



WMSC Inspection Report 20260408

ISSUED 4/13/2026

Inspection Details

Title: Automatic Train Protection (ATP) Cut Out Inspection

Location: Capitol South (D05), Eastern Market (D05), Potomac Ave (D07) - OPS 2

Date of Inspection: 4/8/2026

Time of Inspection: March 26, 2026, through April 8, 2026 (ten hours)

Unannounced

Risk-Based (Data Review, Investigation)

Functional Area: Operations

Hazard Rating: 1B

Overview

From March 26, 2026, through April 8, 2026, a WMSC Inspector spent approximately ten hours tracing the actions of Metrorail radio rail traffic controllers using digital tools such as radio playback (radio operations channel 2,¹ (AIMs),² and (ATP)³ cut out alarm logs.) ATP cut out is a safety-critical procedure that involves disabling the onboard ATP system, allowing the train operator to override automatic braking or loss of speed commands.

¹ Ops 2 is the radio channel for a portion of the Orange, Blue, and Silver lines. (Source: Metrorail Track Access Guide.)

² The Advanced Information Management System (AIMs) is the Supervisory Control and Data Acquisition (SCADA) system used by Metrorail's control center to manage all rail line traffic, traction power devices and station equipment by receiving information from the field, processing it, and displaying it on workstations and large projection screens on the floor of the control center. AIMs playback function enables the review of historical information.

³ Automatic Train Protection (ATP) is "The ATC subsystem that enforces safe operation, including train separation and compliance with civil speed restrictions. It prevents two or more trains from occupying the same controlled segment and permits movement through interlockings only when routes are safely established and locked." (Metrorail Operating Rulebook, Glossary of Terms, p. 17-2)



This is a risk-based inspection based on the ongoing investigation into the February 20, 2026, O-8 Red Signal Overrun⁴ event near West Falls Church Station (K06). One of the contributing factors to the red signal overrun included the train operator not operating at restricted speed (15 miles per hour or less) as required when Automatic Train Protection (ATP) was cut out. This inspection focused on whether the rail traffic controller established either a permissive block⁵ or absolute block⁶ and whether any speed restriction was provided to the rail vehicle operator. This inspection focused on four instances of a rail traffic controller granting permission for trains to cut out Automatic Train Protection on February 18, 2026. Although these four instances occurred before the February 20 red signal overrun, this inspection was conducted after February 20 (approximately 10 hours between March 26, 2026, through April 8, 2026).

Red signal overruns are when a rail vehicle passes a red (stop) signal without other permission to pass that red signal. Red signal overruns have the potential to cause serious injury or death and can significantly damage rail infrastructure. In 2025, a total of 12 red signal overruns occurred on the Metrorail system; since January 1, 2026, a total of six red signal overruns occurred in the first 98 days (about 3 months).⁷ Compared to 2025, red signal overruns are occurring at a statistically significant higher rate in 2026 than in 2025⁸ (~90% increase).

After concluding this inspection, the WMSC Inspector conducted a debrief with the control center's Assistant Operations Manager, in accordance with Program Standard Section 6.F.1.

Defects and Corrective Actions

WMSC Inspections identify safety issues that may be classified as defects, findings, or recommendations. Findings and recommendations are defined by Program Standard Section 5.E.2 and 5.E.3, respectively. Ordinarily, issues identified in a WMSC inspection report are classified as defects. Defects are specific safety issues of non-conformance/non-compliance that are identified, and that require remedial action.

This inspection did not identify any findings or recommendations and therefore does not require a WMSC Corrective Action Plan in accordance with Program Standard Section 5.E.4.

⁴ In accordance with WMSC Program Standard (Rev. 8) Metrorail must "...report all safety events outlined in the Safety Event Notification Matrix in the timeframe and manner specified for each safety event type." Event code O-8 Red Signal Overrun is triggered when a rail vehicle moves past a red stop signal, flag, or indicator, without authorization, creating a high-risk safety hazard.

⁵ A Permissive Block is "A section of clear track ahead of a train in the established direction of traffic, up to a defined limit, into which no other train, vehicle, or obstruction is permitted." (Metrorail Operating Rulebook, Glossary of Terms, p. 17-12)

⁶ An Absolute Block is "A section of track that must not be occupied by more than one (1) train or piece of equipment." (Metrorail Operating Rulebook, Glossary of Terms, p. 17-1)

⁷ Source: WMATA Data Mart - Safety Universal Data System (SUDS) Rail Data. April 8, 2026.

⁸ According to SUDS, in 2025, the system averaged 1 red signal overrun per month. As of April 8, 2026, six overruns have occurred in roughly 3.2 months. This shifts the 2026 average to roughly 1.8 per month, which represents a nearly 90% increase in frequency in 2026 versus 2025.



Defect Observations and Determinations

For this inspection, the WMSC Inspector relied on Advanced Information Management System (AIMs) playback, Advanced Information Management System Automatic Train Protection cut out alarm logs, and radio recordings (OPS 2) to check compliance with Metrorail Operating Rulebook (MOR) procedures. The relevant MOR sections:

8.17.9 Mode 3 operation shall be treated by all employees as a serious and potentially hazardous condition, which must only be used as a last resort when to move a Class 1 rail vehicle.

8.17.9.1 Extreme caution shall be used when operating a Class 1 rail vehicle in Mode 3 because over-speed controls are deactivated, and the train will not automatically stop for hazardous conditions on the roadway.

8.17.9.2 When in Mode 3, a Class 1 rail vehicle shall be operated using absolute block.

8.17.9.3 Use of Mode 3 shall be accomplished only after receiving specific authorization from the Rail Traffic Controller or the Interlocking Operator to cut-out ATP Speed shall be restricted to 15-mph unless otherwise authorized by the Rail Traffic Controller.

