unit # 94		Accompanied Inspector?	Yes	Out Brief Conducted	Yes	Time	1000 1500	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 rev. 6										
Inspection Location	Main Track	Yard	Station	OCC	RTA Facility	FTA Office	Track Type	At-grade	Tunnel	Elevated	N/A
	X		X					X	X		
	B-Line	Track Number	track 2	Chain Marker and/or Station(s)		From		To			
						Takoma Station (B07)		Fort Totten Station (B06)			
Vehicles	Head Car Number		Number of Cars		Equipment						
Description	<p>FWSO team members performed an observation on the B-Line, track 2, between Takoma (B07) and Fort Totten (B06).</p> <p>The following new defects were observed:</p> <ul style="list-style-type: none"> <li><b>TRST 1000 Defect 5.14.7 and 5.14.16:</b> At CM 294+80, right rail, the joint bar used to secure the rail ends was a welded rail strap bar not designed to secure two pieces of rail together. There was also one bolt in the inbound side of the joint bar. This is a yellow color-coded defect.</li> <li><b>TRST 1000 Defect 13.3.13:</b> At CM 306+50, the third rail support cable was found unsecured. This is not a color-coded defect.</li> <li><b>TSTS 1000 Defect 13.3.14:</b> At CM 311+20, an end cover board is not attached and missing. This is not a color-coded defect.</li> <li><b>TRST 1000 Defect 5.14.7:</b> At CM 324+00, a rail joint only had one bolt securing one end of the joint bar. This is listed a red color-coded condition.</li> <li><b>TRST 1000 Defect 8.8:</b> At CM 324+00, the foul ballast was not draining as designed, allowing 1-1/2-inch dynamic vertical deflection. This is listed as a green color-coded condition.</li> <li><b>TRST 1000 Defect 13.3.11:</b> At CM 324+00, there is a broken third rail insulator not providing support to the third rail. This is not a color-coded defect.</li> <li><b>TRST 1000 Defect 13.3.13:</b> At CM 326+00, the third rail support cables are missing the connecting bolts. This is not a color-coded defect.</li> <li><b>TRST 1000 Defect 11.5:</b> At the B-07-98 signal, right rail, a 4-inch dynamic deviation in uniform profile was measured. This is a black color-coded condition. (See attached photos 1 through 4.)</li> </ul>						Number of Defects	11			
							Recommended Finding?	Yes			
							Remedial Action Required?	Yes			
							Recommended Reinspection?	Yes			



	<ul style="list-style-type: none"><li>• <b>TRST 1000 Defect 13.3.11:</b> At the B-07-08 signal there is an unsecured third rail insulator not supporting the end of the third rail. This is not a color-coded defect. (See attached photo 5.)</li><li>• <b>TRST 1000 Defect 13.3.14:</b> At the B-07-08 signal there is a missing third rail end cover board. This is not a color-coded defect. (See attached photo 6.)</li><li>• <b>TRST 1000 Defect 13.3.14:</b> At CM B2-374+00, there is a missing third rail cover end board. This is not a color-coded defect.</li></ul>		
Remedial Action	<p>To achieve compliance with WMATA'S requirements:</p> <ol style="list-style-type: none"><li>1. WMATA must replace the strap bars with proper angle bars and secure the joint with the appropriate number of bolts (at CM 294+80).</li><li>2. WMATA must re-secure the third rail support cables (at CM 306+50).</li><li>3. WMATA must re-secure the missing end cover board (at CM 311+20).</li><li>4. WMATA must secure the angle bar with the appropriate number of bolts (at CM 324+00).</li><li>5. WMATA must install clean ballast and surface (tamp) the area to eliminate the vertical deflection condition (at CM 324+00).</li><li>6. WMATA must replace the defective third rail insulator (at CM 324+00).</li><li>7. WMATA must replace the bolts in the third rail support cable (at CM 326+00).</li><li>8. WMATA must take the necessary steps to secure the deviation in uniform profile condition. This may include replacing ties, dumping ballast and surfacing the affected area (at the B-7-08 signal).</li><li>9. WMATA must secure the third rail insulator support to the tie (at the B-07-08 signal).</li><li>10. WMATA must reinstall the missing third rail end cover board (at the B-07-08 signal).</li><li>11. WMATA must reinstall the missing third rail end cover board (at CM 374+00).</li></ol>		





Photo 1. Overview of condition at B-07-08 signal, track two. Note rail was not seated properly into plates.



Photo 2. 1-5/8-inch spacing between tie and tie plate





Photo 3. 1-3/8-inch dynamic (pumping mark) on tie



Photo 4. One inch void between bottom of tie and ballast





Photo 5. At the B-07-08 signal, unsecure third rail insulator and missing cover board



# Inspection Form

FOIA Exemption: All (b)(6)

Form FTA-IR-1

United States Department of Transportation  
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## Agency/Department Information

Inspection Date	YYYY	MM	DD	Report Number	20170520-WMATA-WP-1		
	2017	05	20				
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]
	[REDACTED]		[REDACTED]		[REDACTED]		[REDACTED]
	[REDACTED]		[REDACTED]		[REDACTED]		[REDACTED]
Inspection Location	New Carrollton Yard (D99) Aerial Structure from Chain Marker (CM) 546+00 to Chain Marker (CM) 565+00 Minnesota Avenue (D09) out to Chain Marker (CM) D2 285+30						

## Inspection Summary

Inspection Activity #	1	2	3	4	5	6
Activity Code	TRK-RWP-OBS	TRK-RWP-OBS	TRK-GEN-OBS			
Inspection Units	1	1	1			
Inspection Subunits	1	1	1			
Defects (Number)	0	0	0			
Recommended Finding	No	No	No			
Remedial Action Required <sup>1</sup>	No	No	No			
Recommended Reinspection	No	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	Track Unit #6355					Accompanied Inspector?	No	Out Brief Conducted	No	Time	0800 – 1230	Outside Shift	Yes	
Related Reports						Related CAPS / Findings								
Related Rules, SOPs, Standards, or Other	Ref		Rule or SOP			Standard			Other / Title		Checklist Reference			
	MSRPH		4.87											
	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	tracks 1 and 2		Chain Marker and/or Station(s)		From		To					
							D2 CM607+88 D1 CM611+08		D2 CM285+30 D1 CM314+64					
Vehicles	Head Car Number		Number of Cars			Equipment	N/A							
	N/A		N/A											

<sup>1</sup> 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		Date	Digitally signed by WINSLOW L. POWELL DN: c=US, o=U.S. Government, ou=DOT Headquarters, ou=FTAHQ, cn=WINSLOW L. POWELL Date: 2017.05.26 07:55:54 -0400
Inspector in Charge – Name Winslow Powell		Inspection Team Winslow Powell, Robert Maniuszko			



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<b>Description</b>	<b>Job Safety Briefing:</b> <ul style="list-style-type: none"> <li>Unit #6355 conducted the briefing.</li> <li>The briefing was conducted at New Carrollton Station (D13).</li> <li>FWSO Inspectors were escorted by the Department of SAFE Unit #205.</li> <li>The roadway worker in charge was the Mobile Command Center (MCC).</li> <li>The MCC was on Radio Operations (Ops) Channel #12.</li> <li>Safety Rule 4.87 was discussed. The rule states: "Visual inspections and tests of powered equipment, tools and machinery shall be made at the beginning of each tour of duty. Equipment or machinery shall not be operated if it is defective or in an unsafe condition."</li> <li>A red tag outage was in place. The tag number was 2017136510A.</li> <li>The area was under inaccessible track (IT) protection. There were wood crosstie barriers, shunts, and e-flares at the end of the work zone.</li> <li>Hot spots were discussed.</li> <li>Work zone hazards were discussed.</li> </ul>	<b>Number of Defects</b>	0
		<b>Recommended Finding?</b>	No
		<b>Remedial Action Required?</b>	No
		<b>Recommended Reinspection?</b>	No
<b>Remedial Action</b>	There were no exceptions taken with the briefing. N/A		

<b>Inspection Activity #</b>	2	<b>Inspection Subject</b>	Roadway Worker Protection – Work Zone Setup					<b>Activity Code</b>	TRK	GEN	OBS
<b>Job Briefing Employee Name/Title</b>	Track Unit #6355			<b>Accompanied Inspector?</b>	No	<b>Out Brief Conducted</b>	No	<b>Time</b>	0800 – 1230	<b>Outside Shift</b>	Yes
<b>Related Reports</b>				<b>Related CAPS / Findings</b>							
<b>Related Rules, SOPs, Standards, or Other</b>	Ref	Rule or SOP			Standard		Other / Title		Checklist Reference		
	TRST 1000										
	MSRPH										
<b>Inspection Location</b>	Main Track	Yard	Station	OCC	RTA Facility	FTA Office	<b>Track Type</b>	At-grade	Tunnel	Elevated	N/A
	X							X		X	
<b>Line(s)</b>	D-Line	<b>Track Number</b>	tracks 1 and 2	<b>Chain Marker and/or Station(s)</b>	From			To			
					D2 CM607+88 D1 CM611+08			D2 CM285+30 D1 CM314+64			
<b>Vehicles</b>	<b>Head Car Number</b>		<b>Number of Cars</b>		<b>Equipment</b>	N/A					
	N/A		N/A								
<b>Description</b>	<b>Observations:</b> <ul style="list-style-type: none"> <li>At D2 CM607+88 one of the e-Flares was not working. The SAFE escort replaced the batteries, then the light worked, as designed.</li> <li>At the barrier crosstie located in D99 yard, track 1, the lock that secures the chain was not locked. The SAFE escort re-secured the lock immediately.</li> </ul> <b>Work Zone Setup:</b> <ul style="list-style-type: none"> <li>E-flares were positioned as required.</li> <li>Wooden crossties were positioned as required.</li> <li>Shunts were positioned and connected as required.</li> <li>Work mats were positioned as required.</li> <li>The observed switches that required clamps were clamped as required.</li> <li>The team noted that there were also clamps on switches 25 and 21A. These switches were clamped in reverse and added an additional level of protection to the working limits. The clamps are not noted on the shutdown map.</li> </ul>						<b>Number of Defects</b>	0			
							<b>Recommended Finding?</b>	No			
							<b>Remedial Action Required?</b>	No			
							<b>Recommended Reinspection?</b>	No			
<b>Remedial Action</b>	N/A										

<b>Inspection Activity #</b>	3	<b>Inspection Subject</b>	General Observations from the Work Area				<b>Activity Code</b>	TRK	GEN	OBS	
<b>Job Briefing</b>	Track Unit #6355			<b>Accompanied</b>	No	<b>Out Brief</b>	No	<b>Time</b>	0800 –	<b>Outside</b>	Yes



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<b>Employee Name/Title</b>					<b>Inspector?</b>		<b>Conducted</b>			1230	<b>Shift</b>	
<b>Related Reports</b>					<b>Related CAPS / Findings</b>							
<b>Related Rules, SOPs, Standards, or Other</b>	Ref		Rule or SOP		Standard			Other / Title		Checklist Reference		
	TRST 1000											
	MSRPH											
<b>Inspection Location</b>	Main Track	Yard	Station	OCC	RTA Facility	FTA Office	<b>Track Type</b>	At-grade	Tunnel	Elevated	N/A	
	X							X		X		
<b>Line(s)</b>	D-Line	<b>Track Number</b>	tracks 1 and 2	<b>Chain Marker and/or Station(s)</b>	From				To			
					D2 CM607+88 D1 CM611+08				D2 CM285+30 D1 CM314+64			
<b>Vehicles</b>	Head Car Number		Number of Cars		<b>Equipment</b>	N/A						
	N/A		N/A									
<b>Description</b>	General Observations: <ul style="list-style-type: none"> <li>The grout pad replacement is ongoing on the aerial structure between New Carrollton (D13) and Landover (D12). The team observed the following activities associated with this work:               <ul style="list-style-type: none"> <li>The rail was lifted approximately 1-foot above the area that is to be replaced.</li> <li>A jack hammer was used to break up the old grout pad.</li> <li>New forms were built and installed.</li> <li>An Epoxy Bonding Agent (FX-752) was applied prior to the new concrete.</li> <li>The new concrete was installed and troweled into place around the old stud bolts.</li> <li>The old stud bolts were cut level with the new grout pad.</li> <li>The rail plates were placed onto the grout pad.</li> <li>New holes were drilled for the new stud bolts.</li> <li>The rail was lowered onto the new tie plates.</li> </ul> </li> <li>Crosstie replacement was observed in two locations. The team was informed that the surge calls for approximately 11,000 crossties to be installed.</li> <li>Tamping operations were observed at the Minnesota Avenue end of the work zone.</li> </ul> There were no exceptions taken to the observed activities.							<b>Number of Defects</b>		0		
								<b>Recommended Finding?</b>		No		
								<b>Remedial Action Required?</b>		No		
								<b>Recommended Reinspection?</b>		No		
<b>Remedial Action</b>	N/A											

Photos:





