An Audit Report on

The Operations of the Department of Transportation’s Flight Services Section

May 2012
Report No. 12-031
Overall Conclusion

The Department of Transportation’s (Department) Flight Services Section had controls in place to promote the safety and compliance of its flight and maintenance operations. Those controls were operating effectively to help ensure that assets were properly safeguarded, employee training and licensure met applicable industry standards, and flight and maintenance activities were adequately documented and supported. However, the Flight Services Section should strengthen controls over its recording and tracking of inventory and its monitoring of licensure, certifications, and currency of contract pilots.

The Flight Services Section is primarily responsible for managing its flight and maintenance operations; it relies on other Department divisions for certain administrative functions, including the processing of procurements and expenditures and the oversight of human resources functions. The Department’s Flight Services Section’s expenditures that auditors tested were allowable and reasonable, and the Department substantially complied with Department and state purchasing requirements. However, the Department should strengthen its controls over purchasing to help ensure that it consistently (1) performs federal suspension and debarment checks prior to issuing purchase orders and (2) posts award notices to the Electronic State Business Daily as required by Department policy and the Texas Administrative Code.

Additionally, the Department did not comply with state hiring requirements related to the public advertisement of job openings. The Department implemented a Rapid Hire Program, which allowed Department supervisors to expedite the hiring process for selected job classifications that the Department historically had difficulty filling. For positions filled using the Rapid Hire Program, the Department did not require public advertisement of job openings, which is required by Texas Government Code, Section 656.001. The Department used the

Background Information

The Department’s Flight Services Section operates within the Department’s Aviation Division and has two major functions:

- Aircraft operations—Provide air transportation to state officials, employees, and sponsored contractors traveling on official state business and provide pilot and co-pilot services.
- Ground services—Provide supplies, maintenance, care, and repair services for state-owned aircraft and provide fuel and hangar storage services for Austin-based state aircraft.

During fiscal year 2011, the Flight Services Section completed 1,014 flights and performed maintenance for 38 state-owned aircraft, including 6 aircraft the Department owned. For fiscal year 2011, the Flight Services Section billed state agencies $4,431,020 for services provided.
Rapid Hire Program to hire all six Flight Services Section employees hired from September 1, 2008, through December 31, 2011.

Summary of Management’s Response

Department management generally agreed with the findings and recommendations in this report. The Department’s detailed management responses are presented immediately following each set of recommendations in the Detailed Results section of this report.

Summary of Information Technology Review

Auditors performed a limited review of general controls over (1) the Department’s Flight Billing System, which the Flight Services Section used to track its flight information, and (2) the Flight Services Maintenance System, which the Flight Services Section used to initiate purchase requests, track its stock inventory, and maintain maintenance records and requirements for state-owned aircraft. The Department had effective general controls over both systems. However, the Department should strengthen its controls over user access and change management. In addition, auditors determined that the data in the Flight Billing System was sufficiently reliable for the purposes of this audit.

Summary of Objective, Scope, and Methodology

The objective of this audit was to determine whether the Department and the Department’s Flight Services Section have controls designed and operating to help ensure that:

- Assets are properly safeguarded.
- Expenditures are allowable, properly authorized, and reasonable for the performance of the Flight Services Section’s functions.
- Staff receive required training.
- Selected human resources activities comply with applicable laws and agency policies.
- Flight activity and other selected operations of the Flight Services Section are fully and accurately documented.

The scope of this audit included activities related to the Department’s Flight Services Section from September 1, 2008, through December 31, 2011.

The audit methodology included collecting and reviewing information from the Department and Flight Services Section, conducting interviews with Department
and Flight Services Section staff, and reviewing Department policies and applicable state and federal requirements. Specifically, auditors reviewed processes and controls related to asset management, hiring, training, expenditures, and flight and maintenance activities. Auditors assessed the reliability of the Flight Services Section’s Flight Billing System and determined that the data in that system was sufficiently reliable for the purposes of this audit.

Auditors also communicated other, less significant issues to the Department separately in writing.
Detailed Results

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Texas Government Code, Section 2205.040
“[The Department] shall adopt rates for interagency aircraft services that are sufficient to recover, in the aggregate and to the extent possible, all direct costs for the services provided, including a state agency’s pro rata share of major maintenance, overhauls of equipment and facilities, and pilots’ salaries.”

