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# WMSC Inspection Report 20241205B

**ISSUED 12/9/2024**

**Inspection Details**

Train Control Room (TCR) Inspection

A01, B01, B02, B03, B04, B05, B06, B07, B08, B09, B10, B11, B35

12/5/2024

09:00-14:08

Announced

Email notification sent at 10:54AM on Wednesday, December 4, 2024.

Risk-Based

C-0213

## Overview

This WMSC inspection was focused on the cleanliness of Train Control Rooms (TCR) and the vital equipment housed within them. The WMSC inspector visited and reviewed the conditions of Train Control Rooms at 13 stations (A01, B01, B02, B03, B04, B05, B06, B07, B08, B09, B10, B11, B35).

This is a risk-based inspection based on corrective action plan C-0213. C-0213 was created to address the finding "Metrorail has an ineffective and insufficient inspection, maintenance and cleaning program for the Automatic Train Control equipment, particularly including a lack of required tools, procedural compliance, and supervisory oversight for care of vital equipment housed in train control rooms and is not maintaining the structural integrity of these ancillary rooms." (WMSC Train Control Room Order dated August 4, 2022.)

The inspector identified 7 potential defects from this inspection.

## 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.

**Defect 1**

During inspection, lead acid batteries were found that did not have their metallic leads guarded and that were stored within metal lockers often neighboring accelerants such as paper and chemicals. Such batteries encountering other metals can cause sparks which could lead to a fire. These conditions were observed at B05 Brookland and immediately reported to ATCM Assistant Director Kelvin Murphy who was on site during the inspection and who contacted the local area supervisor for mitigation. This condition was also observed at B07 Takoma and was pending mitigation by the Assistant Director's designee after discovery. As a temporary mitigation the batteries were removed from their metal cabinet to an open-air space until they could be taped and removed for proper disposal.

During the inspection, this potentially hazardous condition was identified as an Immediate Safety Concern that was immediately conveyed to ATCM Assistant Director Kelvin Murphy and, as noted above, was mitigated on-site during the inspection.

Additionally, WMSC notified WMATA of the Immediate Safety Concern again via email on Friday, December 6, 2024, in accordance with Program Standard Section 6.F.2.a. In response to the WMSC's emailed Immediate Safety Concern, Automatic Train Control Maintenance advised that the batteries had been retrieved and relocated to the Car Maintenance shop at Brentwood Yard for proper disposal.

