
**CITY OF SAN ANTONIO
OFFICE OF THE CITY AUDITOR**

**AVIATION DEPARTMENT
AUDIT OF FLEET OPERATIONS
PROJECT NO. AU23-002
January 10, 2024**

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CITY AUDITOR**



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Executive Summary

As part of our annual Audit Plan approved by City Council, we conducted an audit of the Aviation Department, specifically Fleet Operations. The audit objectives, conclusions, and recommendations follow:

Determine if Aviation fleet operations are functioning effectively and efficiently including maintenance and vehicle replacement.

Aviation Fleet is effectively performing vehicle replacement and reporting preventative maintenance. Asset acquisitions and disposals are adequately supported and appropriately reported in SAP. Preventative maintenance and work order reporting is relayed to upper management. Monthly trainings are occurring and are attended by appropriate personnel, with applicable Commercial Drivers Licenses (CDL) on file. Additionally, access controls to both the fleet facility and FASTERWeb system are appropriate.

However, the audit team identified areas in which controls could be improved over parts purchasing, inventory management, and preventative maintenance schedules. Aviation purchase requests are not appropriately supported or approved. Parts inventory is not accurately reported. In addition, a review over tools inventory identified a segregation of duties issue. Lastly, assets in FASTERWeb are not monitored to ensure appropriate maintenance is scheduled and completed timely.

We provided recommendations to management to strengthen controls and resolve identified issues. Aviation Management agreed with the audit findings and has developed positive action plans to address them. Management's verbatim response is in Appendix B on page 10.

Background

The San Antonio International Airport (SAT) consists of 2,600 acres with two terminals that accommodate 11 domestic and international airlines for commercial service. One of their support subdivisions is Fleet & Material Assets.

Fleet & Material Assets (Fleet) is responsible for overseeing approximately 354 assets owned by the airport system. Assets consist of road safe trucks, sport utility vehicles, cars, passenger shuttles, heavy duty tractors, trailers, mowers, etc. Each asset's use is considered in the scheduling of routine preventative maintenance. Determinants are miles driven, hours idling, and length of time. The following table displays assets serviced for preventative maintenance by fiscal year and percentage of on time and early servicing:

Table 1: Assets Serviced for Preventative Maintenance

Fiscal Year	Assets Serviced	Work Orders	Serviced On Time or Early	% Serviced On Time or Early
2022	249	683	510	75%
2023	270	729	479	66%

Source: FASTERWeb

Of Fleet's 16 assigned personnel, 7 are dedicated to overseeing mechanical responsibilities with the remaining 9 dedicated to administrative duties and stock warehouse support. The current lot utilized by Fleet consists of administrative support offices, an onsite stock part warehouse, and a garage. Unless an offsite repair is required, Fleet manages asset care out of a single garage equipped with two main vehicle bays.

Daily operational data is managed utilizing the FASTERWeb platform which serves as a key resource for management oversight by providing preventative maintenance due/overdue, part assignment, and open/closed work order reporting.

Fleet is supported by the Building and Equipment Services Department (BESD) for fueling and (when required) asset acquisition. Additionally, Fleet is supported by one Management Analyst who monitors the financial aspects and serves as a liaison for vendor relations.

Audit Scope and Methodology

The audit scope was Aviation fleet operations from FY 2022 through 2023 and included preventative maintenance, safety and training, asset/part acquisition and disposal, inventory, management reporting, and physical security controls.

To gain an understanding of department operations, we interviewed Aviation personnel and conducted walkthroughs over preventative maintenance, purchasing, inventory, and physical security controls. The Facilities and Fleet Division Policy Handbook was our primary criteria for this audit.

We assessed internal controls relevant to the audit objective. This included a review of written department policies and procedures, FASTERWeb reports, and City Administrative Directives. In addition, as part of our testing procedures we examined the following areas:

- Determined if adequate training is provided to personnel and if safety inspections are occurring.
- Confirmed whether procurement requests for both parts and asset acquisitions are appropriately supported and tracked in the FASTERWeb system.
- Determined if assets are monitored to ensure preventative maintenance is performed.
- Determined if inventory is being properly assigned to work orders and removed from the FASTERWeb system.
- Determined if assets disposed have been appropriately removed from service within the FASTERWeb system and are accurately reflected in SAP.
- Determined whether Fleet has implemented sufficient measures to secure their facilities.
- Reviewed whether FASTERWeb users/permissions appear appropriate.

