



U.S. Department  
of Transportation  
**Federal Transit  
Administration**

Headquarters

1200 New Jersey Avenue, SE  
Washington, DC 20590

August 21, 2017

Mr. Paul Wiedefeld  
General Manager and Chief Executive Officer  
Washington Metropolitan Area Transit Authority  
600 Fifth Street, NW  
Washington, DC 20001

**Subject: Approval of Safety Directive 16-5 Corrective Action Plans**

Dear Mr. Wiedefeld:

On August 15, 2016, the Federal Transit Administration (FTA) issued Safety Directive 16-5 to require the Washington Metropolitan Area Transit Authority (WMATA) to address findings resulting from FTA's investigation into stop signal overruns occurring on the Metrorail system between January 1, 2012 and July 31, 2016. WMATA submitted its proposed Corrective Action Plans (CAP) to implement the FTA's required actions on October 14, 2016.

Over the last few months, FTA reviewed these proposed CAPs, and in subsequent meetings with WMATA, requested revisions to elements of the CAPs. On May 30, 2017, FTA issued an approval letter for eight of the required Safety Directive 16-5 CAPs. In that letter and in subsequent meetings, FTA requested additional information for the remaining three Safety Directive 16-5 CAPs.

On July 14, 2017, WMATA provided updated CAP proposals for the remaining Safety Directive 16-5 CAPs. These updated proposals reflect revisions and additional detail FTA requested to clarify WMATA's process for addressing the safety concerns in the given timeframe. The FTA accepts the final three Safety Directive 16-5 CAP proposals.

We look forward to working with your team as they address these required actions. Please contact me at (202) 366-5424 or via email at [Jamie.Pfister@dot.gov](mailto:Jamie.Pfister@dot.gov) with any questions.

Sincerely,

**JAMIE DURHAM  
PFISTER**

Digitally signed by JAMIE DURHAM PFISTER  
DN: c=US, o=U.S. Government, ou=DOT  
Headquarters, ou=FTAHQ, cn=JAMIE  
DURHAM PFISTER  
Date: 2017.08.21 13:23:48 -04'00'

Jamie Pfister  
Director, FTA WMATA Safety Oversight

Enclosure: Safety Directive 16-5 Corrective Action Plan Tracking Matrix

Mr. Paul Wiedefeld

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cc: Joseph Leader, Chief Operating Officer, WMATA  
 Andrew Off, Assistant General Manager for Rail Services, WMATA  
 Patrick Lavin, Chief Safety Officer, WMATA  
 Eric Christensen, Chief of Internal Compliance, WMATA  
 Angel Peña, Managing Director, Quality Assurance, Internal Compliance & Oversight,  
 WMATA  
 Sharmila Samarasinghe, Chair, Tri-State Oversight Committee

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of Transportation  
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Mr. Paul Wiedefeld  
General Manager and Chief Executive Officer  
Washington Metropolitan Area Transit Authority  
600 First Street, NW  
Washington, DC 20001

Subject: Approval of Safety Director's 16-3 Corrective Action Plan

Dear Mr. Wiedefeld:

On August 18, 2016, the Federal Transit Administration (FTA) issued Safety Directive 16-3 to require the Washington Metropolitan Area Transit Authority (WMATA) to address findings resulting from FTA's investigation into stop signal overruns occurring on the MetroRail system between January 1, 2012 and July 31, 2016. WMATA submitted its proposed Corrective Action Plan (CAP) to implement the FTA's corrective actions on October 14, 2016.

Over the last few months, FTA reviewed the proposed CAP, and in subsequent meetings with WMATA requested revisions to elements of the CAP. On May 28, 2017, FTA issued an approval letter for eight of the required Safety Directive 16-3 CAP. In that letter and in subsequent meetings, FTA requested additional information for the remaining three Safety Directive 16-3 CAP.

On July 14, 2017, WMATA provided updated CAP proposals for the remaining Safety Directive 16-3 CAP. These proposals request FTA's review and approval of the CAP. FTA requested to clarify WMATA's process for addressing the safety concerns in the CAP. The FTA accepts the final three Safety Directive 16-3 CAP proposals.

We look forward to working with your team to address these required actions. Please contact me at (202) 366-5234 or via email at Jamie.Priester@dot.gov with any questions.