Figure 1 - New forms are constructed



Figure 2 - Rail is raised up approximately 1-foot above the form

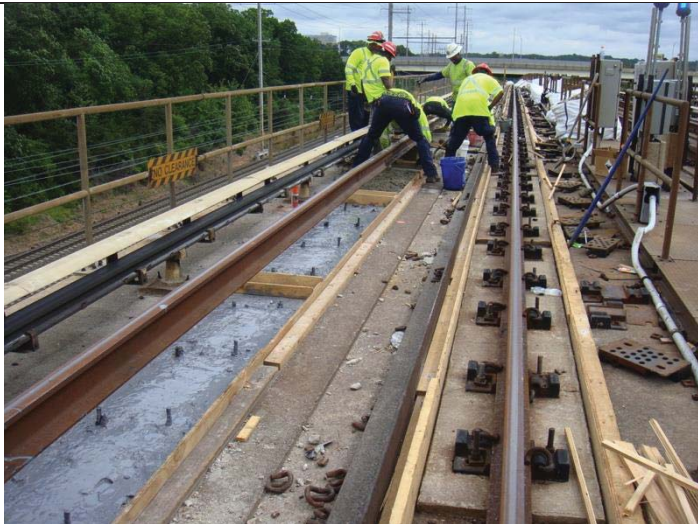


Figure 3 - Crew pours and levels concrete



Figure 4 - New concrete cures around old stud bolts

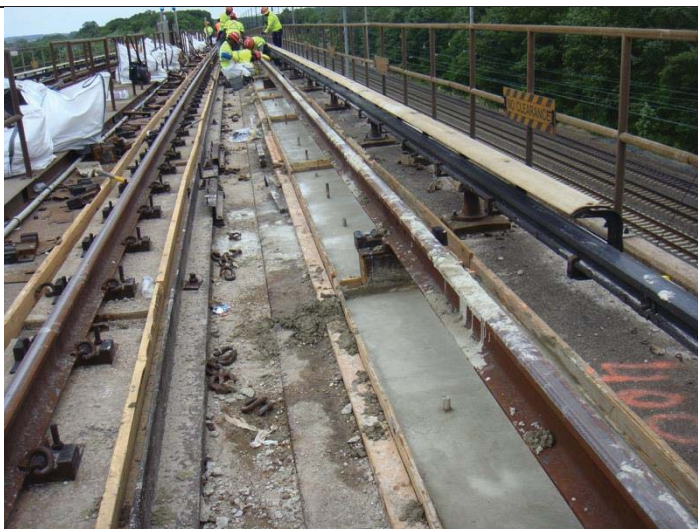


Figure 5 - Old stud bolts are cut flush with new grout pad



Figure 6 - New rail plates are placed under the rail





Figure 7 - New stud bolts are added and rail is lowered



# 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	20170521-WMATA-AG-1		
	2017	05	21				
Rail Agency Name	Washington Metropolitan Area Transit Authority			Rail Agency Department	TRST - SAFE	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]
	[REDACTED]		[REDACTED]		[REDACTED]		[REDACTED]
Inspection Location	F-10 and F-11						

## Inspection Summary

Inspection Activity #	1	2	3	4	5	6
Activity Code	TRK-RWP-OBS					
Inspection Units	1					
Inspection Subunits	1					
Defects (Number)	1					
Recommended Finding	No					
Remedial Action Required <sup>1</sup>	No					
Recommended Reinspection	No					

## Activity Summaries

Inspection Activity #	1	Inspection Subject					Roadway Worker Protection			Activity Code		TRK	RWP	OBS
Job Briefing Employee Name/Title	Advance Mobile Flagger, TRST Unit 6024					Accompanied Inspector?	No	Out Brief Conducted	No	Time	1000 1430	Outside Shift	No	
Related Reports	20170516-WMATA-WP-1					Related CAPS / Findings								
Related Rules, SOPs, Standards, or Other	Ref		Rule or SOP			Standard		Other / Title			Checklist Reference			
	SRPH		P.O. T-16-10			Advance Mobile Flagger								
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	tracks 2	Chain Marker and/or Station(s)	From			To						
					Suitland Station (F10)			Branch Avenue Station (F11)						
Vehicles	Head Car Number		Number of Cars		Equipment		Train number 503							

<sup>1</sup> 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 <b>ADAM ANTHONY GIOVANDO</b>		Digitally signed by ADAM ANTHONY GIOVANDO DN: c=US, o=U.S. Government, ou=FRA FRAftWorthTX, ou=DOT FRAftWorthTX, cn=ADAM ANTHONY GIOVANDO Date: 2017.05.31 10:45:27 -05'00'		Date
Inspector in Charge - Name Adam Giovando		Inspection Team Adam Giovando, Alexander Nepa, Lee Emard		



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or FTA-IR-1

	5171	6			
Description	<p>The FWSO team performed random on-site platform audits of advance mobile flagman placed on the F-Line. The purpose of this inspection was to observe employee understanding and compliance of Permanent Order, R-17-03, from the advance mobile flagger (AMF).</p> <p>The following defect was observed and was not in compliance with Permanent Order R-17-03. There were no color-coded conditions noted:</p> <ul style="list-style-type: none"><li>The FWSO team observed train number 503, lead car number 5171, arrive at Suitland Station at 1231 hours. The FWSO team listened to and observed AMF's instructions to the train operator, which was in full compliance with P.O. T-16-10. The train operator acknowledged understanding the instructions from the AMF. The FWSO team boarded the train and stood directly behind the operator's compartment to observe compliance. Upon departure of Suitland Station, the operator accelerated to a speed of 30 MPH—more than half the posted track speed—and did not continuously sound his main line horn, as required in Permanent Order R-17-03.</li></ul> <p>A remedial action for this defect was previously issued in FWSO report 20170516-WMATA-WP-1.</p> <p>Other Notable Observations:</p> <ul style="list-style-type: none"><li>The FWSO team members were in the head unit number 7338 when it approached Suitland Station. Team members observed the AMF standing at his assigned location with the yellow flashing light visible and the orange flag on his person signaling to the approaching train. The FWSO team members observed the AMF give proper instructions to the train operator and observed the train depart in full compliance.</li></ul>			Number of Defects	1
				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	20170523-WMATA-AG-1		
	2017	05	23				
Rail Agency Name	Washington Metropolitan Area Transit Authority			Rail Agency Department	SAFE	Sub- Department	
Rail Agency Department Contact Information	Name		Email		Office Phone		Mobile Phone
	[REDACTED]		[REDACTED]		[REDACTED]		[REDACTED]
	[REDACTED]		[REDACTED]		[REDACTED]		[REDACTED]
	[REDACTED]		[REDACTED]		[REDACTED]		[REDACTED]
	[REDACTED]		[REDACTED]		[REDACTED]		[REDACTED]
Inspection Location	C-Line, track 1, Pentagon (C07) to National Airport (C10)						

## Inspection Summary

Inspection Activity #	1	2	3	4	5	6
Activity Code	TRK-JSB-OBS	TRK-RC-OBS	RTRA-RC-OBS	ROCC-RC-OBS		
Inspection Units	1	1	1	1		
Inspection Subunits	1	1	1	1		
Defects (Number)	0	0	7	1		
Recommended Finding	No	No	Yes	Yes		
Remedial Action Required <sup>1</sup>	No	No	Yes	Yes		
Recommended Reinspection	No	No	Yes	Yes		

## Activity Summaries

Inspection Activity #	1	Inspection Subject				Job Safety Briefing Observation				Activity Code		TRK	JSB	OBS	
Job Briefing Employee Name/Title	TRST 6367				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						
	MSRPH		R-17-02												
	RWPM		R-17-03												
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	track 1	Chain Marker and/or Station(s)	From			To							
					Pentagon (C07)			National Airport (C10)							
Vehicles	Head Car Number		Number of Cars		Equipment	N/A									
	N/A		N/A												
Description	FWSO Inspectors received a job safety briefing from TRST unit 6367, who was serving as the roadway worker in charge (RWIC) prior to entering the roadway. During the briefing, the work group was informed that the advance mobile flagger							Number of Defects		0					
								Recommended Finding?		No					
								Remedial Action Required?		No					

<sup>1</sup> 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 <b>ADAM ANTHONY GIOVANDO</b>		Digitally signed by ADAM ANTHONY GIOVANDO DN: c=US, o=U.S. Government, ou=FRA FRAFTWorthTX, ou=DOT FRAFTWorthTX, cn=ADAM ANTHONY GIOVANDO Date: 2017.05.31 13:34:53 -05'00'		Date
Inspector in Charge - Name Adam Giovando	Inspection Team Adam Giovando, Leon Ferguson, Tom Wozniak, Tammy Powell, Mike Vitale			



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	(AMF) had been briefed by the RWIC and had the approved personal protective equipment (PPE) to perform his duties. The RWIC covered all required aspects of the job safety briefing, to include the type of protection (train approach warning (TAW)), designation of roles within the work group, identification of hotspots, discussion of potential hazards to be encountered during the inspection, and the nearest hospital. All members of the work group had their PPE and roadway worker protection (RWP) cards checked for compliance. The RWIC contacted the AMF to confirm he was in position and then contacted the Rail Operations Control Center (ROCC) for permission to access the roadway.  No exceptions were taken with the briefing.	<b>Recommended Reinspection?</b>	No
<b>Remedial Action</b>	N/A		

<b>Inspection Activity #</b>	2	<b>Inspection Subject</b>	RWIC and AMF Rules Compliance Observation				<b>Activity Code</b>	TRK	RC	OBS	
<b>Job Briefing Employee Name/Title</b>	TRST 6367		<b>Accompanied Inspector?</b>	Yes	<b>Out Brief Conducted</b>	No	<b>Time</b>	1000-1400	<b>Outside Shift</b>	No	
<b>Related Reports</b>	N/A		<b>Related CAPS / Findings</b>	N/A							
<b>Related Rules, SOPs, Standards, or Other</b>	Ref	Rule or SOP		Standard		Other / Title		Checklist Reference			
	MSRPH	R-17-02									
	RWPM	R-17-03									
<b>Inspection Location</b>	Main Track	Yard	Station	OCC	RTA Facility	FTA Office	<b>Track Type</b>	At-grade	Tunnel	Elevated	N/A
	X								X		
<b>Line(s)</b>	C-Line	<b>Track Number</b>	track 1		<b>Chain Marker and/or Station(s)</b>	From		To			
						Pentagon (C07)		National Airport (C10)			
<b>Vehicles</b>	<b>Head Car Number</b>	<b>Number of Cars</b>		<b>Equipment</b>	N/A						
	N/A	N/A									
<b>Description</b>	<p>FWSO Inspectors observed both the AMF and RWIC for compliance with permanent orders R-17-02 (Requesting Foul Time) and R-17-03 (Advanced Mobile Flagger).</p> <p>According to the 2017 Roadway Access Guide, there are no hot spots between Pentagon (C07) and National Airport (C10). However, the RWIC made the decision to request foul time on approach to the National Airport in a section of track when the place of safety required inspectors to step over the third rail. The RWIC relayed all required information to the ROCC for the request, confirming the foul time protections the ROCC put in place via repeat back. The RWIC noted the time of the request and allowed the team to move through the work area. When foul time was relinquished, the RWIC noted the time when contacting the ROCC.</p> <p>While in this area, the ROCC made multiple requests for the RWIC to clear the work group from the roadway in order to facilitate train movement. The RWIC obliged and relinquished foul time when the work group was safely clear of the roadway. Because of this, FWSO personnel observing the AMF did not observe the AMF inform operators of foul time protections in place.</p> <p>The FWSO Inspector observing the AMF noted compliance with the requirements of Permanent Order R-17-03. The AMF had all required PPE, to include the flashing amber lantern and orange flag, and was positioned at the 8-car marker. The FWSO Inspector verified that the AMF was level-4 RWP qualified, and had established communication with the RWIC. The AMF effectively communicated the information required by Permanent Order R-17-03 to each operator, but did not follow the script word for word.</p>						<b>Number of Defects</b>	0			
							<b>Recommended Finding?</b>	No			
							<b>Remedial Action Required?</b>	No			
							<b>Recommended Reinspection?</b>	No			
<b>Remedial Action</b>	N/A										

