

**TECHNOLOGY & INNOVATION
RADIO & ELECTRONICS DIVISION
AUDIT 20-06
June 2, 2020**



CITY OF TAMPA

Jane Castor, Mayor

Internal Audit Department

Christine Glover, Internal Audit Director

June 2, 2020

Honorable Jane Castor
Mayor, City of Tampa
1 City Hall Plaza
Tampa, Florida

RE: Technology & Innovation - Radio & Electronics Division, Audit 20-06

Dear Mayor Castor:

Attached is the Internal Audit Department's report on Technology & Innovation - Radio & Electronics Division.

We thank the aforementioned management and staff for their cooperation and assistance during this audit.

Sincerely,

/s/ Christine Glover

Internal Audit Director

cc: John Bennett, Chief of Staff
Dennis Rogero, Chief Financial Officer
Jean Duncan, Administrator of Infrastructure and Mobility
Sal Ruggiero, Deputy Administrator of Infrastructure Services
Russell Hauptert, Chief Technology Officer
Pete Brett, Director of Logistics & Asset Management
Eric Hayden, Infrastructure Services Manager
Terry Nehring, Electronics Superintendent

**TECHNOLOGY & INNOVATION
RADIO & ELECTRONICS DIVISION
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/s/ Anthony Tiwari

Auditor

/s/ Christine Glover

Audit Director

**TECHNOLOGY & INNOVATION
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BACKGROUND

The Technology & Innovation (T&I) Department's Radio & Electronics Division (Division) provides installation, repair, preventative maintenance, and consultation services for a multitude of communication and public safety related electronics equipment. A partial list includes radios, mobile data terminals, wireless data cards, automatic vehicle location systems, emergency lighting, sirens/public address systems, in-vehicle camera systems, office radio consoles, and specialty equipment such as bomb and educational robots, tanks, and surveillance equipment.¹

The Division is comprised of ten individuals that also support special events and emergency operations utilizing three specially equipped mobile communications trailers.

STATEMENT OF OBJECTIVES

This audit was conducted in accordance with the Internal Audit Department's FY20 Audit Agenda. The objectives of the audit were to assess:

1. That the Division has policy and procedure manuals documenting internal controls relating to their functions.
2. The process for tracking work orders and customer data.
3. The processes for recording and maintaining inventory.
4. The process of monitoring wireless cards on mobile devices.
5. The Division's part in T&I's Business Continuity Planning.
6. That the Division's employees are provided a healthy and safe working environment.
7. The physical security and monitoring of the Division's building.

STATEMENT OF SCOPE

The audit period covered FY19. Both qualitative and quantitative assessments were performed to determine whether the management and staff of the Division were fulfilling their stated duties and responsibilities in an effective and efficient manner. Original records as well as copies were used as evidence and verified through observation and physical examination.

¹ Retrieved from: <https://itampa.ads.cot/technology/radio-and-electronics>

STATEMENT OF METHODOLOGY

We achieved our audit objectives by utilizing the following methods:

1. Conducted interviews with management to gain an understanding of internal processes and controls.
2. Reviewed ordinances and guidance related to best practices in managing similar entities.
3. Performed a data reliability analysis to determine completeness and accuracy of system-generated information used by management.
4. Analyzed the processes for acquiring, controlling, and managing inventory.
5. Performed a walkthrough of the Division's building including areas that contain sensitive equipment.

STATEMENT OF AUDITING STANDARDS

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our conclusions based on our audit objectives.

AUDIT CONCLUSIONS

Based upon the audit work performed, our conclusions are as follows:

1. The Division does not have policy and procedure manuals documenting internal controls relating to their functions.
2. The process for tracking work orders and customer data are effectively performed using software. Reports are consistently submitted to senior management for review.
3. The processes for recording and maintaining inventory are only for current inventory and does not incorporate a high number of "cannibalized" parts.
4. The process of monitoring wireless cards on mobile devices are effectively tracked using software.
5. The Division is part of T&I's Business Continuity Planning, in the event of a disaster or emergency, as they are critical to communications.
6. The Division's employees may not be provided a healthy and safe working environment, due to deterioration from lack of building maintenance and termite-infestation.
7. The physical security and monitoring of the Division's building are adequate.

BUILDING SAFETY

STATEMENT OF CONDITION: During a walkthrough of the Division's building, we noted some areas of concern including general maintenance and termite issues. We reviewed Facilities Management (Facilities) work order reports from June 2019 that noted a termite-infested wall was replaced in the storage area however, no building inspection or follow-up treatment was performed. We subsequently requested a building and termite inspection by Facilities. Their inspection performed in April 2020 revealed that several areas of the building, both internal and external, are in need of maintenance and repair. The termite inspection, performed by an external Pest Management Company, revealed that the entire building and furniture are riddled with both dry-wood and subterranean termites. The Termite Inspector noted that the building is too far-gone for the termite spot treatment. Eradication would require fumigation by tenting and drilling rods filled with chemicals into the earth surrounding the building, with annual follow up treatment.

CRITERIA: The City of Tampa, Human Resources Safety and Health Program describe that Management should give top priority to identify and provide the financial resources for the maintenance and correction of unsafe conditions. The policy of Facilities Management is to conduct facility condition assessments on high-usage, major downtown facilities and community centers on a 1-year cycle and all other facilities on a 2-year inspection cycle.

CAUSE: On multiple 2019 work order requests, the Division reported several issues to Facilities that were corrected. However, neither party observed or reported all building maintenance and termite issues necessary to correct unsafe conditions. Routine and termite inspections, of the building, were not performed.