The Department of Transportation’s (Department) Flight Services Section provides air transportation and pilot and co-pilot services to state officials, employees, and sponsored contractors traveling on official state business. The Flight Services Section also provides maintenance services for state-owned aircraft. To provide those services, the Flight Services Section employs 28 full-time and contract personnel, including pilots, mechanics, ground crew, and administrative support staff. Table 1 lists the Flight Services Section’s expenditures and agency billings for fiscal years 2009 through 2011.

Table 1

<table>
<thead>
<tr>
<th>Category</th>
<th>Fiscal Year 2009</th>
<th>Fiscal Year 2010</th>
<th>Fiscal Year 2011</th>
</tr>
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<tbody>
<tr>
<td>Expenditures</td>
<td>$4,590,643</td>
<td>$6,036,061</td>
<td>$4,357,162</td>
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<tr>
<td>Capital Outlays a</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aircraft Lease Purchase Payments</td>
<td>320,932</td>
<td>315,722</td>
<td>326,277</td>
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<tr>
<td>Capital Enhancements</td>
<td>485,400</td>
<td>1,945,874</td>
<td>1,867,811</td>
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<tr>
<td><strong>Total Outlays</strong></td>
<td><strong>$5,396,975</strong></td>
<td><strong>$8,297,657</strong></td>
<td><strong>$6,551,250</strong></td>
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<tr>
<td>Agency Billings</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maintenance</td>
<td>$2,544,971</td>
<td>$4,431,913</td>
<td>$2,868,501</td>
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<tr>
<td>Flights</td>
<td>848,773</td>
<td>789,338</td>
<td>997,548</td>
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<tr>
<td>Fuel</td>
<td>332,944</td>
<td>276,290</td>
<td>364,453</td>
</tr>
<tr>
<td><strong>Miscellaneous b</strong></td>
<td>207,329</td>
<td>196,969</td>
<td>200,518</td>
</tr>
<tr>
<td><strong>Total Billings</strong></td>
<td><strong>$3,934,017</strong></td>
<td><strong>$5,694,510</strong></td>
<td><strong>$4,431,020</strong></td>
</tr>
<tr>
<td>Sale of Two Aircraft</td>
<td>1,000,000</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total Receipts</strong></td>
<td><strong>$4,934,017</strong></td>
<td><strong>$5,694,510</strong></td>
<td><strong>$4,431,020</strong></td>
</tr>
<tr>
<td><strong>Difference Between Total Outlays and Total Receipts</strong></td>
<td><strong>$462,958</strong></td>
<td><strong>$2,603,147</strong></td>
<td><strong>$2,120,230</strong></td>
</tr>
</tbody>
</table>

a According to the Department, Capital Outlays reflect major capital enhancements and the annual purchase payment for an aircraft that would not be amortized over this report time period. Capital Enhancements include engine replacements, repainting, interior refurbishment, and new avionics installation for Flight Services Section aircraft.

b Miscellaneous billings include hangar rental fees, off-site fuel charges, and other fees incurred during flights.

Source: Unaudited data from the Department.
The Flight Services Section is responsible for safeguarding its assets, including Department-owned aircraft, fuel trucks, aircraft fuel, tools and equipment, and aircraft parts. The Flight Services Section had controls to help ensure that assets were properly safeguarded, employee training and licensure met applicable industry standards, and flight and maintenance activities were adequately documented and supported. However, the Flight Services Section did not ensure that its assets were recorded and tracked in accordance with Department and state requirements, nor did it consistently track licensure, certification, and currency for all of its contract pilots.

Chapter 1-A
The Flight Services Section Had Controls to Properly Safeguard Its Assets; However, It Should Strengthen Its Recording and Tracking of Inventory

The Flight Services Section had effective controls to safeguard its assets. For example, the Flight Services Section performed and documented routine maintenance on Department-owned aircraft in accordance with manufacturer guidelines and applicable Federal Aviation Administration (FAA) requirements. The Flight Services Section also maintained adequate insurance coverage for all state-owned aircraft and disposed of Department-owned aircraft in a manner that provided reasonable assurance that the disposition was in the best interest of the State. However, the Flight Services Section did not have sufficient controls to help ensure that all Flight Services Section assets were recorded and tracked within Department inventory systems.

The Flight Services Section is responsible for a range of assets such as Department-owned aircraft, fuel trucks, aircraft fuel, tools and equipment, and aircraft parts. The Property Management Section of the Department’s General Services Division establishes procedures for recording and tracking of assets.