<b>Inspection Activity #</b>	3	<b>Inspection Subject</b>	Train Operator Rules Compliance Observation			<b>Activity Code</b>	RTRA	RC	OBS
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<b>Job Briefing Employee Name/Title</b>	TRST 6367		<b>Accompanied Inspector?</b>	Yes	<b>Out Brief Conducted</b>	No	<b>Time</b>	1000-1400	<b>Outside Shift</b>	No	
<b>Related Reports</b>	20170516-WMATA-WP-1		<b>Related CAPS / Findings</b>		Remedial Action ID: 1308						
<b>Related Rules, SOPs, Standards, or Other</b>	Ref	Rule or SOP		Standard		Other / Title		Checklist Reference			
	MSRPH	R-17-02									
	RWPM	R-17-03									
<b>Inspection Location</b>	Main Track	Yard	Station	OCC	RTA Facility	FTA Office	<b>Track Type</b>	At-grade	Tunnel	Elevated	N/A
	X								X		
<b>Line(s)</b>	C-Line	<b>Track Number</b>	track 1		<b>Chain Marker and/or Station(s)</b>	From		To			
						Pentagon (C07)		National Airport (C10)			
<b>Vehicles</b>	<b>Head Car Number</b>		<b>Number of Cars</b>		<b>Equipment</b>	N/A					
	N/A		N/A								
<b>Description</b>	<p>FWSO Inspectors observed five train operators for compliance with permanent orders R-17-02 (Requesting Foul Time) and R-17-03 (Advanced Mobile Flagger). All train operators had attended the AMF training as required by WMATA.</p> <p><b>The following non-color-coded defects were noted:</b></p> <ul style="list-style-type: none"> <li>Train 306 failed to properly sound the horn to acknowledge the mobile work crew while traveling between Pentagon City and Pentagon. <b>Defect associated with Class I/Class II Vehicle Operator Procedures, Item 3 of P.O. R-17-03.</b></li> <li>Train 303 failed to properly sound the horn to acknowledge the mobile work crew while traveling between Pentagon City (C08) and Crystal City (C09). <b>Defect associated with Class I/Class II Vehicle Operator Procedures, Item 3 of P.O. R-17-03.</b></li> <li>Train 409 failed to properly sound the horn to acknowledge the mobile work crew while traveling between Pentagon City (C08) and Pentagon (C07). <b>Defect associated with Class I/Class II Vehicle Operator Procedures, Item 3 of P.O. R-17-03.</b></li> <li>Train 6118 failed to properly sound the horn when approaching the AMF. <b>Defect associated with Class I/Class II Vehicle Operator Procedures, Item 1 of P.O. R-17-03.</b></li> <li>Train 3026 was being used for training, but did not sound the horn. <b>Defect associated with Class I/Class II Vehicle Operator Procedures, Item 1 of P.O. R-17-03.</b></li> <li>Train 7170 failed to properly sound the horn when approaching the AMF. <b>Defect associated with Class I/Class II Vehicle Operator Procedures, Item 1 of P.O. R-17-03.</b></li> <li>Train 3287 failed to properly sound the horn when approaching the AMF. <b>Defect associated with Class I/Class II Vehicle Operator Procedures, Item 1 of P.O. R-17-03.</b></li> </ul> <p>Remedial actions for these defects were previously issued in FWSO report 20170516-WMATA-WP-1.</p> <p><b>Other Notable Observations:</b></p> <ul style="list-style-type: none"> <li>FWSO Inspectors noted confusion about whether they should use their full-service horn or yard horn (whichever is quieter), to acknowledge personnel on the roadway. P.O. R-17-03 requires the use of the mainline horn per items 1 and 3 of the Class I/Class II Vehicle Operator Procedures.</li> </ul>						<b>Number of Defects</b>		7		
							<b>Recommended Finding?</b>		No		
							<b>Remedial Action Required?</b>		No		
							<b>Recommended Reinspection?</b>		No		
	<b>Remedial Action</b>	<ul style="list-style-type: none"> <li>N/A</li> </ul>									

<b>Inspection Activity #</b>	4	<b>Inspection Subject</b>	ROCC Rules Compliance Observation			<b>Activity Code</b>		ROCC	RC	OBS
<b>Job Briefing Employee Name/Title</b>	TRST 6367		<b>Accompanied Inspector?</b>	Yes	<b>Out Brief Conducted</b>	No	<b>Time</b>	1000-1400	<b>Outside Shift</b>	No
<b>Related Reports</b>	20170516-WMATA-WP-1		<b>Related CAPS / Findings</b>		Remedial Action ID: 1308					



Related Rules, SOPs, Standards, or Other	Ref		Rule or SOP		Standard		Other / Title		Checklist Reference		
	MSRPH		R-17-02								
	RWPM		R-17-03								
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	track 1	Chain Marker and/or Station(s)	From			To			
					Pentagon (C07)			National Airport (C10)			
Vehicles	Head Car Number		Number of Cars		Equipment	N/A					
	N/A		N/A								
Description	<p>The FWSO Inspector observed the operations (Ops) 3 console and monitored the FSWO team members assigned to a WMATA inspection track unit walking from Pentagon (C07) to National Airport (C10). The RWIC assigned to the team was formally cleared onto the protect list at 1003 hours. The RWIC followed radio protocol, calling on each segment via his portable radio, properly identifying himself as unit 6367. For his initial call-on, the RWIC provided the location of the first segment of his walk from Pentagon to Pentagon City, track 1, and identified the number of personnel in his crew, including "two FTA personnel." The RWIC also reported he conducted a safety briefing and identified all "hot spots" and that the work group would be walking under TAW protection. Lastly, he stated that there was an AMF stationed at Pentagon City for train operator notifications.</p> <p>The FWSO inspector noted that all radio transmissions between the rail traffic controller (RTC) and the RWIC concluded with "over," and the RTC concluded with "Central Out," closing the communication loop. The RTC requested him to stand by and stand clear while he reviewed the request before granting permission of the RWP request. The RTC granted permission for requested access, making a general announcement over the radio. The RTC used International Civil Aviation Organization (ICAO) assignment of the alphabet to clarify location, e.g. Charlie 07 (C07), as required by WMATA Rule 1.79. The RWIC called clear of the location once crew completed that section of the walk. In each instance, the RTC ensured 100% repeat back of clearance and information provided.</p> <p>RWIC Unit 6367 called on for foul time at National Airport Interlocking on four separate occasions while the FWSO and WMATA work group inspected switch number 9. The work group was asked to clear intermittently by the ROCC to allow revenue service through the area. The crew was cleared for foul time on three occasions. They canceled the fourth request, as they would not have enough time to conclude work/inspection.</p> <p>For each instance, the RWIC identified self and crew properly, requesting foul time and stating chain markers. The RTC asked him to "stand by and stand clear," while he ensured proper protects were in place. In each instance, the RTC button controller established red signals and prohibit exits for all affected signals in the area, removing automatic capability. Blue Block Track and human form was established on the Controller's display board in the area, as well. On one of three occasions, the RTC contacted the approaching train to notify him of the red signal on approach. On the other two occasions, the RTC let revenue traffic clear the area, and the crew worked with no trains in the vicinity. The RTC ensured 100% repeat back of clearance and specific foul time protection (exits, red signals, etc.) before granting the RWIC foul time access.</p> <p>The FWSO Inspector also reviewed all ROCC Foul Time and Maintenance Personnel Access Checklists for compliance of populating all requests, as required. All checklists were completed by the RTC accordingly, documenting both the general access request and all three separate instances where foul time was granted.</p> <p><b>The following non-color coded defect was observed:</b></p> <ul style="list-style-type: none"> <li>At 1011 hours, train 305, located at Pentagon City (C07), track 1, radioed the RTC requesting clarification that there were personnel on the roadway ahead of her between Pentagon City and Pentagon. She</li> </ul>						Number of Defects		1		
							Recommended Finding?		No		
							Remedial Action Required?		No		
							Recommended Reinspection?		No		



	<p>then reported that the AMF assigned to the team at Pentagon City told her to operate at normal speed, not half speed, as required by P.O. R-17-03. She continued that despite her trying to tell him the crew was on the roadway, he said he did not hear the announcement. The RTC again clarified the announcement over the radio and informed the operator to proceed at half speed. The inspector did not observe or hear further communication between any parties regarding the clarification that the RTC's protect was established. <b><i>Defect associated with Roadway Worker in Charge (RWIC) Procedures, Item 4 of P.O. R-17-03.</i></b> NOTE: There were no more reports of conflicting direction at Pentagon City following that redirect and clarification.</p> <p>Remedial actions for these defects were previously issued in 20170516-WMATA-WP-1.</p>		
Remedial Action	N/A		



# Inspection Form

FOIA Exemption: All (b)(6)

Form FTA-IR-1

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## Agency/Department Information

Inspection Date	YYYY	MM	DD	Report Number	20170523-WMATA-AG-2		
	2017	05	23				
Rail Agency Name	Washington Metropolitan Area Transit Authority			Rail Agency Department	TRST	Sub- Department	TKIN
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 Track 1, Pentagon to National Airport						

## 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	3				
Recommended Finding	No	Yes				
Remedial Action Required <sup>1</sup>	No	Yes				
Recommended Reinspection	No	Yes				

## Activity Summaries

Inspection Activity #	1	Inspection Subject					Job Safety Briefing Observation			Activity Code		TRK	JSB	OBS
Job Briefing Employee Name/Title	TRST 6367					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					
	MSRPH		R-17-02											
	RWPM		R-17-03											
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	track 1	Chain Marker and/or Station(s)	From			To						
					Pentagon (C07)			National Airport (C10)						
Vehicles	Head Car Number		Number of Cars		Equipment	N/A								
	N/A		N/A											
Description	FWSO Inspectors received a job safety briefing from TRST unit 6367, who was serving as the roadway worker in charge (RWIC) prior to entering the roadway. During the briefing, the work group was informed that the advanced mobile								Number of Defects		0			
									Recommended Finding?		No			
									Remedial Action Required?		No			

<sup>1</sup> 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 <b>ADAM ANTHONY GIOVANDO</b>		Digitally signed by ADAM ANTHONY GIOVANDO DN: c=US, o=U.S. Government, ou=FRA FRAFTWorthTX, ou=DOT FRAFTWorthTX, cn=ADAM ANTHONY GIOVANDO Date: 2017.06.01 08:29:35 -05'00'		Date
Inspector in Charge - Name Adam Giovando		Inspection Team Adam Giovando, Mike Vitale		



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	<p>flagger (AMF) had been briefed by the RWIC and had the approved personal protective equipment (PPE) to perform his duties. The RWIC covered all required aspects of the job safety briefing. This included the type of protection (train approach warning (TAW)), designation of roles within the work group, identification of hot spots, discussion of potential hazards to be encountered during the inspection, and the nearest hospital. All members of the work group had their PPE and roadway worker protection (RWP) cards checked for compliance. The RWIC contacted the AMF to confirm he was in position and then contacted the Rail Operations Control Center (ROCC) for permission to access the roadway.</p> <p>No exceptions were taken with the briefing.</p>	<b>Recommended Reinspection?</b>	No
<b>Remedial Action</b>	N/A		

<b>Inspection Activity #</b>	2	<b>Inspection Subject</b>						Walking Track Inspection		<b>Activity Code</b>		TRK	WI	PI
<b>Job Briefing Employee Name/Title</b>	TRST 6367						<b>Accompanied Inspector?</b>	Yes	<b>Out Brief Conducted</b>	No	<b>Time</b>	1000-1400	<b>Outside Shift</b>	No
<b>Related Reports</b>	N/A						<b>Related CAPS / Findings</b>		N/A					
<b>Related Rules, SOPs, Standards, or Other</b>	Ref		Rule or SOP		Standard		Other / Title		Checklist Reference					
	TRST 1000		R-17-02											
	RWPM		R-17-03											
<b>Inspection Location</b>	Main Track	Yard	Station	OCC	RTA Facility	FTA Office	<b>Track Type</b>	At-grade	Tunnel	Elevated	N/A			
	X								X					
<b>Line(s)</b>	C-Line	<b>Track Number</b>	track 1	<b>Chain Marker and/or Station(s)</b>	From				To					
					Pentagon (C07)				National Airport (C10)					
<b>Vehicles</b>	Head Car Number		Number of Cars		<b>Equipment</b>	N/A								
	N/A		N/A											
<b>Description</b>	<p>FWSO Inspectors accompanied WMATA track inspectors performing a walking track inspection between Pentagon (C07) and National Airport (C10) stations.</p> <p><b>The following new color-coded defect was observed:</b></p> <ul style="list-style-type: none"><li>At C1 312+00, three defective fasteners in a row were noted, resulting in a gage of 57.25 inches. WMATA installed gage rods as a mitigation until the fasters are replaced (<b>Red condition</b>). <b>TRST 1000 Table 11-2.</b></li></ul> <p><b>The following new non-color-coded defects were observed:</b></p> <ul style="list-style-type: none"><li>At C1 277+73, five defective fasteners in a row were noted on the left rail, and four of five defective fasteners observed on the right rail. The track in this area was still holding proper gage and did not show signs of excessive lateral or vertical movement. This is classified as a maintenance defect per WMATA's TRST 1000 manual. <b>TRST 1000 7.9.2.5</b></li><li>At C1 301+20 there are two consecutive fasteners that are supported by approximately 20 shims in lieu of a grout pad. TRST 1000 requires that grout pads should be made from: "Grout Pads may be either Portland cement grout, epoxy grout, or epoxy modified concrete." <b>TRST 1000 6.14.2.2</b></li></ul> <p><b>Other Notable Observations:</b></p> <ul style="list-style-type: none"><li>Between C1 276+00 and 277+30, the 3<sup>rd</sup> rail is directly below the high catwalk where employees are required to clear.</li><li>The existing Lord and Landis fasteners between Pentagon and Pentagon City are showing signs of deterioration.</li><li>The frogs for switches 1A and 3A at C1 289+00 were showing signs of wear.</li><li>Switch 9 at C1 360+70 showed evidence of switch rod number four contacting the grout pad supporting the switch. In addition, various</li></ul>							<b>Number of Defects</b>		3				
								<b>Recommended Finding?</b>		Yes				
								<b>Remedial Action Required?</b>		Yes				
								<b>Recommended Reinspection?</b>		Yes				



	components were loose or obstructing the free movement of the switch. A switch point bolt on the right-hand switch point is contacting the switch point stop, preventing the switch from fully positioning when lined for turnout movement. While this switch did not warrant a restriction at the time, WMATA should review the inspection records and perform required maintenance.		
Remedial Action	To achieve compliance with WMATA's requirements: <ul style="list-style-type: none"><li>• WMATA must replace defective fasteners at C1 277+73.</li><li>• WMATA must replace shims with proper grout pad at C1 301+20.</li><li>• WMATA must replace defective fasteners at C1 312+00.</li></ul>		

Photos:



Photo 1: Shims used in lieu of grout pad at C1 301+20.