**Hazard Rating: 3B**

**Photos**



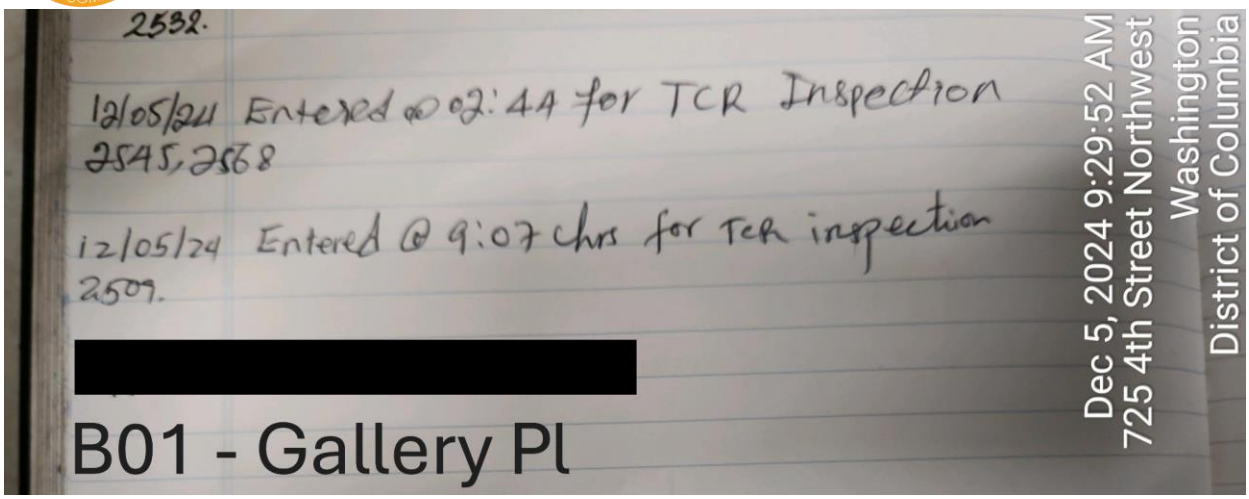
**Defect 2**

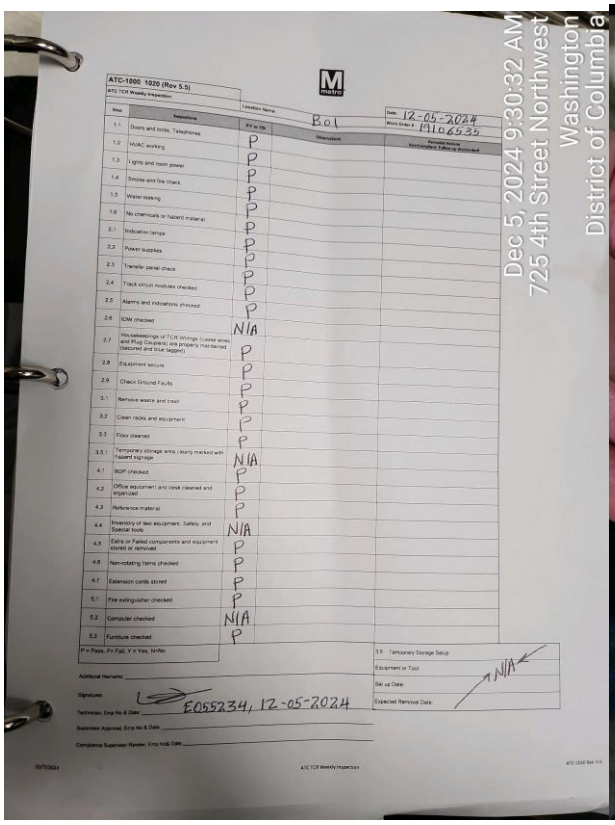
As outlined in the ATC-1000 Instructions for Testing and Inspection of ATC Apparatus and System the 1020 Procedure for Train Control Room (TCR) Weekly Inspections Procedure, Step 5.1.4 instructs that WMATA mechanics performing this preventative maintenance must "verify the extinguishers has an inspection tag and that tag has been initialed by a WMATA Approved Fire Personnel for the current or previous month of the inspection."

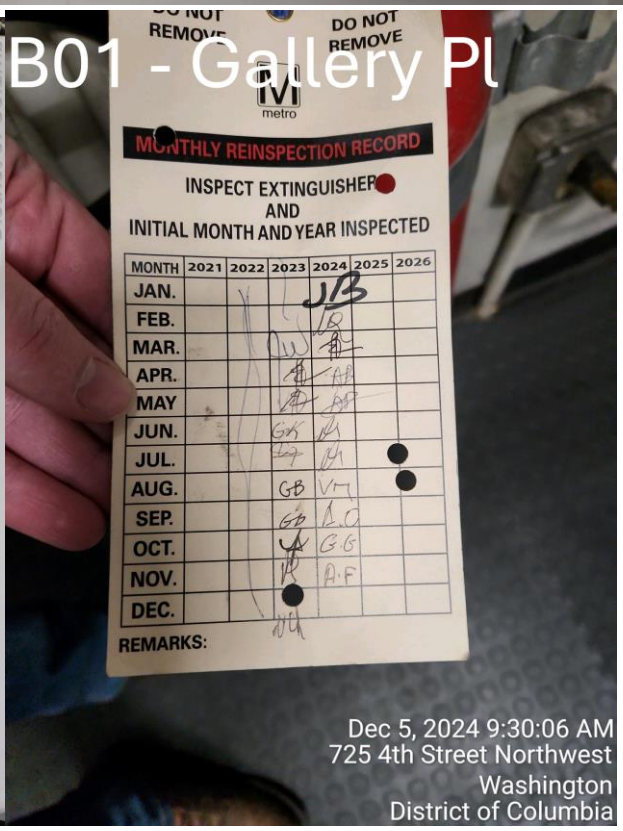
Each visited TCR had an extinguisher available in the room. At two TCR locations, the present fire extinguishers had not been signed off as having their condition checked/confirmed. The locations in question were Gallery Pl - Chinatown (TCR Inspection 1020 Data Sheet completed 12/5/2024 with "Fire Extinguisher checked" as "P" passing, but the extinguisher's tag had not been signed off for the month of December) and Silver Spring North Train Control Room (November Maintenance Check Missing - December check not completed yet).

