



INTERNAL REVIEW SUMMARY

December 2017

11. Metrobus Revenue Collection Equipment Maintenance

Key Takeaway: Although BMNT - Revenue Equipment Technicians are equipped with the experience to perform their duties, controlled standards, procedures and training program are necessary to assure all requirements are consistently and effectively adhered to.

Why QICO Performed This Review:

- This internal review is intended to provide Metro senior management with an assessment of the current methods and practices associated with the maintenance of revenue collection equipment on buses throughout the authority. The review will promote the actions needed to address areas of concern.
- QICO is uninvolved in the functions assessed, authorized by the Metro General Manager to conduct objective reviews with unrestricted access to all functions, records, assets and employees under its purview.

QICO's Methodology:

- QICO developed relevant review activities through identifying and assessing risks to quality of work, compliance with standards, and records management.
- QICO observed Bus Maintenance (BMNT) – Revenue Collection Equipment Technicians while on duty, assessed their conformance to requirements, reviewed maintenance documentation and key records and interviewed key personnel.
- Review findings and required actions are rated based on risk, which ranges on a scale from "Insignificant" to "High."

Wins and Areas for Improvement:

- ✓ Effective use of Electro-Static Discharge Protection (ESD) improves the reliability of repairs.
- Consistent and accurate capture of work order data in MAXIMO is essential to effective monitoring, tracking and analysis of the maintenance work performed.
- Effective revenue collection equipment training is needed for technicians to perform their duties effectively and efficiently.
- The development of engineering modification process is essential to the control and reliability of equipment modifications.
- While the Revenue Repair Shop strives to reduce costs and to help with parts availability, material requalification requires additional controls to promote reliability.
- Defining key performance indicators (KPI) for shop activities is needed to identify performance deficiencies and drive improvement.
- Utilization of a formal Quality Control Plan (QCP) is essential to promote the consistency and reliability of work being performed.

Required Actions:

- **QICO-FBO-17-01:** Develop formal approved procedures for BMNT practices, including standards for MAXIMO data entry, engineering modification instructions, refurbished parts requalification, and develop a quality control plan to promote consistent application of corrective and preventative maintenance.
(Risk Rating: Moderate)
- **QICO-FBO-17-02:** Develop a comprehensive training program specific to the revenue collection equipment technicians, covering both class room and on the job training.
(Risk Rating: Elevated)
- **QICO-FBO-17-03:** Develop and consistently measure performance indicators that reflects the actual performance of BMNT shop activities and drives improvement.
(Risk Rating: Moderate)

Note: An itemized Corrective Action Plan (CAP) is developed for each required action to achieve effective and measureable resolution of identified concerns. To check the status of CAP implementation go to <https://www.wmata.com/initiatives/transparency/upload/Overview-of-Internal-Compliance-Actions.pdf>.