Photo 2: Switch rod number four contacting concrete pad supporting switch nine at C1 360+70.



Photo 3: Switch point stop interfering with bolts preventing the switch from fully positioning when lined for turnout movement at switch nine at C1 360+70.





# 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	20170524-WMATA-AG-1		
	2017	05	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]
	[REDACTED]		[REDACTED]		[REDACTED]		[REDACTED]
Inspection Location	Dupont Circle (A03) - Track 2						

## Inspection Summary

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

## Activity Summaries

Inspection Activity #	1	Inspection Subject					Dupont Circle (A03) Job Safety Briefing			Activity Code		TP	JSB	OBS
Job Briefing Employee Name/Title	WMATA RWIC					Accompanied Inspector?	Yes	Out Brief Conducted	Yes	Time	0100-0500	Outside Shift	Yes	
Related Reports	N/A					Related CAPS / Findings		N/A						
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)	A-Line	Track Number	track 2		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											
Description	FWSO personnel received a job safety briefing from the WMATA roadway worker in charge (RWIC). All personal protective equipment (PPE) and roadway worker										Number of Defects		0	
											Recommended Finding?		No	

<sup>1</sup> 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 <b>ADAM ANTHONY GIOVANDO</b>		Digitally signed by ADAM ANTHONY GIOVANDO DN: c=US, o=U.S. Government, ou=FRA FRAFTWorthTX, ou=DOT FRAFTWorthTX, cn=ADAM ANTHONY GIOVANDO Date: 2017.06.07 09:32:28 -05'00'	Date
Inspector in Charge - Name Adam Giovando	Inspection Team Tino Sahoo		



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	<p>protection (RWP) IDs were checked and the working limits were reviewed. The WMATA RWIC covered the nearest hospital and safety rule of the day. The hot spots, hazards, clearance areas, communication, and Roadway Access Guide were used as part of the discussion. Track protection was exclusive track occupancy (ETO) and the de-energization of the 3<sup>rd</sup> rail was done via a red tag. No exceptions were taken to the Job Safety Briefing.</p> <p><b>The FWSO Inspector did not note any defects.</b></p>	<b>Remedial Action Required?</b>	No
		<b>Recommended Reinspection?</b>	No
<b>Remedial Action</b>	N/A		

<b>Inspection Activity #</b>	2	<b>Inspection Subject</b>					Dupont Circle (A03) Replacing Expansion Cables (1000 kcmil, 2 kV)		<b>Activity Code</b>		TP	RM	OBS
<b>Job Briefing Employee Name/Title</b>	WMATA RWIC		<b>Accompanied Inspector?</b>		Yes	<b>Out Brief Conducted</b>	Yes	<b>Time</b>	0100-0500	<b>Outside Shift</b>	Yes		
<b>Related Reports</b>	N/A		<b>Related CAPS / Findings</b>			N/A							
<b>Related Rules, SOPs, Standards, or Other</b>	Ref		Rule or SOP		Standard		Other / Title		Checklist Reference				
	ENGINEERING MODIFICATION INSTRUCTIONS (EMI) FOR JUMPER, EXPANSION, AND TRANSITION POWER CABLES REPLACEMENT SYSTEMWIDE (REVISION 2, SEPTEMBER 16, 2016)												
	TRACK AND STRUCTURES DIVISION – TRST 1000 TRACK MAINTENANCE AND INSPECTION MANUAL (REVISION 7, MARCH 2017)												
<b>Inspection Location</b>	Main Track	Yard	Station	OCC	RTA Facility	FTA Office	<b>Track Type</b>	At-grade	Tunnel	Elevated	N/A		
	X								X				
<b>Line(s)</b>	A-Line	<b>Track Number</b>	track 2	<b>Chain Marker and/or Station(s)</b>		From			To				
						CM 088+00			CM 089+00				
<b>Vehicles</b>	Head Car Number		Number of Cars		<b>Equipment</b>		Expansion Cables (1000 kcmil, 2 kV)						
	N/A		N/A										
<b>Description</b>	<p>FWSO Inspectors observed WMATA's power department and electrical contractors performing the task of replacing four expansion cables.</p> <p>In WMATA's shop before the night of work, four 30-foot length portions of 1000 kcmil cable were cut and pre-meggered. In addition, anytime there is a new cable replacement on the expansion cables, 2 kV (voltage rating) cables are being used to upgrade the system for the future deployment of 100 percent 7000 series 8-car trains.</p> <p>During the inspection, the FWSO Inspectors observed the contractor installing expansion cables per the Engineering Modification Instruction (EMI) for jumper, expansion, and transition power cables replacement system wide, issued September 16, 2016.</p> <p><b>The FWSO Inspector and WMATA personnel did not note any defects during the expansion cable replacement.</b></p> <p><b>The following new track defect was observed and not in compliance with TRACK AND STRUCTURES DIVISION – TRST 1000 TRACK MAINTENANCE AND INSPECTION MANUAL (REVISION 7, MARCH 2017). There were no color-coded conditions noted:</b></p>							<b>Number of Defects</b>		1			
								<b>Recommended Finding?</b>		Yes			
								<b>Remedial Action Required?</b>		Yes			
								<b>Recommended Reinspection?</b>		Yes			



	<ul style="list-style-type: none"><li>TRK 2 CM 088+00 to CM 089+00 – Track invert clogged with mud and debris causing standing water. (See Figure 1.)</li></ul>		
<b>Remedial Action</b>	<p>To achieve compliance with WMATA’s requirements:</p> <ul style="list-style-type: none"><li>WMATA must clean track invert so accumulated water can be drained as designed at Dupont Circle (TRK 2 CM 088+00 to CM 089+00).</li></ul>		



FIGURE 1 - TRK 2 CM 088+00 TO CM 089+00 – TRACK INVERT CLOGGED WITH MUD AND DEBRIS CAUSING STANDING WATER.



# 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	20170524-WMATA-AG-2		
	2017	05	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]
	[REDACTED]		[REDACTED]		[REDACTED]		[REDACTED]
	[REDACTED]		[REDACTED]		[REDACTED]		[REDACTED]
	[REDACTED]		[REDACTED]		[REDACTED]		[REDACTED]
Inspection Location	Franconia Springfield (J03) to Van Dorn (J02), track 2						

## Inspection Summary

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

## Activity Summaries

Inspection Activity #	1	Inspection Subject					Franconia Springfield (J03) - Job Safety Briefing (Mobile Work Crew)			Activity Code		TP	JSB	OBS
Job Briefing Employee Name/Title	WMATA RWIC					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		
	WMATA PERMANENT ORDER R-17-03 ADVANCE MOBILE FLAGGER (FRIDAY APRIL 28, 2017)													
	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		track 2	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										

<sup>1</sup> 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 <b>ADAM ANTHONY GIOVANDO</b>		Digitally signed by ADAM ANTHONY GIOVANDO DN: c=US, o=U.S. Government, ou=FRA FRAFTWorthTX, ou=DOT FRAFTWorthTX, cn=ADAM ANTHONY GIOVANDO Date: 2017.06.07 09:33:42 -05'00'		Date
Inspector in Charge - Name Adam Giovando	Inspection Team Tino Sahoo			



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<b>Description</b>	<p>FWSO personnel received a job safety briefing from the WMATA roadway worker in charge (RWIC). All personal protective equipment (PPE) and roadway worker protection (RWP) IDs were checked and the working limits were reviewed. The WMATA RWIC covered the nearest hospital and safety rule of the day. The hot spots, hazards, clearance areas, communication, and Roadway Access Guide were used as part of the discussion.</p> <p>In addition to the required PPE, the advanced mobile flagger (AMF) did have the required equipment and was compliant with "WMATA PERMANENT ORDER R-17-03 ADVANCE MOBILE FLAGGER (FRIDAY APRIL 28, 2017)." This equipment consisted of WMATA approved flashing amber lantern/e-flare, orange flag (18'x18') calibrated working radio, air horn, and whistle.</p> <p>The AMF did notify the RWIC via positive communication (phone) that he was in place (next station ahead in the direction the mobile crew walked) and the flashing amber lantern /e-flare and orange flag had been positioned at the end of the platform (8-car marker or end gate). No exceptions were taken.</p> <p><b>The FWSO Inspector did not note any defects.</b></p>	<b>Number of Defects</b>	0	
		<b>Recommended Finding?</b>	No	
		<b>Remedial Action Required?</b>	No	
		<b>Recommended Reinspection?</b>	No	
<b>Remedial Action</b>	N/A			

<b>Inspection Activity #</b>	2	<b>Inspection Subject</b>	Walking Observation (Cable Inspection)			<b>Activity Code</b>	TP	WI	OBS		
<b>Job Briefing Employee Name/Title</b>	WMATA RWIC		<b>Accompanied Inspector?</b>	Yes	<b>Out Brief Conducted</b>	Yes	<b>Time</b>	1000-1400	<b>Outside Shift</b>	No	
<b>Related Reports</b>	20161221-WMATA-WP-3 20170224-WMATA-WP-2		<b>Related CAPS / Findings</b>								
<b>Related Rules, SOPs, Standards, or Other</b>	Ref	Rule or SOP	Standard	Other / Title		Checklist Reference					
	TRACK AND STRUCTURES DIVISION – TRST 1000 TRACK MAINTENANCE AND INSPECTION MANUAL (REVISION 7, MARCH 2017)										
	TRACTION POWER DESIGN DRAWING (DD-TP-SSI-013, REVISION 0, AUGUST 2001)										
	ENGINEERING MODIFICATION INSTRUCTIONS (EMI) FOR JUMPER, EXPANSION, AND TRANSITION POWER CABLES REPLACEMENT SYSTEMWIDE (REVISION 2, SEPTEMBER 16, 2016)										
	WMATA PERMANENT ORDER R-17-02 GRANTING FOUL TIME (FRIDAY APRIL 28, 2017)										
<b>Inspection Location</b>	Main Track	Yard	Station	OCC	RTA Facility	FTA Office	<b>Track Type</b>	At-grade	Tunnel	Elevated	N/A
	X							X			
<b>Line(s)</b>	J-Line	<b>Track Number</b>	track 2	<b>Chain Marker and/or Station(s)</b>		From		To			
						Franconia Springfield (J03) CM 875+00 (Crossover)		Van Dorn (J02) CM 870+00 (Crossover)			
<b>Vehicles</b>	Head Car Number		Number of Cars		<b>Equipment</b>		N/A				





	N/A	N/A				
Description	<p>The FWSO inspector observed the WMATA RWIC request foul time for crossover encountered during mobile work crew's cable inspection walk. 100% repeat back did occur on radio communication between the RWIC and the Rail Operations Control Center (ROCC). The RWIC relinquished foul time once the mobile work crew completely walked through the "hot spot." No exceptions were taken to the RWIC performing his duties. The RWIC was compliant with WMATA PERMANENT ORDER R-17-02 GRANTING FOUL TIME (FRIDAY APRIL 28, 2017).</p> <p>Daily cable inspections are part of the holistic approach WMATA has instituted to prevent cable fires and arcing incidents. The pictures taken and issues noted were entered into a database for nighttime cable repair crews to fix.</p> <p><b>The following new defect was observed, and there were no color-coded conditions noted:</b></p> <ul style="list-style-type: none"><li>• TRK 2 CM 773+00 – Cables stood off the ground with the old metal Kindorf channel. The cables have shifted to where a portion of metal Kindorf lattice structure (old way of standing cables off the ground) is on the gage side of the third rail<sup>1</sup>.</li></ul> <p><sup>1</sup> The above defect should be compliant with: ENGINEERING MODIFICATION INSTRUCTIONS (EMI) FOR JUMPER, EXPANSION, AND TRANSITION POWER CABLES REPLACEMENT SYSTEMWIDE (REVISION 2, SEPTEMBER 16, 2016)</p> <p><b>From two related FTA reports (20161221-WMATA-WP-3 and 20170224-WMATA-WP-2), the following remedial actions have been corrected:</b></p> <ul style="list-style-type: none"><li>• TRK 2 CM 826+00 – Repair conduit stub-up.</li><li>• TRK 2 CM 782+00 – Repair conduit stub-up.</li><li>• TRK 2 CM 731+00 – Repair conduit/O-Z/Gedney Bushing.</li></ul> <p><b>The other remedial actions and cable issues noted in the two related reports (i.e., FTA reports: 20161221-WMATA-WP-3 and 20170224-WMATA-WP-2) have not been addressed.</b></p>				<b>Number of Defects</b>	1
					<b>Recommended Finding?</b>	Yes
					<b>Remedial Action Required?</b>	Yes
					<b>Recommended Reinspection?</b>	Yes
Remedial Action	<p>To achieve compliance with WMATA's requirements:</p> <ul style="list-style-type: none"><li>• WMATA must replace the metal Kindorf channel with a fiberglass Kindorf channel and move cables/Kindorf to field side of the third rail (TRK 2 CM 773+00).</li></ul>					