**Hazard Rating: 3B**

**Photos**


2532.
12/05/24 Entered @ 02:44 for TCR Inspection
2545, 2568
12/05/24 Entered @ 9:07 hrs for TCR inspection
2509.
[redacted]
B01 - Gallery Pl
Dec 5, 2024 9:29:52 AM
725 4th Street Northwest
Washington
District of Columbia


ATC-1000 1020 (Rev 5.5)
ATC TCR Weekly Inspection
B01
12-05-2024
1910635
E055234, 12-05-2024
N/A
Dec 5, 2024 9:30:32 AM
725 4th Street Northwest
Washington
District of Columbia


B01 - Gallery Pl
DO NOT REMOVE
metro
MONTHLY REINSPECTION RECORD
INSPECT EXTINGUISHER
AND
INITIAL MONTH AND YEAR INSPECTED
MONTH 2021 2022 2023 2024 2025 2026
JAN.
FEB.
MAR.
APR.
MAY
JUN.
JUL.
AUG.
SEP.
OCT.
NOV.
DEC.
REMARKS:
Dec 5, 2024 9:30:06 AM
725 4th Street Northwest
Washington
District of Columbia


**Defect 3**

As outlined in the ATC-1000 (Instructions for Testing and Inspection of ATC Apparatus and System) the 1020 Procedure for Train Control Room (TCR) Weekly Inspections Procedure, Step 1.6 instructs that WMATA mechanics performing this preventative maintenance must "ensure that no hazardous material or any type of chemicals are stored in the TCR."

In 9 of the 13 TCRs (A01, B01, B02, B03, B35, B04, B05, B07, and B10) hazardous material or chemicals were observed in the room that included combustibles, flammables, and corrosives.

**Hazard Rating: 3B**

**Photos**

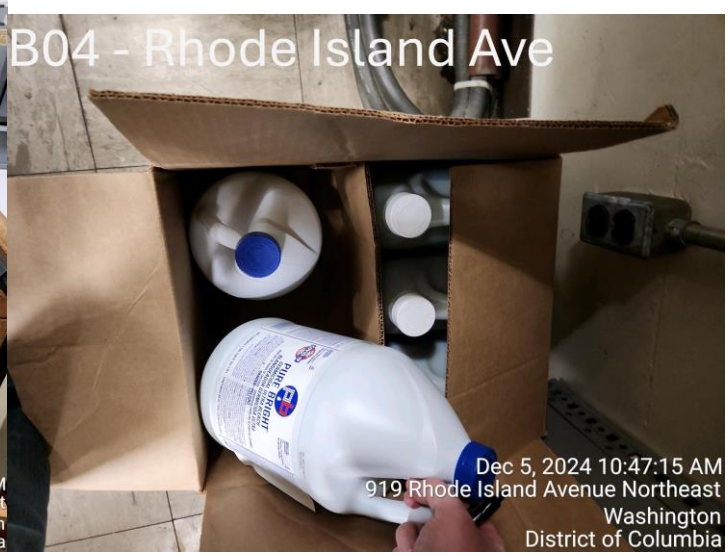

A01 - Metro Center
Dec 5, 2024 9:08:34 AM


B01 - Gallery Pl
Dec 5, 2024 9:28:35 AM
725 4th Street Northwest
Washington
District of Columbia


B02 - Judiciay Square
Dec 5, 2024 9:49:41 AM
725 4th Street Northwest
Washington
District of Columbia


B03 - Union Station
Dec 5, 2024 10:10:16 AM
301 First Street Northeast
Washington
District of Columbia


B35 - NoMa-Gallaudet
Dec 5, 2024 10:26:56 AM
1005 First Street Northeast
Washington
District of Columbia


B04 - Rhode Island Ave
Dec 5, 2024 10:47:15 AM
919 Rhode Island Avenue Northeast
Washington
District of Columbia




**Defect 4**

Damaged or missing flooring was identified at A01 Metro Center TCR. Some plastic flooring material was added in front of equipment racks. As presented, the floor poses a slip or trip hazard.

