



Internal Review Summary

Why QICO Performed This Review:

- This internal review is intended to provide Metro senior management with an assessment of the state of Automatic Train Control Maintenance (ATCM) and promote the actions needed to address any concerns.
- QICO is independent from the functions it oversees, authorized by the General Manager to conduct objective reviews with unrestricted access to all functions, records, assets and employees under its purview.

QICO's Methodology:

- Developed relevant review activities by identifying and assessing risks to Quality of work, compliance with standards, records management and safety.
- Reviewed maintenance documentation, observe maintenance and inspection work while in-progress, and interview key personnel.
- Review findings and required actions are rated based on severity of risk, which ranges on a scale from "Insignificant" to "High."

Note: An itemized Corrective Action Plan (CAP) is developed for each required action to achieve effective and measurable resolution of identified concerns. To check the status of CAP implementation go to www.wmata.com/initiatives/transparency/.

June 2017

Automatic Train Control Maintenance (ATCM)

QICO's Review Results:

Better work order tracking and utilization of electronic records management for preventative inspections can improve accountability

QICO's internal review identified and noted several **Wins (What Worked Well)** and **Areas for Improvement** requiring corrective actions:

- ✓ Effective communication occurs on a daily basis between ATC Maintenance and ATC Production.
- ✓ ATC-1000, 2000 and 3000 maintenance manuals meet FRA standards with regards to minimum requirements and frequency of tests.
- ATC mechanics encounter delays obtaining access to the roadway for preventative maintenance inspections.
- The ATC Maintenance Control Policy does not outline technical training required for mechanics or supervisors, according to grade or experience.
- Inconsistent communication between successive shifts on Corrective Maintenance work orders in Maximo results in ineffective record keeping of work completed during each shift.
- ATCM supervisors are not performing quality control checks as required in Maintenance Control Policy.
- QICO could not identify applicable work orders when reviewing completed Preventative Maintenance (PM) data sheets.
- Several Preventative Maintenance Work Orders (WOs) in the enterprise asset management database (Maximo) do not contain the current revised version of instructions and/or sample data sheets.
- ATC corrective maintenance records, as identified in the enterprise asset management database (Maximo), indicate a backlog of open work orders dating back to 2012.
- ATC Maintenance utilizes only paper records for preventative maintenance inspection data sheets.

Required Actions:

- QICO-ATC-17-01: Establish clear training requirements for each mechanic grade including periodicity and develop methods of capturing on-the-job training in accordance with the ATC maintenance control policy for ATC. Develop a training plan to comply with updated requirements (*Risk Rating: Elevated*)
- QICO-ATC-17-02: Review and perform necessary revision to maintenance documentation, including the ATC maintenance control policy, and establish supervisory control to ensure compliance with updated requirements. (*Risk Rating: Moderate*)
- QICO-ATC-17-03: Develop a process to determine which groups receive precedence or priority for track access maximize time available to complete critical maintenance/inspection activities. (*Risk Rating: Moderate*)