FIGURE 1 - TRK 2 CM 773+00 – CABLES STOOD OFF THE GROUND WITH THE OLD METAL KINDORF CHANNEL. THE CABLES HAVE SHIFTED TO WHERE A PORTION OF METAL KINDORF LATTICE STRUCTURE (OLD WAY OF STANDING CABLES OFF THE GROUND) IS ON THE GAGE SIDE OF THE THIRD 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	20170524-WMATA-TW-1		
	2017	05	24				
Rail Agency Name	Washington Metropolitan Area Transit Authority (WMATA)			Rail Agency Department	Car Maintenance (CMNT)	Sub- Department	Inspection
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	West Falls Church Yard (K99)						

## Inspection Summary

Inspection Activity #	1	2	3	4	5	6
Activity Code	VM-SI-OBS					
Inspection Units	1					
Inspection Subunits	1					
Defects (Number)	0					
Recommended Finding	No					
Remedial Action Required <sup>1</sup>	No					
Recommended Reinspection	Yes					

## Activity Summaries

Inspection Activity #	1	Inspection Subject					Shop Observations – West Falls Church Inspection Facility (K99)			Activity Code		VM	SI	OBS
Job Briefing Employee Name/Title	N/A		Accompanied Inspector?		No	Out Brief Conducted		Yes	Time	0800-1100	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			
	N/A		N/A			N/A								
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				
								N/A		N/A				
Vehicles	Head Car Number		Number of Cars			Equipment		Under Floor Car Hoist (Automatic Wheel Stops)						
	N/A		N/A					Under Floor Car Hoist Overhaul						
Description	FWSO Inspectors observed WMATA contractors performing overhaul of under floor car hoist. Work was being conducted using contractual specifications under the oversight of WMATA inspectors. Inspectors observed the contractors wearing							Number of Defects		0				
								Recommended Finding?		No				
								Remedial Action Required?		No				

<sup>1</sup> 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	Thomas Wozniak		Digitally signed by Thomas Wozniak DN: cn=Thomas Wozniak, o=FRA, ou=DOT, email=thomas.wozniak@dot.gov, c=US Date: 2017.06.07 12:48:43 -05'00'	Date
Inspector in Charge – Name Tom Wozniak	Inspection Team Tom Wozniak, Bill Hultsch			

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	<p>appropriate personal protective equipment (PPE) and conducting work activities in a safe manner.</p> <p>FWSO Inspectors observed an automatic wheel stop on an under-floor car hoist that did not deploy with the train in the raised position. Automatic wheel stops are intended to prevent rail cars from rolling off the under-floor car hoist when the rail car is raised. Shop personnel were aware of the defect, ensured manual wheel stops were properly placed, and have included repair of the automatic wheel stops with the rehab contract on the under-floor hoists currently in progress. FWSO will perform a follow-up inspection following completion of under-floor car hoist rehab to ensure proper repair of the automatic wheel stops and development of a procedure for placement of manual wheel stops.</p> <p>FWSO Inspectors reviewed the procedure for wheel maintenance management and recording of measurements in Maximo. Recordings in Maximo included wheel diameter, flange thickness, and flange height. Maximo highlights in red any entries that are out of tolerance. Rail cars with wheels out of tolerance are held out of service for re-wheel.</p> <p>Finally, FWSO Inspectors walked the shop area. Inspectors observed the proper placement of tools, equipment, and shop material that was stored in a manner where it did not foul any working track nor create a tripping hazard for employees. Additionally, the shop floor was clean and free of slip and fall hazards.</p> <p>No defects were observed during the inspection.</p>	<b>Recommended Reinspection?</b>	Yes
<b>Remedial Action</b>	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	20170525-WMATA-AG-1		
	2017	05	25				
Rail Agency Name	Washington Metropolitan Area Transit Authority			Rail Agency Department	SAFE	Sub- Department	
Rail Agency Department Contact Information	Name		Email		Office Phone		Mobile Phone
	[REDACTED]		[REDACTED]		[REDACTED]		[REDACTED]
	[REDACTED]		[REDACTED]		[REDACTED]		[REDACTED]
	[REDACTED]		[REDACTED]		[REDACTED]		[REDACTED]
	[REDACTED]		[REDACTED]		[REDACTED]		[REDACTED]
Inspection Location	E-Line Track 1, West Hyattsville (E07) to Fort Totten (E06)						

## Inspection Summary

Inspection Activity #	1	2	3	4	5	6
Activity Code	TRK-JSB-OBS	TRK-RC-OBS	RTRA-RC-OBS	ROCC-RC-OBS		
Inspection Units	1	1	1	1		
Inspection Subunits	1	1	1	1		
Defects (Number)	0	0	2	0		
Recommended Finding	No	No	No	No		
Remedial Action Required <sup>1</sup>	No	No	No	No		
Recommended Reinspection	No	No	Yes	No		

## Activity Summaries

Inspection Activity #	1	Inspection Subject				Job Safety Briefing Observation			Activity Code		TRK	JSB	OBS
Job Briefing Employee Name/Title	TRST 6207				Accompanied Inspector?	Yes	Out Brief Conducted	Yes	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				
	MSRPH		R-17-02										
	RWPM		R-17-03										
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	track 1	Chain Marker and/or Station(s)	From		To						
					West Hyattsville (E07)		Fort Totten (E06)						
Vehicles	Head Car Number		Number of Cars		Equipment	N/A							
	N/A		N/A										
Description	The FWSO Inspectors received a job safety briefing from Track and Structures (TRST) Unit 6207, who was serving as the roadway worker in charge (RWIC), prior								Number of Defects		0		
									Recommended Finding?		No		

<sup>1</sup> 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 <b>ADAM ANTHONY GIOVANDO</b>		Digitally signed by ADAM ANTHONY GIOVANDO DN: c=US, o=U.S. Government, ou=FRA FRAFTWorthTX, ou=DOT FRAFTWorthTX, cn=ADAM ANTHONY GIOVANDO Date: 2017.05.31 10:54:39 -05'00'		Date
Inspector in Charge – Name Adam Giovando		Inspection Team Chris DiFatta, Alexander Nepa, Tom Wozniak, Robert Maniuszko		

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Federal Transit Administration

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	to entering the roadway. During the briefing, the work group was informed that the advanced mobile flagger (AMF), Unit 6093, had been briefed by the roadway worker in charge (RWIC) and had the approved personal protective equipment (PPE) to perform his duties. The RWIC covered all required aspects of the job safety briefing. This included the type of protection (train approach warning (TAW)), designation of roles within the work group, identification of hot spots, discussion of potential hazards to be encountered during the inspection, and the nearest hospital. The RWIC also informed the work group that an advanced watchman, unit 6699, would be used. All members of the work group had their PPE and roadway worker protection (RWP) cards checked for compliance. The RWIC contacted the AMF to confirm he was in position. The briefing concluded at 1023 hours.	<b>Remedial Action Required?</b>	No
	The RWIC contacted the Rail Operations Control Center (ROCC) at 1047 hours and was instructed to stand by due to too many work groups on the roadway. At 1207 hours the ROCC contacted the RWIC for details of the request. The ROCC instructed the RWIC to stand by. At 1212 hours, the ROCC granted permission to access the roadway. At 1225 hours, the RWIC contacted the ROCC to request foul T=time to traverse two hot spots. The ROCC instructed the RWIC to stand by. At 1241 hours, the ROCC contacted the RWIC for details of the requested foul time. The ROCC instructed the RWIC to stand by. At 1251 hours, the ROCC apologized to the RWIC for the delay. They informed him that trains were backed up down the line and that it would take some time to grant the foul time. At 1251 hours the RWIC cancelled the request and was granted permission to return to the West Hyattsville (E07) station platform on track 2. At 1257 hours, the RWIC contacted the ROCC to notify the controller that the work group was clear of the roadway.	<b>Recommended Reinspection?</b>	No
<b>Remedial Action</b>	N/A		

<b>Inspection Activity #</b>	2	<b>Inspection Subject</b>	RWIC and AMF Rules Compliance Observation				<b>Activity Code</b>	TRK	RC	OBS	
<b>Job Briefing Employee Name/Title</b>	TRST 6207		<b>Accompanied Inspector?</b>	Yes	<b>Out Brief Conducted</b>	Yes	<b>Time</b>	1000 – 1400	<b>Outside Shift</b>	No	
<b>Related Reports</b>	N/A		<b>Related CAPS / Findings</b>		N/A						
<b>Related Rules, SOPs, Standards, or Other</b>	Ref	Rule or SOP		Standard		Other / Title		Checklist Reference			
	MSRPH	R-17-02									
	RWPM	R-17-03									
<b>Inspection Location</b>	Main Track	Yard	Station	OCC	RTA Facility	FTA Office	<b>Track Type</b>	At-grade	Tunnel	Elevated	N/A
	X									X	
<b>Line(s)</b>	E-Line	<b>Track Number</b>	track 1		<b>Chain Marker and/or Station(s)</b>	From		To			
						West Hyattsville (E07)		Fort Totten (E06)			
<b>Vehicles</b>	<b>Head Car Number</b>		<b>Number of Cars</b>		<b>Equipment</b>	N/A					
	N/A		N/A								
<b>Description</b>	The FWSO Inspectors observed the RWIC for compliance with Permanent Orders R-17-02 (Requesting Foul Time) and R-17-03 (Advanced Mobile Flagger). As per the 2017 Roadway Access Guide, there are four hot spots between West Hyattsville (E07) and Fort Totten (E06). The RWIC relayed all required information to the ROCC for the first location at F1 chain marker (CM) 356+00 to F1 CM 335+00. The ROCC acknowledged the request and instructed the RWIC to stand by. The ROCC informed the RWIC that due to trains being backed up down the line, it would take time to approve the foul time. The RWIC relinquished the request and asked for permission to cross over to track 2 to walk back to the West Hyattsville (E07) platform. The inspection was then cancelled due to the delays explained in activity #1.						<b>Number of Defects</b>		0		
							<b>Recommended Finding?</b>		No		
							<b>Remedial Action Required?</b>		No		
							<b>Recommended Reinspection?</b>		No		



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	<p>No exceptions were taken with the duties and responsibilities performed by RWIC #6207.</p> <p>The FWSO Inspectors observed the advanced mobile flagger for compliance with Permanent Order R-17-03 (Advanced Mobile Flagger).</p> <p>The FWSO Inspector observing the AMF (unit 6093) noted compliance with the requirements of R-17-03. The AMF had all required personal protective equipment (PPE); including the flashing amber lantern and orange flag, and was positioned at the 8-car marker. The FWSO Inspector verified that the AMF was level-4 qualified and had established communication with the RWIC. The AMF communicated with each operator, as required by R-17-03.</p> <p>No exceptions were taken with the duties performed by the AMF.</p>		
Remedial Action	N/A		