8.17.9.5 If the train is at a station platform, customers must be discharged prior to initiating Mode 3 operation. If Mode 3 operation must be initiated between stations, customers must be discharged at the next station.

8.17.9.6 After a Class 1 rail vehicle has been operated in Mode 3, or when the "ATP cut-out" switch has been moved to the CUT-OUT position for any reason, the train must be moved under a permissive or absolute block at Restricted Speed, or as directed by the Rail Traffic Controller.

8.17.9.7 That pair of cars shall not be used as a lead pair in customer service until Rail Car Maintenance has inspected the cars, and the "ATP Cut-Out" switch has been resealed.

8.17.11 On the mainline, prior to authorizing Mode 2 - Level 2 or Mode 3 operation, or prior to moving any rail vehicle not equipped with Automatic Train Protection, the Rail Traffic Controller shall establish an absolute block.

On February 18, 2026, at approximately 10:08pm, the Train ID 935 located on track one at Capitol South Station (D05) reported to the OPS 2 radio rail traffic controller that the train had loss speed commands⁹. After troubleshooting for approximately two minutes, the rail traffic controller instructed the train operator to offload the train at Capitol South Station (D05). The rail traffic controller continued to assist the train operator with troubleshooting and ultimately gave permission for the train operator to cut out Automatic Train Protection (ATP) at approximately 10:23pm. Cutting out ATP will allow the train to move without speed commands, and therefore the

⁹ Loss of speed commands occurs under Automatic Train Protection (ATP) while in Automatic Train Operation (ATO) when the train's on-board system stops receiving speed limit data from the track signaling system.



train will not automatically stop for hazardous conditions on the roadway representing a heightened safety risk. The rail traffic controller gave train 935 an absolute block to Eastern Market Station (D06) with a speed restriction not to exceed 15mph (i.e. restricted speed). At Eastern Market Station (D06) car maintenance boarded the train and inspected the cars before the train went back into service.

Subsequently, three additional trains, other than train 935, lost speed commands at Capitol South Station (D05), track one, and were instructed to cut out Automatic Train Protection but were not instructed to offload or operate at restricted speed. Under these conditions, rail vehicle operators and rail traffic controllers must adhere to specific rules in the Metrorail Operating Rulebook (MOR) (see above). This inspection used digital tools to confirm the required rules were adhered to while in this heightened state of safety risk. The inspected trains that lost speed commands and subsequent inspection results are represented in the table below.

Train ID	Time	Offload	Block	Speed Restriction	CMNT ¹⁰ Inspection
935	10:33pm	Yes	Yes	Yes	Yes
429	10:50pm	No	Yes	No	Yes
939	10:55pm	No	Yes	No	Yes
431	11:03pm	No	Yes	No	Yes

Observation 1

The procedure for Mode 3, or Automatic Train Protection cut out, has some conflicting language (see yellow highlight) regarding absolute block versus permissive block and the speed restriction:

8.17.9.2 When in Mode 3, a Class 1 rail vehicle shall be operated using absolute block.

8.17.9.3 Use of Mode 3 shall be accomplished only after receiving specific authorization from the Rail Traffic Controller or the Interlocking Operator to cut-out ATP Speed shall be restricted to 15-mph unless otherwise authorized by the Rail Traffic Controller.

8.17.9.6 After a Class 1 rail vehicle has been operated in Mode 3, or when the “ATP cut-out” switch has been moved to the CUT-OUT position for any reason, the train must be moved under a permissive or absolute block at Restricted Speed, or as directed by the Rail Traffic Controller.

¹⁰ CMNT is the acronym for Car Maintenance.



8.17.11 On the mainline, prior to authorizing Mode 2 - Level 2 or Mode 3 operation, or prior to moving any rail vehicle not equipped with Automatic Train Protection, the Rail Traffic Controller shall establish an absolute block.

Observation 2

On February 18, 2026, at approximately 10:33pm, the rail traffic controller instructed the train operator of train 935 to cut out Automatic Train Protection and granted an absolute block with a speed restriction. The train was offloaded a few minutes prior to the block being granted and rail car maintenance inspected the train in accordance with MOR 8.17.9-8.17.11.

Defect 1

On February 18, 2026, at approximately 10:50pm, the rail traffic controller instructed the train operator of train 429 to cut out Automatic Train Protection and granted an absolute block. Car Maintenance inspected the train. The train was not offloaded in accordance with MOR 8.17.9.5, and the train was not instructed to operate at restricted speed in accordance with MOR 8.17.9.3.

Hazard Rating: 1B

Defect 2

On February 18, 2026, at approximately 10:55pm, the rail traffic controller instructed the train operator of train 939 to cut out Automatic Train Protection and granted an absolute block. Car Maintenance inspected the train. The train was not offloaded in accordance with MOR 8.17.9.5, and the train was not instructed to operate at restricted speed in accordance with MOR 8.17.9.3.

Hazard Rating: 1B

Defect 3

On February 18, 2026, at approximately 11:03pm, the rail traffic controller instructed the train operator of train 431 to cut out Automatic Train Protection and granted an absolute block. Car Maintenance inspected the train. The train was not offloaded in accordance with MOR 8.17.9.5, and the train was not instructed to operate at restricted speed in accordance with MOR 8.17.9.3.

Hazard Rating: 1B



Next Steps

Please respond **by Thursday, April 16, 2026**, to acknowledge receipt and to convey responses to the WMSC regarding what, if any, actions will be or have been taken in response.