The Flight Services Section did not have sufficient controls to help ensure that it recorded assets it purchased in applicable inventory systems as required by Department policy. For 2 (16.7 percent) of the 12 asset purchases tested that should have been recorded in an inventory system, neither the Flight Services Section nor the Department entered the assets purchased into an inventory system (see text box for more information about the Department’s inventory systems). One of those two purchases was for two televisions that cost $658 each. The other purchase was for a riding lawnmower that cost $3,362. According to the Department’s Property Management Manual, those three items should have been recorded as controlled assets in the Minor Equipment System. The Department did not have a formal process to inform responsible parties about asset purchases that met the requirements for recording the assets in Department inventory systems. Failure to enter all assets into the Department’s inventory systems
may result in incomplete inventory records and inhibit the Department’s ability to identify theft, loss, or misuse of assets.

Additionally, the Flight Services Section did not consistently perform annual physical inventories of its assets as required by Department policy and state requirements. The Department’s Property Management Manual requires an annual physical inventory of all personal property in accordance with Texas Government Code, Chapter 403. The Department performed annual physical inventories of assets recorded in its Equipment Operations System and Minor Equipment System for fiscal years 2009, 2010, and 2011. However, the Flight Services Section did not perform an annual inventory of assets recorded in its Flight Services Maintenance System for fiscal years 2010 or 2011. The Flight Services Section last performed an inventory of assets recorded in that system in February 2009. By not performing an annual physical inventory, the Flight Services Section may be unable to detect theft, loss, or misuse of assets. Auditors performed a physical inventory for a sample of 30 assets recorded in the Flight Services Maintenance System and identified no exceptions.

**Recommendations**

The Department should ensure that its Flight Services Section:

- Implements controls to help ensure that all capital and controlled assets are recorded in Department inventory systems.
- Performs annual inventories of assets in accordance with Department policies.

**Management’s Response**

The Flight Services Section (FSS) will evaluate its controls to ensure all assets are properly recorded in the Flight Services Maintenance System inventory system and will ensure all parts are properly recorded and tracked to other agencies’ aircraft for billing purposes. As reported, no instances were identified by the State Auditor’s Office (SAO) of missing assets due to theft, loss, or misuse. FSS will clarify responsibilities and roles for recording of assets to ensure an appropriate corrective action plan is developed. FSS estimates a final corrective action plan to be developed by July 1, 2012.

FSS will continue to evaluate its performance of annual asset inventories. As reported, FSS did conduct annual inventories each year for two of the three asset systems it utilizes. Although a full inventory was not performed for the Flight Services Maintenance System, an annual inventory was performed for all items $500 or greater between fiscal year 2009-2011. This inventory was performed to ensure all high value items are accounted for and properly billed. In addition, a monthly inventory is performed on all fuel and oil
products. As reported the SAO did not identify any inventory exceptions for the Flight Services Maintenance System.

As of April 2012, FSS has assigned one staff the responsibility to ensure the parts room is properly maintained and inventories performed. Additionally, a functional reorganization of practices, protocols and procedures for ordering, receiving, issuing, and inventoried items is proceeding to ensure compliance with department policy.

Chapter 1-B
The Flight Services Section Ensured That Employee Training and Licensure Met Applicable Industry Standards and Were Adequately Documented; However, It Should Strengthen Controls over Monitoring the Licensure, Certifications, and Currency of Contract Pilots

The Flight Services Section’s pilots and mechanics are required to meet minimum licensure, training, and currency requirements established in FAA regulations and the Flight Services Section’s Flight Operations Manual. In accordance with federal requirements and the Flight Operations Manual, Flight Service Section pilots must possess a second class medical certificate, a pilot certificate with commercial privileges, and the following ratings: instrument, airplane single engine land, and airplane multi-engine land. Additionally, the Flight Services Section established a training and standardization program that includes annual flight simulator training for all Flight Services Section pilots. Flight Services Section mechanics are required to possess a mechanic certificate with ratings in both airframe and powerplant.

The Flight Services Section had controls to help ensure that its pilots and mechanics complied with applicable licensure and training requirements. Auditors reviewed 25 employee and contractor files for Flight Services Section pilots, mechanics, and contract pilots. All 25 employee and contractor files tested included the required licenses and certificates. Files for all 5 Flight Services Section pilots included documentation showing that the pilots had attended flight simulation training within the last 12 months. Four of the five pilots tested held licenses and type certifications beyond the minimum qualifications for their job classification.