Inspection Activity #	3	Inspection Subject					Train Operator Rules Compliance Observation			Activity Code		RTRA	RC	OBS
Job Briefing Employee Name/Title	TRST 6207					Accompanied Inspector?	Yes	Out Brief Conducted	Yes	Time	1000 – 1400	Outside Shift	No	
Related Reports	20170516-WMATA-WP-1					Related CAPS / Findings		Remedial Action ID: 1308						
Related Rules, SOPs, Standards, or Other	Ref		Rule or SOP			Standard			Other / Title		Checklist Reference			
	MSRPH		R-17-02											
	RWPM		R-17-03											
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	track 1	Chain Marker and/or Station(s)	From				To					
					West Hyattsville (E07)				Fort Totten (E06)					
Vehicles	Head Car Number		Number of Cars		Equipment	N/A								
	N/A		N/A											
Description	<p>FWSO Inspectors observed eight train operators for compliance with Permanent Orders R-17-02 (Requesting Foul Time) and R-17-03 (Advanced Mobile Flagger). The train operator of train 507 had attended the AMF training, as required by WMATA.</p> <p>Note: The number of trains observed was effected by the limited time the inspectors were on the roadway.</p> <p><b>The following non-color-coded defects were noted by the FWSO Inspector assigned to the AMF:</b></p> <ul style="list-style-type: none"><li>Train 306 failed to properly sound the horn approaching Fort Totten Station. The operator did not sound the horn continuously when departing the station. <b>Defect associated with Class I/Class II Vehicle Operator Procedures, Item 1 of P.O. R-17-03</b></li><li>Train 504 failed to properly sound the horn approaching Fort Totten Station to acknowledge the AMF. The operator did not sound the horn continuously when departing the platform. <b>Defect associated with Class I/Class II Vehicle Operator Procedures, Item 1 of P.O. R-17-03.</b></li></ul> <p>Remedial actions for these defects were previously issued in FWSO report 20170516-WMATA-WP-1.</p>							Number of Defects		2				
								Recommended Finding?		No				
								Remedial Action Required?		No				
								Recommended Reinspection?		No				
Remedial Action	N/A													



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<b>Inspection Activity #</b>	4	<b>Inspection Subject</b>	ROCC Rules Compliance Observation				<b>Activity Code</b>		ROCC	RC	OBS
<b>Job Briefing Employee Name/Title</b>	TRST 6207		<b>Accompanied Inspector?</b>	Yes	<b>Out Brief Conducted</b>	Yes	<b>Time</b>	1000 – 1400	<b>Outside Shift</b>	No	
<b>Related Reports</b>	N/A		<b>Related CAPS / Findings</b>		N/A						
<b>Related Rules, SOPs, Standards, or Other</b>	Ref	Rule or SOP		Standard		Other / Title		Checklist Reference			
	MSRPH	R-17-02									
	RWPM	R-17-03									
	MSRPH	T-16-10									
<b>Inspection Location</b>	Main Track	Yard	Station	OCC	RTA Facility	FTA Office	<b>Track Type</b>	At-grade	Tunnel	Elevated	N/A
				X					X	X	
<b>Line(s)</b>	E-Line	<b>Track Number</b>	track 1	<b>Chain Marker and/or Station(s)</b>	From			To			
					West Hyattsville (E07)			Fort Totten (E06)			
<b>Vehicles</b>	<b>Head Car Number</b>		<b>Number of Cars</b>		<b>Equipment</b>	N/A					
	N/A		N/A								
<b>Description</b>	<p>On Thursday, May 25, 2017, the FWSO Inspector reported to the ROCC and conducted a coordinated observation with the field-based FWSO team to observe, monitor, and document rail traffic controller (RTC) compliance regarding roadway worker protection (RWP) access procedures. There was a concentrated focus on Permanent Order R-17-02 (Granting Foul Time), Permanent Order T-16-10 (Radio Protocol), as well as compliance with Permanent Order R-17-03 (Advanced Mobile Flagger).</p> <p>The FWSO Inspector conducted the observation from the operations (OPS) 3 console and monitored the FSWO team members assigned to a WMATA inspection track unit walking from West Hyattsville (E07) to Ft. Totten (E06). The RWIC assigned to the team was formally cleared onto the protect list at 1211 hours.</p> <p>The FWSO Inspector did not note any defects.</p> <p>Other Notable Observations:</p> <ul style="list-style-type: none"> <li>The RWIC followed radio protocol, calling on via his portable radio and properly identifying as unit 6207.</li> <li>For his last initial call-on, he provided the location of his walk from West Hyattsville (E07) – Ft. Totten (E06), track 1, and identified the number of personnel in his crew, including "One FTA personnel." He also reported he conducted a safety briefing and identified all "hot spots." He would be walking under train approach warning (TAW) protection. Lastly, he stated that there was an AMF stationed at Ft. Totten (E06) for train operator notifications.</li> <li>The FWSO Inspector noted all radio transmissions concluded with "over" between the RTC and the RWIC. The RTC concluded with "Central Out," concluding the communication loop.</li> <li>The RTC requested him to stand by and stand clear while he reviewed the request before granting permission of the RWP request.</li> <li>The RTC granted permission for requested access, making a general announcement over the radio. The RTC used International Civil Aviation Organization (ICAO) assignment of the alphabet to clarify location. This conforms with the Metrorail Safety Rules and Procedures Handbook (MSRPH) General Rule 1.79.</li> <li>The RWIC called clear of location once crew completed that section of the walk.</li> <li>In each instance, the RTC ensured 100% repeat back of clearance and information provided.</li> </ul> <p>FOUL TIME REQUEST:</p> <ul style="list-style-type: none"> <li>The RWIC, unit 6207, called for foul time on one occasion: <ul style="list-style-type: none"> <li>The location was from E1 CM356+00 – E1 CM335+00.</li> </ul> </li> </ul>						<b>Number of Defects</b>		0		
							<b>Recommended Finding?</b>		No		
							<b>Remedial Action Required?</b>		No		



	<ul style="list-style-type: none"><li>• The RWIC identified himself and the crew properly, requesting foul time for E1 CM356+00 – E1 CM335+00.</li><li>• The RTC asked him to "stand by and stand clear" – this occurred at 1241 hours.</li><li>• At 1251 hours, the RTC notified the RWIC that due to heavy traffic it would be awhile before the foul time request could be implemented.</li><li>• At this point, the RWIC requested permission to cross over to track #2 and walk back to the West Hyattsville Station (E07) platform.</li></ul>		
Remedial Action	N/A		



# Inspection Form

FOIA Exemption: All (b)(6)

Form FTA-IR-1

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## Agency/Department Information

Inspection Date	YYYY	MM	DD	Report Number	20170525-WMATA-AG-2		
	2017	05	25				
Rail Agency Name	Washington Metropolitan Area Transit Authority			Rail Agency Department	SAFE	Sub- Department	
Rail Agency Department Contact Information	Name		Email		Office Phone		Mobile Phone
	[REDACTED]		[REDACTED]		[REDACTED]		[REDACTED]
	[REDACTED]		[REDACTED]		[REDACTED]		[REDACTED]
	[REDACTED]		[REDACTED]		[REDACTED]		[REDACTED]
	[REDACTED]		[REDACTED]		[REDACTED]		[REDACTED]
Inspection Location	E-Line, track 2, West Hyattsville (E07) to Fort Totten (E06)						

## Inspection Summary

Inspection Activity #	1	2	3	4	5	6
Activity Code	TRK-JSB-OBS	TRK-RC-OBS	RTRA-RC-OBS	ROCC-RC-OBS		
Inspection Units	1	1	1	1		
Inspection Subunits	1	1	1	1		
Defects (Number)	0	0	3	0		
Recommended Finding	No	No	No	No		
Remedial Action Required <sup>1</sup>	No	No	Yes	No		
Recommended Reinspection	No	No	Yes	No		

## Activity Summaries

Inspection Activity #	1	Inspection Subject				Job Safety Briefing			Activity Code		TRK	JSB	OBS
Job Briefing Employee Name/Title	TRST #6369				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				
	MSRPH		R-17-02										
	RWPM		R-17-03										
Inspection Location	Main Track	Yard	Station	OCC	RTA Facility	FTA Office	Track Type	At-grade	Tunnel	Elevated	N/A		
	X								X	X			
Line(s)	E-Line	Track Number	track 2	Chain Marker and/or Station(s)	From			To					
					Fort Totten (E06)			West Hyattsville (E07)					
Vehicles	Head Car Number		Number of Cars		Equipment	N/A							
	N/A		N/A										
Description									Number of Defects		0		

<sup>1</sup> 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 <b>ADAM ANTHONY GIOVANDO</b>		Digitally signed by ADAM ANTHONY GIOVANDO DN: c=US, o=U.S. Government, ou=FRA FRAFTWorthTX, ou=DOT FRAFTWorthTX, cn=ADAM ANTHONY GIOVANDO Date: 2017.06.01 08:31:04 -05'00'		Date
Inspector in Charge – Name Adam Giovando	Inspection Team Chris DiFatta, Lee Emard, Tom Wozniak, Tino Sahoo			





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Form FTA-IR-1

	<p>The FWSO inspection team received a job safety briefing from TRST #6369. All personal protective equipment (PPE) and roadway worker protection (RWP) identification were checked. The roadway worker in charge (RWIC) reviewed the working limits, nearest hospital and the safety rule of the day. The hot spots, hazards, clearance areas, communication and the Roadway Access Guide were used as part of the discussion.</p> <p>The work group was also provided with an advanced mobile flagman (AMF) and an advanced watchman for any areas that require additional protection.</p> <p>No exceptions were take of the job safety briefing.</p>						<b>Recommended Finding?</b>		No		
							<b>Remedial Action Required?</b>		No		
							<b>Recommended Reinspection?</b>		No		
<b>Remedial Action</b>		N/A									

<b>Inspection Activity #</b>	2	<b>Inspection Subject</b>	RWIC and AMF Rules Compliance Observation				<b>Activity Code</b>		TRK	RC	OBS
<b>Job Briefing Employee Name/Title</b>	TRST #6369		<b>Accompanied Inspector?</b>	Yes	<b>Out Brief Conducted</b>	No	<b>Time</b>	1000 – 1400	<b>Outside Shift</b>	No	
<b>Related Reports</b>	N/A		<b>Related CAPS / Findings</b>		N/A						
<b>Related Rules, SOPs, Standards, or Other</b>	Ref	Rule or SOP		Standard		Other / Title		Checklist Reference			
	MSRPH	R-17-02									
	RWPM	R-17-03									
<b>Inspection Location</b>	Main Track	Yard	Station	OCC	RTA Facility	FTA Office	<b>Track Type</b>	At-grade	Tunnel	Elevated	N/A
	X								X	X	
<b>Line(s)</b>	E-Line	<b>Track Number</b>	track 2	<b>Chain Marker and/or Station(s)</b>	From			To			
					Fort Totten (E06)			West Hyattsville (E07)			
<b>Vehicles</b>	<b>Head Car Number</b>		<b>Number of Cars</b>		<b>Equipment</b>	N/A					
	N/A		N/A								
<b>Description</b>	<p><b>Roadway Worker in Charge (RWIC):</b></p> <p>The FWSO inspectors observed the RWIC for compliance with permanent orders R-17-02 (Requesting Foul Time) and R-17-03 (Advanced Mobile Flagger). As per the 2017 Roadway Access Guide, there are three hot spots between Fort Totten (E06) and West Hyattsville (E07). The RWIC relayed all required information to the Rail Operations Control Center (ROCC) for the first location at E2 Chain Marker (CM) 282+00 to E2 CM 290+00. The ROCC acknowledged the request and instructed the RWIC to stand by. The ROCC rail traffic controller (RTC) granted the foul time per the requirements of Permanent Order R-17-02. The RWIC provided a 100% repeat back via the radio. The inspection team traversed the area and foul time was relinquished as required by the RWIC.</p> <p>At the second location, the RWIC combined two hot spots into one request for foul time. The request covered the area from E2 CM335+00 to E2 CM356+00. The request was granted after the R-17-02 requirements were met and a 100% repeat back occurred from the RWIC. During this foul time period the ROCC requested that the RWIC relinquish foul time to allow a train to pass through. The RWIC cleared the team to a place of safety and alerted the RTC that foul time was relinquished until the train passed. Once the train passed the RWIC was granted foul time and the walk was completed.</p> <p>No exceptions were taken with the duties and responsibilities performed by RWIC #6369.</p> <p><b>Advanced Mobile Flagger (AMF):</b></p> <p>The FWSO Inspectors observed the AMF for compliance with Permanent Order R-17-03 (Advanced Mobile Flagger).</p>						<b>Number of Defects</b>		0		
							<b>Recommended Finding?</b>		No		
							<b>Remedial Action Required?</b>		No		
							<b>Recommended Reinspection?</b>		No		



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	The FWSO Inspector observing the AMF noted compliance with the requirements of R-17-03. The AMF had all required personal protective equipment (PPE); including the flashing amber lantern, orange flag, calibrated working radio, air horn and a whistle. The FWSO Inspector verified that the AMF was level 4-qualified and had established communication with the RWIC. The AMF communicated with each operator as required by R-17-03.  No exceptions were taken with the duties performed by the AMF.		
Remedial Action	N/A		