EFFECT OF CONDITION: Workplace hazards go unnoticed until incidents occur. The health and safety of employees may be compromised due to structural deterioration from lack of maintenance and termite-infestation. In several articles published by the Center for Disease Control, it is noted that the effects of airborne and subterranean termites not only cause structural damage but also penetrate plastic-covered electric cables causing electrical systems to fail. In some cases, termite droppings may cause respiratory issues in individuals with asthma.

RECOMMENDATION 1: The Division should perform regular workplace inspections, including feedback from staff, as an important part of improving the overall morale, occupational health, and safety of their employees. Facilities should correct all identified issues as well as schedule routine and termite inspections of the building. The frequent inspections performed and communicated by both parties should be documented, as part of a preventive maintenance and risk mitigation process.

T&I RADIO AND ELECTRONICS MANAGEMENT RESPONSE: T&I Electronics agrees with the finding and will implement a semi-annual building walk-around inspection to identify building related issues and will report them to Facilities Management via their report system, WebTMA. Additionally, we will remind our staff to report any workplace issues to their supervisors. Unsafe conditions will be reported ASAP, general maintenance items will be added to the semi-annual list.

T&I RADIO & ELECTRONICS TARGET IMPLEMENTATION DATE: June 1, 2020

FACILITIES MANAGEMENT RESPONSE: Facilities Management recently contacted T&I and we are currently working together on short and long-term solutions that will provide a safe and healthy facility for T&I Radio and Electronic employees.

Facilities recently met with T&I Radio and Electronic staff for their input and conducted an inspection of the facility. A cost estimate for restoration work is being prepared and funding sources are being researched. Termite tenting is being scheduled along with work area air quality testing.

FACILITIES TARGET IMPLEMENTATION DATE: No hard dates have been established at this time. An update report will be provided on a monthly basis outlining our findings and recommendations.

POLICIES AND PROCEDURES

STATEMENT OF CONDITION: The Division is responsible for the installation and maintenance of critical communication and public safety electronic equipment for City of Tampa Departments. The Division does not have documented policies and/or standard operating procedures (SOP's) that provide direction on how daily operations should be carried out.

CRITERIA: The City of Tampa municipal code section 2-46, requires departments to create and maintain, among other things, proper documentation of their functions, policies, and procedures. In addition, documented policies and/or SOP's are useful and effective not only for retention of an organization's operational knowledge and new employee training, but also for reliable internal control.

CAUSE: Institutional knowledge from experienced employees have been relied upon to provide guidance on the performance of day-to-day responsibilities. Daily operations took priority over the development of policies and SOP's.

EFFECT OF CONDITION: Without documented policies and/SOP's, there is likely to be inconsistency in the way processes and procedures are carried out. Training of new employees is likely to be affected, resulting in their productivity and efficiency being negatively impacted. There is also an elevated dependence on institutional knowledge, increasing the risk, in the event of staff separation from the Division. Ultimately, effectiveness of the internal control system could be compromised.

RECOMMENDATION 2: The Division should document policies and/or SOP's to reflect current practice, as well as encapsulate contemporary statutory requirements for compliance. Documentation should be periodically reviewed and approved by Management.

MANAGEMENT RESPONSE: T&I Electronics agree with this recommendation. We will develop written policies and SOP's that cover our work processes along with the procedures used to document the work in a method that meets the City of Tampa municipal code section 2-46.

TARGET IMPLEMENTATION DATE: July 1, 2021

INVENTORY OF CANNIBALIZED PARTS

STATEMENT OF CONDITION: The Division practices “cannibalization,” which involves removing useable parts from sold or salvaged vehicles for use in existing vehicles. During a walkthrough of the storage facility, it was noted that two thirds of the building housed cannibalized radio and electronic parts, while only one third contained current inventory. The Division does not maintain inventory records of cannibalized parts and SOP’s for managing the parts life cycle.

CRITERIA: The U.S. Government Accountability Office (GAO) suggests performing inventory counts in order to ensure the availability of meeting operational needs, including mission readiness and identify excess or obsolete inventory. In several studies performed by the GAO, they noted that cannibalizations do not restore a component to its full projected life expectancy but rather increase the chance that the same component may break down again prematurely. In some instances, the GAO found that without tracking inventory of cannibalized parts, management could not make sound economic decisions concerning the relative costs of alternatives, such as changes to stock levels or storage locations.

CAUSE: The Division made the decision to retain the cannibalized parts, as a cost saving measure, in the event the manufacturer no longer produces the part. However, inventory data was not maintained in a centralized database and employee knowledge was relied on for the cannibalized parts inventory levels, age, and practicality.

EFFECT OF CONDITION: Without inventory records of the cannibalized parts, the City of Tampa may be at risk of misuse of these assets. Inefficient management of the items could result in higher carrying costs, including administrative and storage related expense.

RECOMMENDATION 3: The Division should establish SOP’s for managing the inventory of cannibalized parts similar to their current perpetual inventory process. This should include inventorying and recording the levels, age, and use of cannibalized parts. Obsolete cannibalized parts should be removed to allow for the storage of current inventory.

MANAGEMENT RESPONSE: Electronics agrees with the finding and GAO recommendations. In many organizations age of assets are not sustained as long as at the City of Tampa where a vehicle can be in use for more than 20 years. Viable parts are salvaged to fully support critical assets still in use. Electronics will undertake a cost/benefit study to ascertain what efforts are needed to track parts that should be kept, and which parts should be purchased new. We will also dispose of parts that have not been used within 3 years of salvage.

TARGET IMPLEMENTATION DATE: 1/1/2021 However, this date may need to be moved out, depending on how long we stay under the Covid-19 special work schedule.