We relied on computer-processed data in the FASTERWeb system to validate assets' preventative maintenance, acquisition and disposal data, and parts assignment. Our reliance was based on performing direct tests on the data rather than evaluating the system's general and application controls. We do not believe that the absence of testing general and application controls had an effect on the results of our audit.

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 findings and conclusions based on our audit objectives.

Audit Results and Recommendations

Aviation Fleet is effectively performing vehicle replacement and reporting preventative maintenance. We performed a review over asset acquisitions and disposals to determine if they were adequately supported and appropriately reported in SAP. We selected a sample of 7 asset purchases and 7 disposed assets and found that each of the assets had appropriate support of their acquisition/disposal and were appropriately stated in SAP.

We also performed a review over management reporting to determine if preventative maintenance and work order reporting was being relayed to upper management. We selected a sample of the 5 most recent biweekly downtime reports and 5 most recent daily work order reports and confirmed they were being distributed to management for review on a consistent basis.

Additionally, we performed a review over monthly safety trainings for a sample of three months in FY 2023 to determine if trainings were being attended by appropriate personnel. We determined the trainings were being attended by all necessary personnel. In addition, we reviewed Commercial Driver's Licenses (CDL) to ensure all personnel required to have a license had one on file. We confirmed that all 8 individuals had an active CDL.

We also reviewed individuals with badge access to the Aviation Fleet facility to confirm appropriateness of access. We determined all 73 individuals with access to the facility gate and administrative building were appropriate. In addition, we confirmed that all 13 personnel with keys to either the parts warehouse or the auto shop required access to those buildings to perform their job duties.

Furthermore, we completed a review over users with access to FASTERWeb. We confirmed all 11 users had appropriate access as active Aviation employees. In addition, the last review over FASTERWeb user access was performed by Aviation in conjunction with ITSD in July 2023.

However, the audit team identified areas in which controls could be improved as noted below.

A. Parts Purchasing

Parts purchase requests are not appropriately supported or approved.

We obtained a sample of 20 parts order forms for FY 2023 that are required in order to create a purchase request. 4/20 parts order forms did not have evidence of supervisor approval. In addition, 8/20 purchase requests had additional parts ordered that were not originally requested

on the parts order form. Per further background obtained from Aviation, these additional parts were purchased to maintain recommended parts levels. However, the documentation maintained does not show these parts were assigned to the parts inventory or for that purpose.

Per the Auto Shop Parts Ordering procedure, a supervisor must review and sign each parts order form to ensure accountability of parts ordered. In addition, it is best practice to document all procedures related to inventory ordering and receiving for consistency.

Aviation Department lacks execution of controls to ensure parts order forms are approved by a supervisor. In addition, Aviation lacks updated procedures documenting processes over the ordering of additional inventory to maintain stock levels.

Recommendations

Director of Airports:

- 1) Ensure existing controls (i.e., supervisor approvals) over parts ordering are executed as intended, and
- 2) Parts ordering/receiving processes are updated to reflect current practices.

B. Inventory Management

Parts inventory is not properly reported, and a segregation of duties concern over tool inventory was identified.

We completed a review over parts and determined inventory is not accurately reported. 3/25 items selected from the inventory listing could not be found in the warehouse during our visit. In addition, 4/25 items selected from inventory were not on the inventory listing. Parts inventory inaccuracies were due to a variety of reasons, including but not limited to:

- Inappropriately assigning unused parts to a work order,
- Not assigning parts used to a work order, and
- Parts being located in another area of the warehouse.

Subsequent to our visit, all specific items identified have been corrected by Aviation management. However, inventory procedures are not documented to ensure parts are appropriately assigned to work orders which contributed to these discrepancies.

We also performed a review over the technicians' tool inventory and identified a segregation of duties issue. Tool inventories are currently being performed by the technicians that utilize those tools.

Administrative Directive 8.7 Financial Management of Capital Assets and Tracked Property requires adequate segregation of duties and safeguarding of assets. In addition, as a best practice, inventory should be updated to accurately reflect current inventory.

Currently, Aviation has inadequate procedures in place to ensure that items removed from inventory are assigned appropriately to work orders. In addition, Aviation lacks segregation of duties regarding technician tool inventory counts. In effect, Aviation risks misappropriation of both parts and tools.

Recommendations

Director of Airports:

- 1) Update procedures surrounding inventory management and parts work order assignment, and
- 2) Evaluate tool inventory management processes to determine if inventory duties can be segregated.