Inspection Activity #	3	Inspection Subject	Train Operator Rules Compliance Observation				Activity Code		RTRA	RC	OBS
Job Briefing Employee Name/Title	TRST #6369		Accompanied Inspector?	Yes	Out Brief Conducted	No	Time	1000 – 1400	Outside Shift	No	
Related Reports	20170516-WMATA-WP-1		Related CAPS / Findings		Remedial Action ID: 1308						
Related Rules, SOPs, Standards, or Other	Ref	Rule or SOP		Standard		Other / Title		Checklist Reference			
	MSRPH	R-17-02									
	RWPM	R-17-03									
Inspection Location	Main Track	Yard	Station	OCC	RTA Facility	FTA Office	Track Type	At-grade	Tunnel	Elevated	N/A
	X								X	X	
Line(s)	E-Line	Track Number	track 2	Chain Marker and/or Station(s)	From			To			
					Fort Totten (E06)			West Hyattsville (E07)			
Vehicles	Head Car Number	Number of Cars		Equipment	N/A						
	N/A	N/A									
Description	FWSO Inspectors observed 18 train operators for compliance with permanent orders R-17-02 (Requesting Foul Time) and R-17-03 (Advanced Mobile Flagger). One of the train operators (train 502) had not gone through the AMF training as required by WMATA.  The following non-color-coded defects were noted by the inspector assigned to the AMF: <ul style="list-style-type: none"><li>Train 504 failed to properly sound the horn approaching the AMF located at West Hyattsville Station platform. <i>Defect associated with Class I/Class II Vehicle Operator Procedures, Item 1 of P.O. R-17-03.</i></li><li>Train 506 failed to properly sound the horn approaching the AMF located at West Hyattsville Station platform. <i>Defect associated with Class I/Class II Vehicle Operator Procedures, Item 1 of P.O. R-17-03.</i></li><li>Train 505 only sounded the main line horn once on approach to the AMF located at West Hyattsville Station platform. <i>Defect associated with Class I/Class II Vehicle Operator Procedures, Item 1 of P.O. R-17-03.</i></li></ul> Remedial actions for these defects were previously listed in FWSO report 20170516-WMATA-WP-1.  Note: The FWSO Inspector riding within the operating cab of train numbers 504, 502, 509, 503, 505 did not note any noncompliance with R-17-03.							Number of Defects		3	
								Recommended Finding?		No	
								Remedial Action Required?		Yes	
								Recommended Reinspection?		Yes	
Remedial Action	• N/A										

Inspection Activity #	4	Inspection Subject	ROCC Rules Compliance Observation				Activity Code		ROCC	RC	OBS
Job Briefing Employee Name/Title	TRST #6369		Accompanied Inspector?	Yes	Out Brief Conducted	No	Time	1000 – 1400	Outside Shift	No	
Related Reports	N/A		Related CAPS / Findings		N/A						



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Related Rules, SOPs, Standards, or Other	Ref		Rule or SOP		Standard		Other / Title		Checklist Reference						
	MSRPH		R-17-02												
	RWPM		R-17-03												
	MSRPH		T-16-10												
Inspection Location	Main Track	Yard	Station	OCC	RTA Facility	FTA Office	Track Type	At-grade	Tunnel	Elevated	N/A				
	X								X	X					
Line(s)	E-Line		Track Number		track 2		Chain Marker and/or Station(s)	From		To					
								Fort Totten (E06)		West Hyattsville (E07)					
Vehicles	Head Car Number		Number of Cars		Equipment		N/A								
	N/A		N/A												
Description	<p>On Thursday, May 25, 2017, the FWSO Inspector reported to the ROCC and conducted a coordinated observation with the FWSO team to observe, monitor, and document rail traffic controller (RTC) compliance regarding Roadway Worker Protection (RWP) Access Procedures. There was a concentrated focus on Permanent Order R-17-02 (Granting Foul Time), Permanent Order T-16-10 (Radio Protocol), as well as compliance with Permanent Order R-17-03 (Advanced Mobile Flagger).</p> <p>The FWSO Inspector conducted the observation from the operations (OPS) 3 console and monitored the FSWO team members assigned to a WMATA inspection track unit walking from Ft. Totten to West Hyattsville. The RWIC assigned to the team was formally cleared onto the protect list at 1106 hours.</p> <p>The FWSO Inspector did not note any defects.</p> <p>Other Notable Observations:</p> <ul style="list-style-type: none"> <li>The RWIC followed radio protocol, calling on via his portable radio, properly identifying as unit 6369.</li> <li>For his last initial call-on, he provided the location of his walk from Ft. Totten and West Hyattsville, track 2, and identified the number of personnel in his crew—including "One FTA personnel." He also reported he conducted a safety briefing and identified all "hot spots." He would be walking under train approach warning (TAW) protection. Lastly, he stated that there was an AMF stationed at West Hyattsville for train operator notifications.</li> <li>The FWSO Inspector noted all radio transmissions concluded with "over" between the RTC and the RWIC. The RTC concluded with "Central Out," concluding the communication loop.</li> <li>The RTC requested him to stand by and stand clear while he reviewed the request before granting permission of the RWP request.</li> <li>The RTC granted permission for requested access, making a general announcement over the radio. RTC used International Civil Aviation Organization (ICAO) assignment of the alphabet to clarify location. This conforms with the Metrorail Safety Rules and Procedures Handbook (MSRPH) General Rule 1.79.</li> <li>The RWIC called clear of location once crew completed that section of the walk.</li> <li>In each instance, the RTC ensured 100% repeat back of clearance and information provided.</li> </ul> <p><b>FOUL TIME REQUEST:</b></p> <ul style="list-style-type: none"> <li>RWIC unit 6369 called on for foul time on two separate occasions: <ul style="list-style-type: none"> <li>The first location was E2 CM283+00 – E2 CM290+00.</li> <li>The second location was E2 CM335+00 – E2 CM356+00.</li> </ul> </li> <li>For each instance, the RWIC identified himself and crew properly and requested foul time, as required.</li> </ul>	Number of Defects		0											
		Recommended Finding?		No											
		Remedial Action Required?		No											
		Recommended Reinspection?		No											



	<ul style="list-style-type: none"><li>• The RTC asked him to "stand by and stand clear," while he ensured proper protects were in place.</li><li>• For each instance, the FWSO inspector observed the RTC button controller establish red signals and prohibit exits for all affected signals in area, removing automatic capability.</li><li>• Blue block track and human form was established in said area, as well.</li><li>• On one of the two requests, the RTC contacted the approaching train to notify him of the red signal on approach.</li><li>• The RTC ensured 100% repeat back of clearance and specific foul time protection (exits, red signals, etc.) before granting the RWIC foul time access.</li></ul> <p>No exceptions were taken with the ROCC rules compliance associated with this inspection.</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	20170525-WMATA-AG-3		
	2017	05	25				
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]
	[REDACTED]		[REDACTED]		[REDACTED]		[REDACTED]
Inspection Location	E-Line, track 1, West Hyattsville (E07) to Fort Totten (E06)						

## Inspection Summary

Inspection Activity #	1	2	3	4	5	6
Activity Code	TRK-JSB-OBS	TRK-GEN-OBS				
Inspection Units	1	1				
Inspection Subunits	1	1				
Defects (Number)	0	0				
Recommended Finding	No	No				
Remedial Action Required <sup>1</sup>	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	TRST 6207				Accompanied Inspector?	Yes	Out Brief Conducted	Yes	Time	1000 – 1400	Outside Shift	No	
Related Reports	20170525-WMATA-AG-1				Related CAPS / Findings								
Related Rules, SOPs, Standards, or Other	Ref		Rule or SOP		Standard		Other / Title		Checklist Reference				
	MSRPH												
	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	track 1	Chain Marker and/or Station(s)	From		To						
	West Hyattsville (E07) E1 CM368+00				Fort Totten (E06) E1 CM356+00								
Vehicles	Head Car Number		Number of Cars		Equipment	N/A							
	N/A		N/A										
Description										Number of Defects		0	

<sup>1</sup> 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 <b>ADAM ANTHONY GIOVANDO</b>		Digitally signed by ADAM ANTHONY GIOVANDO DN: c=US, o=U.S. Government, ou=FRA FRAFTWorthTX, ou=DOT FRAFTWorthTX, cn=ADAM ANTHONY GIOVANDO Date: 2017.06.01 08:32:28 -05'00'		Date
Inspector in Charge – Name Adam Giovando	Inspection Team Robert Maniuszko			



United States Department of Transportation  
Federal Transit Administration

Form FTA-IR-1

	<p>FWSO Inspectors received a job safety briefing from Track and Structures (TRST), unit 6207, who was serving as the roadway worker in charge (RWIC), prior to entering the roadway. During the briefing, the work group was informed that the advanced mobile flagger (AMF), unit 6093, had been briefed by the RWIC and had the approved personal protective equipment (PPE) to perform his duties. The RWIC covered all required aspects of the job safety briefing. This included the type of protection (train approach warning (TAW)), designation of roles within the work group, identification of hot spots, discussion of potential hazards to be encountered during the inspection, and the nearest hospital. The RWIC also informed the work group that an advanced watchman, unit 6699, would be used. All members of the work group had their PPE and roadway worker protection (RWP) cards checked for compliance. The RWIC contacted the AMF to confirm he was in position. The briefing concluded at 1023 hours.</p> <p>No exceptions were taken with the briefing.</p>	<b>Recommended Finding?</b>	No
		<b>Remedial Action Required?</b>	No
		<b>Recommended Reinspection?</b>	No
<b>Remedial Action</b>	N/A		

<b>Inspection Activity #</b>	2	<b>Inspection Subject</b>	Track Inspection Observation					<b>Activity Code</b>	TRK	GEN	OBS
<b>Job Briefing Employee Name/Title</b>	TRST 6207		<b>Accompanied Inspector?</b>	Yes	<b>Out Brief Conducted</b>	Yes	<b>Time</b>	1000 – 1400	<b>Outside Shift</b>	No	
<b>Related Reports</b>	20170525-WMATA-AG-1		<b>Related CAPS / Findings</b>								
<b>Related Rules, SOPs, Standards, or Other</b>	Ref	Rule or SOP		Standard			Other / Title		Checklist Reference		
	TRST1000										
	MSRPH										
<b>Inspection Location</b>	Main Track	Yard	Station	OCC	RTA Facility	FTA Office	<b>Track Type</b>	At-grade	Tunnel	Elevated	N/A
	X									X	
<b>Line(s)</b>	E-Line	<b>Track Number</b>	track 1		<b>Chain Marker and/or Station(s)</b>		From		To		
							E1 CM368+00		E1 CM356+00		
<b>Vehicles</b>	<b>Head Car Number</b>		<b>Number of Cars</b>		<b>Equipment</b>		N/A				
	N/A		N/A								
<b>Description</b>	<p>The FWSO Inspector observed the track inspection that was performed by the Washington Metropolitan Area Transit Authority (WMATA) contractor from Rail Pro. The planned inspection was for track 1 from PG Plaza (E08) to Fort Totten (E06). Due to the rain and possible slippery conditions, the inspection was shortened. The new plan was to cover from West Hyattsville (E07) to Fort Totten (E06). Following the job safety briefing, the team traveled from Fort Totten to West Hyattsville and contacted the Rail Operations Control Center (ROCC) rail traffic controller (RTC) for permission to access the roadway. The initial request was made at 1047 hours. The team was told to stand by, stand clear. Permission to enter the roadway was granted at 1212 hours. At 1225 hours, the RWIC requested foul time to traverse two hot spots. The RTC notified the team at 1251 hours that trains were backed up on the line and that it would take time to issue the requested foul time. At 1251 hours the RWIC cancelled the request and the team received permission from the RTC to walk back to West Hyattsville on track 2.</p> <p>Note: The remaining inspection activity would have exceeded the available time left for track access, which was: 1 -hour, 9 minutes. This is the reason the team cancelled the inspection.</p> <p><b>The FWSO Inspector did not note any defects.</b></p> <p><b>Other Notable Observations:</b></p> <p>Note: Each of these observations were documented within the Rail Pro inspectors daily report. No exceptions were taken.</p>						<b>Number of Defects</b>	0			
							<b>Recommended Finding?</b>	No			
							<b>Remedial Action Required?</b>	No			
							<b>Recommended Reinspection?</b>	No			





	<ol style="list-style-type: none"><li>1. Within the platform area at West Hyattsville (E07), there were three locations where head checking was observed. This was at approximately chain marker (CM) 365+00 on both the left and right rail. The Rail Pro Inspector performs visual inspection only from the station platform. One of the head defects appeared to be approximately 3 inches in length. The inspector noted the area in his daily report for follow-up by their night inspection team. He explained that from 0000 hours – 0500 hours, they are able to inspect the platform areas due to limited train movement.</li><li>2. At approximately E1 CM359+00, the inspector noted one loose bolt at a rail joint on the left rail. The nut was still on the bolt at the time of inspection. As per the WMATA Track Maintenance and Inspection Manual, section 5.14.7 states: "All Joints must have a full complement of bolts and nutlocks. If bolts are missing or loose as indicated in the table below, restrictions shall be placed on track until condition is corrected." Table 5-21 notes that "One bolt in the other rail end" requires a 40-mph speed restriction. This would be considered a "Yellow" speed restriction. The inspector noted the condition in his report.</li></ol>		
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	20170525-WMATA-AG-4		
	2017	05	25				
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]
	[REDACTED]		[REDACTED]		[REDACTED]		[REDACTED]
Inspection Location	E-Line, track 2, Fort Totten (E06) to West Hyattsville (E07)						