Sincerely,

Director, FTA WMATA Safety Oversight  
 Jamie Priester  
 1200 New York Avenue, SE  
 Washington, DC 20590  
 (202) 366-5234  
 j.priester@dot.gov

JAMIE DURHAM  
 PRIESTER

Director, FTA WMATA Safety Oversight

Attachment: Safety Directive 16-3 Corrective Action Plan Tracking Matrix



**Approved Corrective Action Plan (CAP) Responses**

Category	Finding	WMATA Required Action	ID	Due Date
Mainline and Yard Familiarity	WMATA does not ensure train and equipment operator familiarity with mainline and yard characteristics, including signal placement, interlocking locations, and track numbers.	To support train and equipment operator identification of signals, WMATA must improve the visibility of signal markers. (Example actions include replacing existing black and white markers with retro-reflective markers, and taking steps to ensure that the color of the marker cannot be mistaken for signal aspect.)	FTA-RED-16-001-a	07/25/2018
Mainline and Yard Familiarity	WMATA does not ensure train and equipment operator familiarity with mainline and yard characteristics, including signal placement, interlocking locations, and track numbers.	To support train and equipment operator orientation on the Metrorail system, WMATA must increase the availability of location information. (Example actions include the provision of additional detail on wayside signage at the end of station platforms, including the direction of travel, line, and location of any interlockings prior to the next station.)	FTA-RED-16-001-b	04/30/2018



Category	Finding	WMATA Required Action	ID	Due Date
Departure from Stations and Terminals and Movement with Zero Speed Commands	WMATA has not fully implemented sufficient protections against the unauthorized movement of trains with zero speed commands.	WMATA must complete and perform a hazard analysis regarding the positive stop option, and any other options, currently under review to prevent trains from operating with zero speed commands without authorization from the ROCC system wide.	FTA-RED-16-003-b	03/04/2019



### Previously Approved CAP Responses

Category	Finding	WMATA Required Action	ID	Due Date
Mainline and Yard Familiarity	WMATA does not ensure train and equipment operator familiarity with mainline and yard characteristics, including signal placement, interlocking locations, and track numbers.	To enhance train and equipment operator familiarity with the Metrorail system, WMATA must increase opportunities for visual observation of the system as part of its program to address FTA-RED-15-004. (Examples include, as part of the new physical characteristics training program, incorporating the use of video or simulation technologies for each line and yard.)	FTA-RED-16-001-c	03/27/2017
Departure from Stations and Terminals and Movement with Zero Speed Commands	WMATA train operators do not consistently verify lunar signal aspect and speed commands prior to taking a point of power.	WMATA must increase rules checks, including random testing for conformance with stop signals, to ensure WMATA operators are complying with Rule 3.67 and 3.79, and must incorporate these additional checks and random testing program into the agency's response to FTA-RED-15-001.	FTA-RED-16-002-a	05/30/2017



Category	Finding	WMATA Required Action	ID	Due Date
Departure from Stations and Terminals and Movement with Zero Speed Commands	WMATA train operators do not consistently verify lunar signal aspect and speed commands prior to taking a point of power.	WMATA must formalize its program for conducting a dedicated review of signal system downloads to monitor train operator performance and must incorporate this program into the agency's response to FTA-RED-15-001.	FTA-RED-16-002-b	05/25/2017
Departure from Stations and Terminals and Movement with Zero Speed Commands	WMATA has not fully implemented sufficient protections against the unauthorized movement of trains with zero speed commands.	WMATA must review its Fatigue Risk Management System (FRMS), available to all WMATA employees via the Metroweb, to ensure that this program provides train operators with sufficient information and training to assist them in the managing of their mental state and attention as required when engaged in train operations, including topics such as personal readiness and the use of the point-of-power stickers installed on the consoles of the operating cabs.	FTA-RED-16-003-a	06/29/2017



Category	Finding	WMATA Required Action	ID	Due Date
Departure from Stations and Terminals and Movement with Zero Speed Commands	WMATA has not fully implemented sufficient protections against the unauthorized movement of trains with zero speed commands.	Once the modification at the Grosvenor-Strathmore Station Center Pocket Track is fully implemented, WMATA must establish a program to monitor its performance.	FTA-RED-16-003-c	06/07/2017
Communication with ROCC and Interlocking Operators	WMATA does not ensure consistent understanding among train and equipment operators and the ROCC or Interlocking Controllers.	WMATA must develop and implement a procedure for auditing radio protocol, radio communications, and for ensuring conformance with Permanent Order T-16-10 Radio Protocols, Modification to General Rule 1.79.	FTA-RED-16-004-a	08/08/2017
Communication with ROCC and Interlocking Operators	WMATA must continue to improve radio quality, as identified previously in the FTA's SMI report.	WMATA must provide FTA with a quarterly report documenting its assessments and findings regarding radio quality, and planned corrective actions.	FTA-RED-16-005-a	11/1/2017



Category	Finding	WMATA Required Action	ID	Due Date
Stop Signal Overrun Investigation	WMATA does not conduct sufficient investigations into stop signal overruns to identify trends and implement effective mitigations.	WMATA's Department of Safety and Environmental Management must create, either as a standalone document or as part of its own accident investigation procedure, an enhanced stop signal overrun investigation process with standardized data fields for trending and analysis.	FTA-RED-16-006-a	02/08/17