The Flight Services Section also had controls to help ensure that its pilots and mechanics met minimum currency requirements (see text box for more information about those requirements). The Flight Services Section maintained documentation demonstrating that all five Flight Services
Section pilots complied with FAA currency requirements. Additionally, all mechanics were assigned to job roles that ensured their compliance with FAA currency requirements.

However, the Flight Services Section did not consistently track licensure, certification, and currency requirements for all contract pilots with whom it had active contracts. The Flight Services Section contracts with pilots to serve as co-pilots as needed to meet flight service demand. But it tracks training, licensure, and currency requirements only for contract pilots it intends to utilize frequently. While FAA regulations do not require pilots to maintain currency unless they will act as pilot-in-command of passenger flights, a co-pilot may have to take over a flight in the event of an emergency. By monitoring training, licensure, and currency requirements for all of its contract pilots, the Flight Services Section can help provide for the safety of its passengers.

**Recommendation**

The Department should develop and implement a consistent process to track licensure, certifications, and currency compliance for all contract pilots.

**Management’s Response**

*The Flight Services Section (FSS) has implemented a system to track licensure, certifications, and currency compliance for all its pilots. The tracking system utilizes a currency and qualification matrix of Federal regulations to track and update all pilot data after each flight. Although FSS had controls in place during the procurement process to ensure initial licensure, certification and training requirements for contract pilots, this new system will ensure those requirements are maintained.*

Chapter 1-C

**The Flight Services Section Adequately Documented and Supported Its Flight and Maintenance Activities**

In accordance with Texas Government Code, Chapter 2205, the Flight Services Section documented flights using a flight log form prescribed by the Department and the Legislative Budget Board. The flight log form utilized by the Department included passenger information, aircraft and pilot information, travel dates, destinations, mission statement, and specific flight purpose. For fiscal years 2009 through 2011, the Flight Services Section also entered flight information from completed flight logs into its Flight Billing System.

Auditors reviewed a sample of 60 flights completed from September 1, 2008, through December 31, 2011. The Flight Services Section’s flight logs and
Flight Billing System were generally complete and accurately reflected flight activity. Auditors identified only minor instances in which flight logs were incomplete or flight information in the Flight Billing System differed from the information on the flight log. Additionally, for all 60 flights reviewed, the flight purpose listed was reasonable and adequately supported.

As of April 2012, the Flight Services Section asserted that it was in the process of replacing its Flight Billing System with a new Web-based application that will provide increased functionality and may help increase the accuracy of flight documentation.

The Flight Services Section performed maintenance on state-owned aircraft, including aircraft owned by the Department of Public Safety, the Parks and Wildlife Department, the Department of Criminal Justice, the Texas A&M University System, and the University of Texas System. Flight Services Section mechanics documented routine maintenance and repairs using work orders that were recorded and tracked in the Flight Services Maintenance System. The Flight Services Section billed other agencies and higher education institutions for the maintenance work performed. All 60 maintenance billings that auditors tested were accurately calculated and supported by maintenance work orders.
Chapter 2

While Flight Services Section Expenditures Were Allowable and Reasonable, the Department Should Strengthen Its Controls Over Purchasing and Comply with Hiring Notification Requirements

All Flight Services Section expenditures that auditors tested were allowable and reasonable, and the Department substantially complied with Department and state purchasing requirements (see text box for information about the Flight Services Section’s administrative functions). However, the Department should strengthen its controls over purchasing to help ensure that it consistently complies with Department and state purchasing requirements.

The Flight Services Section hired six employees from September 1, 2008, through December 31, 2011, using the Department’s Rapid Hire Program. All six employees met minimum qualifications, and hiring documentation supported the hiring decisions that authorized hiring supervisors made. However, the Department did not comply with state hiring requirements related to the public advertisement of job openings for those six positions. Also, the Department was unable to provide sufficient, written documentation of the justification for the permanent addition of four Flight Services Section job classifications to the list of approved titles for the Rapid Hire Program.

Chapter 2-A

Flight Services Section Expenditures Were Allowable and Reasonable; However, the Department Should Strengthen Its Controls Over Purchasing

For all 60 Flight Services Section expenditures tested, supporting documentation agreed with Department accounting records, and the goods and services purchased appeared to be reasonable for the performance of Flight Services Section functions. Additionally, the Department substantially complied with Department and state purchasing requirements when making purchases on behalf of the Flight Services Section. However, auditors noted some exceptions. Specifically:

- The Department did not obtain all required authorizations for 2 (3.4 percent) of 58 Flight Services Section expenditures tested for which such authorizations were required. One of those two expenditures was a $32,131 purchase order for temporary maintenance services exceeding 90 days. For that purchase order, the Department did not obtain purchase approval from the Aviation Division Director as required by the Department’s Purchasing Manual. The second expenditure was a $21,251 blanket purchase order for rental of aircraft mechanic uniforms. The Flight Services Section released $14,422 on this blanket purchase order...
from September 1, 2008, through December 31, 2011. According to the Department’s *Purchasing Manual*, mechanics are not an authorized classification for rental of non-safety apparel. The Department informed auditors that it was updating the *Purchasing Manual* to include mechanics and pilots as authorized classifications.