## Inspection Summary

Inspection Activity #	1	2	3	4	5	6
Activity Code	TRK-JSB-OBS	TRK-GEN-OBS				
Inspection Units	1	1				
Inspection Subunits	1	1				
Defects (Number)	0	0				
Recommended Finding	No	No				
Remedial Action Required <sup>1</sup>	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	TRST 6369				Accompanied Inspector?	Yes	Out Brief Conducted	Yes	Time	1000 – 1400	Outside Shift	No	
Related Reports	20170525-WMATA-AG-2				Related CAPS / Findings								
Related Rules, SOPs, Standards, or Other	Ref		Rule or SOP		Standard		Other / Title		Checklist Reference				
	MSRPH												
	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)	E-Line	Track Number	track 2	Chain Marker and/or Station(s)	From				To				
					Fort Totten (E06)				West Hyattsville (E07)				
Vehicles	Head Car Number		Number of Cars		Equipment	N/A							
	N/A		N/A										
Description	FWSO Inspectors received a job safety briefing from Track and Structures (TRST), unit 6369, who was serving as the roadway worker in charge (RWIC), prior to								Number of Defects		0		
									Recommended Finding?		No		

<sup>1</sup> 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 <b>ADAM ANTHONY GIOVANDO</b>		Digitally signed by ADAM ANTHONY GIOVANDO DN: c=US, o=U.S. Government, ou=FRA FRAFTWorthTX, ou=DOT FRAFTWorthTX, cn=ADAM ANTHONY GIOVANDO Date: 2017.06.02 13:08:14 -05'00'		Date
Inspector in Charge – Name Adam Giovando	Inspection Team Tino Sahoo			



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	entering the roadway. During the briefing, the work group was informed that the advanced mobile flagger (AMF), unit 6288, had been briefed by the RWIC and had the approved personal protective equipment (PPE) to perform his duties. The RWIC covered all required aspects of the job safety briefing to include the type of protection (train approach warning (TAW)), designation of roles within the work group, identification of hot spots, discussion of potential hazards to be encountered during the inspection, and the nearest hospital. The RWIC also informed the work group that an advanced watchman, unit 6048, would be used. All members of the work group had their PPE and roadway worker protection (RWP) cards checked for compliance. The RWIC contacted the AMF to confirm he was in position.	<b>Remedial Action Required?</b>	No
	No exceptions were taken with the briefing.	<b>Recommended Reinspection?</b>	No
<b>Remedial Action</b>	N/A		

<b>Inspection Activity #</b>	2	<b>Inspection Subject</b>	Track Inspection Observation					<b>Activity Code</b>	TRK	GEN	OBS
<b>Job Briefing Employee Name/Title</b>	TRST 6369		<b>Accompanied Inspector?</b>	Yes	<b>Out Brief Conducted</b>	Yes	<b>Time</b>	1000 – 1400	<b>Outside Shift</b>	No	
<b>Related Reports</b>	20170525-WMATA-AG-2		<b>Related CAPS / Findings</b>								
<b>Related Rules, SOPs, Standards, or Other</b>	Ref	Rule or SOP		Standard			Other / Title		Checklist Reference		
	TRST1000										
	MSRPH										
<b>Inspection Location</b>	Main Track	Yard	Station	OCC	RTA Facility	FTA Office	<b>Track Type</b>	At-grade	Tunnel	Elevated	N/A
	X								X	X	
<b>Line(s)</b>	E-Line	<b>Track Number</b>	track 2		<b>Chain Marker and/or Station(s)</b>		From		To		
							Fort Totten (E06)		West Hyattsville (E07)		
<b>Vehicles</b>	<b>Head Car Number</b>		<b>Number of Cars</b>		<b>Equipment</b>	N/A					
	N/A		N/A								
<b>Description</b>	<p>The FWSO Inspector observed the track inspection that was performed by the Washington Metropolitan Area Transit Authority (WMATA) contractor from Rail Pros. The planned inspection covered track 2 from Fort Totten (E06) to West Hyattsville (E07).</p> <p>The FWSO Inspector did not note any defects.</p> <p><b>Other Notable Observations:</b></p> <p>Note: Each of these observations were documented within the Rail Pro inspectors daily report:</p> <ul style="list-style-type: none"> <li>• TRK 2 CM 281+00 to CM 282+50 – Track drain invert clogged with mud and debris.</li> <li>• TRK 2 CM 288+00 to CM 289+00 - Track drain invert clogged with mud and debris.</li> <li>• TRK 2 CM 291+00 – Mud and standing water surrounding 3<sup>rd</sup> rail post insulators.</li> <li>• TRK 2 CM 294+00 – Mud and standing water surrounding 3<sup>rd</sup> rail post insulators.</li> <li>• TRK 2 CM 311+00 – Water leaking from tunnel wall on field side of 3<sup>rd</sup> rail.</li> <li>• TRK 2 CM 311+00 to CM 313+00 – Standing water surrounding 3<sup>rd</sup> rail post insulators.</li> <li>• TRK 2 CM 312+20 – Pile of broken collector shoes on concrete slab on gage side of 3<sup>rd</sup> rail.</li> <li>• TRK 2 CM 320+00 – Tunnel wall water leak.</li> <li>• TRK 2 CM 322+00 to 325+00 – Mud and standing water surrounding 3<sup>rd</sup> rail post insulators.</li> </ul>						<b>Number of Defects</b>	0			
							<b>Recommended Finding?</b>	No			
							<b>Remedial Action Required?</b>	No			
								<b>Recommended Reinspection?</b>	No		



	<ul style="list-style-type: none"><li>TRK 2 CM 335+00 to CM 336+00 - Mud and standing water surrounding 3<sup>rd</sup> rail post insulators. Track drain grate on gage side of 3<sup>rd</sup> rail clogged with mud.</li></ul>		
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	20170525-WMATA-TW-1		
	2017	05	25				
Rail Agency Name	Washington Metropolitan Area Transit Authority (WMATA)			Rail Agency Department	Car Maintenance (CMNT)	Sub- Department	Inspection
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	West Falls Church Yard (K99)						

## Inspection Summary

Inspection Activity #	1	2	3	4	5	6
Activity Code	VM-SI-OBS					
Inspection Units	1					
Inspection Subunits	1					
Defects (Number)	0					
Recommended Finding	No					
Remedial Action Required <sup>1</sup>	No					
Recommended Reinspection	No					

## Activity Summaries

Inspection Activity #	1	Inspection Subject				Shop Observations – West Falls Church Inspection Facility (K99)			Activity Code		VM	SI	OBS
Job Briefing Employee Name/Title	N/A		Accompanied Inspector?		No	Out Brief Conducted		Yes	Time	0700 - 0900	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				
	N/A		N/A		2000/3000 Series Periodic Inspection "A" Inspection Manual								
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			
								N/A		N/A			
Vehicles	Head Car Number		Number of Cars		Equipment		N/A						
	2012-2013 2028-2029		4										
Description										Number of Defects		0	

<sup>1</sup> 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	Thomas Wozniak		Digitally signed by Thomas Wozniak DN: cn=Thomas Wozniak, o=FRA, ou=DOT, email=thomas.wozniak@dot.gov, c=US Date: 2017.06.01 11:44:31 -05'00'	Date
Inspector in Charge – Name Tom Wozniak	Inspection Team Bill Hultsch			



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	FWSO Inspectors observed periodic maintenance activities on rail vehicles 2012-2013, conducting an "A1" Type inspection.  FWSO Inspectors observed periodic maintenance activities on rail vehicles 2028-2029, conducting an "A2" Type inspection.  FWSO Inspectors noted all personnel were wearing the required personal protective equipment (PPE) and were performing their duties in accordance with the prescribed WMATA procedures.  No defects observed with the periodic inspection process.	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

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## Agency/Department Information

Inspection Date	YYYY	MM	DD	Report Number	20170530-WMATA-AG-1		
	2017	05	30				
Rail Agency Name	Washington Metropolitan Area Transit Authority			Rail Agency Department	RTRA	Sub- Department	ROCC
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	Rail Operations Control Center (ROCC) 3500 Pennsy Drive Landover, MD 20785						

## Inspection Summary

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

## Activity Summaries

Inspection Activity #	1	Inspection Subject				ROCC Rules Compliance Observation			Activity Code		RTRA	RC	OBS
Job Briefing Employee Name/Title	No				Accompanied Inspector?	No	Out Brief Conducted	Yes	Time	0900-1600	Outside Shift	No	
Related Reports	Safety Management Inspection (SMI), Final Report, June 17, 2015				Related CAPS / Findings		Required Actions: R-1-6-a, R-1-6-b						
Related Rules, SOPs, Standards, or Other	Ref		Rule or SOP		Standard		Other / Title		Checklist Reference				
	MetroRail Safety Rules and Procedures Handbook (MSRPH); and Permanent Orders: No. T-16-10, No. R-17-03, & No. R-17-02		Section 1 – General Rules (Radio Usage and Operation): Rules 1.69 – 1.88										
Inspection Location	Main Track	Yard	Station	OCC	RTA Facility	FTA Office	Track Type	At-grade	Tunnel	Elevated	N/A		
				X								X	

<sup>1</sup> 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 <b>ADAM ANTHONY GIOVANDO</b>		Digitally signed by ADAM ANTHONY GIOVANDO DN: c=US, o=U.S. Government, ou=FRA FRAFTWorthTX, ou=DOT FRAFTWorthTX, cn=ADAM ANTHONY GIOVANDO Date: 2017.06.07 09:36:51 -05'00'		Date
Inspector in Charge – Name Adam Giovando		Inspection Team Chris Difatta, Tamara Powell		



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Line(s)	N/A	Track Number	N/A	Chain Marker and/or Station(s)	From	To				
Vehicles	Head Car Number	Number of Cars	Equipment	N/A						
	N/A	N/A								
Description	<p>The FWSO Inspectors conducted Rules Compliance Observations at the Rail Operations Control Center (ROCC). The inspector observed activities on operations (Ops) Console 2 for compliance with the Metrorail Safety Rules and Procedures Handbook (MSRPH).</p> <ul style="list-style-type: none"><li>• <i>Radio Usage, MSRPH General Rules 1.69 – 1.88; Permanent Order No. T-16-10;</i><ul style="list-style-type: none"><li>➤ The FWSO Inspector observed the rail traffic controllers (RTC) during each radio broadcast; all of which were compliant. There were no defects observed with this finding. The RTC acknowledged all radio requests as: “That is a good copy,” and turned over or closed each transmission with “over” and “out” until the communication was concluded.</li></ul></li><li>• <i>SMI - 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"><li>➤ The RTC ensured each unit or operator repeated back each clearance or operating instruction with 100 percent word-for-word read back, as required.</li><li>➤ The inspector observed this procedure for roadway worker protection (RWP) instruction. This included standing by for foul time allowance, as well as repeat back for acknowledgment of personnel on roadway and limits of protect via stations, chain markers, and/or interlocking areas.</li></ul></li><li>• <i>SMI - 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"><li>➤ Per policy, RTCs must conduct hourly radio broadcasts that include a full readout of roadway protections (if applicable), time confirmation, rule of the day, cardinal rule 1.79, and all operational anomalies in place. RTCs must also broadcast RWP personnel protection announcements every 20 minutes.</li><li>➤ The required hourly broadcasts were observed every hour, and the roadway personnel protection announcements were observed every 20 minutes. RTCs also maintained a written log of all personnel on the roadway and recorded all call-on/call-off times.</li></ul></li></ul> <p><b>The FWSO Inspector did not note any defects.</b></p> <p><b>Other Notable Observations:</b></p> <ul style="list-style-type: none"><li>• <b>New Permanent Orders: No. R-17-03 and No. R-17-02</b><p>The FWSO Inspector observed the foul time requests for six work groups. All requests were compliant with Permanent Order No. R-17-02 (Granting Foul Time) and Permanent Order No. R-17-03 (Advanced Mobile Flagger).</p><ul style="list-style-type: none"><li>➤ All personnel followed radio protocol when they called on/off over the radio; including proper identification or self and work crew, location of foul time request (station or chain marker), and reason for request.</li><li>➤ RTC established red signals and “prohibit exits,” as well as human form, via the Advanced Information Management (AIM) system.</li><li>➤ RTC required 100% and word-for-word repeat backs, ensuring the track units were in receipt of and repeated back full instructions and clearance.</li><li>➤ RTC contacted trains in the vicinity regarding the foul time request and the location of personnel, as applicable.</li></ul></li></ul>				Number of Defects	0				
					Recommended Finding?	No				
					Remedial Action Required?	No				
					Recommended Reinspection?	No				



	<ul style="list-style-type: none"><li>➤ RTC ensured that an advanced mobile flagger was assigned to each crew and positioned in proper location/place to warn trains on approach to work/walk zones.</li><li>➤ RTC documented call-on/off times.</li><li>➤ RTC completed relevant checklists, confirming compliance of permanent orders.</li><li>➤ An FWSO Inspector also conducted an out brief with the ROCC Director to notify him of the observation activities.</li></ul>		
Remedial Action	N/A		