**Hazard Rating: 3B**

**Photos**

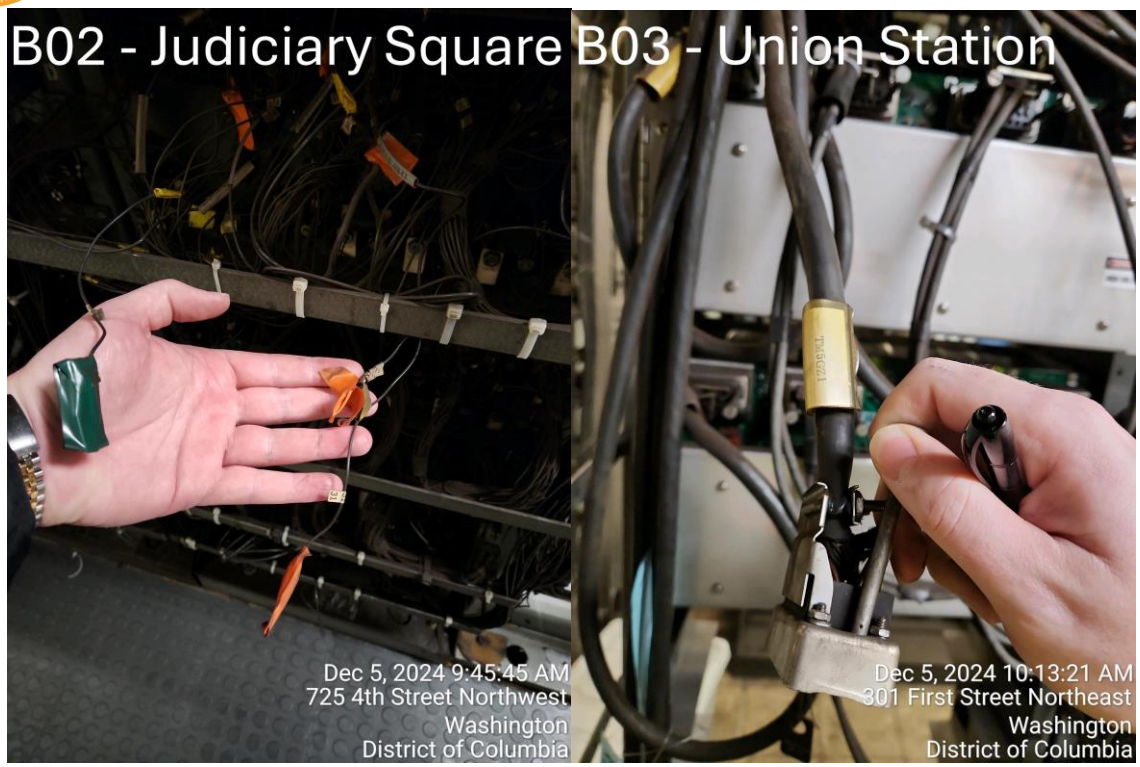

**Defect 5**

At several TCR, cable jumpers and various copper interconnect cable heads were observed hanging from racks that were not blue tagged to indicate their status at B02, B03, B04, B05, B06, and B07. Stations B04, B05, B06, and B07 appeared to be undergoing work so it is possible these four locations will be resolved by those efforts.

As outlined in the ATC-1000 (Instructions for Testing and Inspection of ATC Apparatus and System) the 1020 Procedure for Train Control Room (TCR) Weekly Inspections Procedure, Step 2.7.2 instructs that WMATA mechanics performing this preventative maintenance ensure the following: "Unterminated loose wires must be properly secured, and blue tagged. The blue tag should be properly filled out. Unterminated Loose wires without blue tags must be reported to the ATC Supervisor for investigation and documentation. Any deficiency must be corrected as soon as possible."