C. Preventative Maintenance Schedules

Preventative maintenance is not occurring timely and adequate preventative maintenance schedules are not being established.

We performed an analysis over assets subject to preventative maintenance and identified 110 assets overdue for scheduled maintenance with 33 of those (30%) overdue at least 60 days, 240 hours, or 500 miles based on their meter type. Aviation management provided valid reasoning to the delay in preventative maintenance for 18/33 assets. However, for the remaining 15/33 assets we determined:

- 8/33 assets have an incorrect preventative maintenance schedule integrated and require adjustment in FASTERWeb and
- 7/33 assets were either not serviced timely or were overlooked for service.

Per the Equipment Renewal & Replacement Program procedure, the Aviation Department is responsible for ensuring vehicles are maintained in good working condition and remain in compliance with preventative maintenance schedules. Currently, incorrect preventative maintenance schedules have led to inaccurate management reporting.

Recommendations

Director of Airports:

- 1) Adjust preventative maintenance schedules for assets as appropriate and

- 2) Adjust current processes over asset entry into FASTERWeb to ensure appropriate assignment of preventative maintenance.

Appendix A – Staff Acknowledgement

Abigail Estevez, CPA, CIA, CISA, Audit Manager
Loretta Faxlanger, Auditor in Charge

Appendix B – Management Response



CITY OF SAN ANTONIO

SAN ANTONIO TEXAS 78283-3966

January 5, 2024

Kevin W. Barthold, CPA, CIA, CISA
City Auditor
San Antonio, Texas

RE: Management’s Corrective Action Plan for Audit of Aviation Fleet Operations

The Aviation Department has reviewed the audit report and has developed the Corrective Action Plan below corresponding to the report recommendation.

Recommendation					
#	Description	Audit Report Page	Accept, Decline	Responsible Person’s Name/Title	Completion Date
A	Parts Purchasing Director of Airports: 1) Ensure existing controls (i.e., supervisor approvals) over parts ordering are executed as intended, and 2) Parts ordering/receiving processes are updated to reflect current practices.	6	Accept.	Jason Loredo, Fleet and Asset Material Manager	1) 12/21/23 2) 12/21/23
	Action plan: 1) Parts ordering process was changed, and a new form was implemented that requires a service advisor, supervisor, or above signature on every parts order form before processing. 2) The Parts Ordering Process was updated in Fleet Standard Operating Procedures (SOP). On-hand inventory and non-stock inventory parts are now required separate orders.				

Recommendation					
#	Description	Audit Report Page	Accept, Decline	Responsible Person's Name/Title	Completion Date
B	<p>Inventory Management</p> <p>Director of Airports:</p> <ol style="list-style-type: none"> 1) Update procedures surrounding inventory management and parts work order assignment, and 2) Evaluate tool inventory management processes to determine if inventory duties can be segregated. 	7	Accept	Jason Loreda, Fleet and Asset Material Manager	<ol style="list-style-type: none"> 1) 12/21/2023 2) 3/31/2024
<p>Action plan:</p> <ol style="list-style-type: none"> 1) The parts issuing flow chart in the SOP was updated to reflect non-stock parts being issued out to the work order in FASTER after receiving. 2) A tool inventory SOP will be created that will a) outline a separation of duties for the person performing the inventory or b) require the inventory be performed in the presence of a supervisor or above. 					
C	<p>Preventative Maintenance Schedules</p> <p>Director of Airports:</p> <ol style="list-style-type: none"> 1) Adjust preventative maintenance schedules for assets as appropriate, and 2) Adjust current processes over asset entry into FASTERWeb to ensure appropriate assignment of preventative maintenance. 	7	Accept	Jason Loreda, Fleet and Asset Material Manager	<ol style="list-style-type: none"> 1) 4/30/2024 2) 4/30/2024
<p>Action plan:</p> <ol style="list-style-type: none"> 1) The Fleet Operations Manager will update and verify Preventive Maintenance service data in FASTERweb complies with the manufacturer's recommendations. 2) The Fleet Operations Manager will create an SOP for the data entry required information of New Fleet Assets entered in FASTERweb. 					

We are committed to addressing the recommendation in the audit report and the plan of action presented above.

Sincerely,

Tim BaHett

For: Jesus Saenz
Director
Aviation Department

1-5-24

Date

Jeff M. Coye

Jeff Coye
Assistant City Manager
City Manager's Office

1-5-24

Date