**Hazard Rating: 3B**

**Photos**

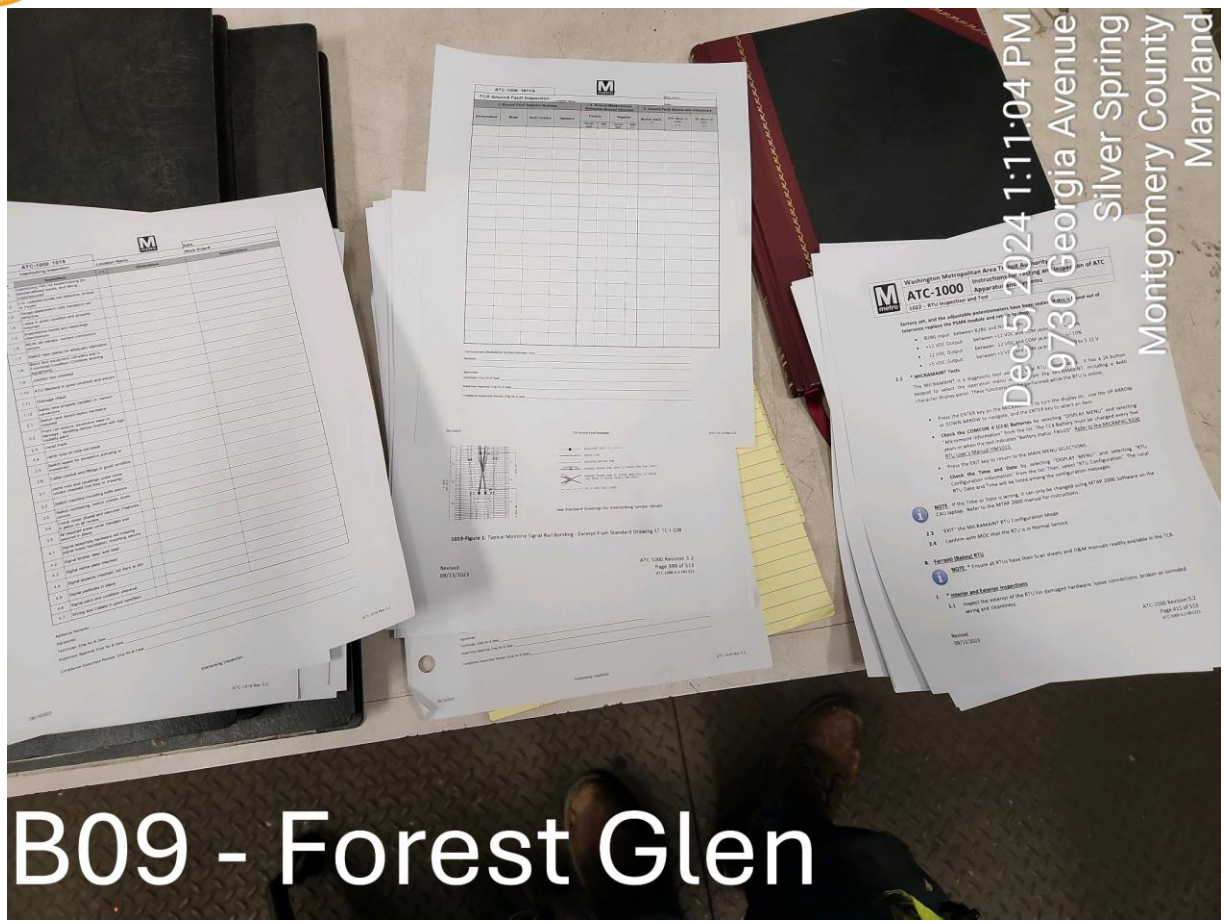



**Defect 6**

A spot check was conducted at the A01, B01, and B09 Train Control Rooms checking for maintenance data sheets. In each room there were instances where there were copies of pre-printed data sheets that were from various revisions of the ATC 1000 Instructions for Testing and Inspection of ATC Apparatus and System. To ensure proper document control, the outdated forms should be removed and only printed prior to performing work to ensure the current version of data sheets are used with up-to-date measurements, tolerances, and specifications. At A01 and B01 ATCM mechanics were in the TCR engaged in the 1020 Procedure for Train Control Room (TCR) Weekly Inspections Procedure activities and immediately remedied the finding of the outdated paperwork at the time of the observation. Assistant Director Murphy was advised at B09 of the condition needing intervention.

**Hazard Rating: 3B**

**Photos**




**Defect 7**

An extender board was found at the B07 Takoma Train Control Room sitting atop a box of improperly stored cans and other various discarded equipment inside a cabinet. This extended printed circuit board (PCB) is a piece of equipment that is used to pass current during sensitive testing procedures. The board found during this inspection was removed by ATCM Assistant Director Kelvin Murphy.

1) The observed type of storage of such a piece of equipment is against the ATC-2000 System Integrity Maintenance Practices, which states:

   2018 Electrostatic Discharge (ESD)

   2018.1 Storage and Transport

   Electronic modules or sensitive components must be completely enclosed in suitable conductive anti-static jackets during storage or transportation.

2) The board observed at this location was modified and marked with what appears to be green permanent marker highlighting specific pins. Such modifications without an approval are prohibited in the ATC-2000 System Integrity Maintenance Practices, which states:

2005 Vital Circuits and Devices

2005.8 Changes and Modifications Modification must not be made to any apparatus or circuits without the proper authority. Changes and modifications must be approved by the Senior Director ATC Engineering or designated Employee through release of an Engineering Modification Instruction (EMI), Engineering Bulletin (EAB/EIB) or a Temporary Configuration Plan (TCP).

**Hazard Rating: 3B**

**Photos**



## Next Steps

Please respond **by Thursday, December 12, 2024,** to acknowledge receipt and to convey responses to the WMSC regarding what, if any, actions will be or have been taken in response.