- The Department did not obtain the required number of bids for 2 (20.0 percent) of 10 purchase orders tested for which competitive bidding was required. For one $5,300 purchase order, the Department obtained only one bid. The other purchase order was a blanket emergency proprietary purchase for Department-wide office relocation services totaling $181,136. The Department did not provide sufficient justification for proprietary treatment of that purchase. The Flight Services Section released $616 on that Department-wide blanket purchase order from September 1, 2008, through December 31, 2011.

- The Department did not consistently perform federal suspension and debarment checks prior to issuing purchase orders, nor did it consistently post award notices to the *Electronic State Business Daily* as required by Department policy and the Texas Administrative Code. Specifically:
  - For 5 (20.8 percent) of 24 purchase orders tested that required a federal suspension and debarment check for the vendor, the Department did not perform the check prior to issuing the purchase orders as required by Department policy. The Department performed the suspension and debarment checks between 2 and 8 days after purchase order issuance. None of the vendors was suspended or debarred. Combined, the five purchase orders totaled $194,553.
  - The Department did not post award notices to the *Electronic State Business Daily* for 3 (33.3 percent) of 9 purchase orders tested as required by Title 34, Texas Administrative Code, Section 20.204. All three purchases were emergency procurements for goods and services that supported the Flight Services Section’s aircraft maintenance operations. Combined, the three purchase orders totaled $600,640.

Noncompliance with Department and state purchasing requirements increases the risk that goods and services purchased are unallowable or excessive, and that purchasing methods do not ensure open competition and best value.
Recommendations

The Department should ensure that procurements are made in accordance with Department and state purchasing requirements. Specifically, the Department should:

- Obtain all required authorizations prior to purchase order issuance.
- Solicit competitive bids, when applicable, to ensure best value.
- Perform federal suspension and debarment checks prior to purchase order issuance.
- Post award notices to the Electronic State Business Daily in accordance with Title 34, Texas Administration Code, Section 20.204.

Management’s Response

The General Services Division (GSD) within the Department is responsible for establishing purchasing policies and procedures. GSD maintains a formal Purchasing Manual which provides guidance to purchasers and other Department employees on compliance with state purchasing requirements. In addition, TxDOT utilizes an automated purchasing system that provides electronic approvals of purchase requests based on designated authorizations at the district, division, office and region level, to ensure proper approvals are completed prior to purchases. GSD also provides monthly continuing education to reinforce proper procurement procedures such as verifying that vendors are not debarred from doing business with the state.

To clarify requirements and reinforce established procurement guidelines, GSD plans to implement the following corrective actions:

- Revise the Purchasing Manual to clarify and require specific written authorization (email) from the DE/DD/OD/RD to document the required approval prior to processing temporary employee assignments which will exceed 90 days.
- Revise the Purchasing Manual to require a market price review when an Emergency Purchase Order will be extended beyond the original term. GSD will also remind purchasers via email to ensure the minimum required number of solicitations are distributed to potential vendors based on method of purchase and total dollar amount of each purchase order (PO). Finally, GSD will also publish a reminder article in BuyWays, its internal newsletter.
• Revise the Purchasing Manual to specifically require proof of debarment list verification prior to PO award and issuance to be documented in the PO file.

• Remind purchasers via email to ensure applicable POs are posted to the ESBD promptly after award and issuance. GSD will also publish a reminder article in BuyWays.

estimated completion date for the reminder emails and publication of the BuyWays articles is July 1, 2012. Estimated completion date for publication of Purchasing Manual revisions is August 1, 2012.

Chapter 2-B
The Department Did Not Comply with State Hiring Requirements Related to the Public Advertisement of Job Openings

The Department’s Human Resources Division establishes hiring procedures and supervises hiring activities for all Department divisions. The Department implemented a Rapid Hire Program, which allowed Department hiring supervisors to expedite the hiring process for selected job classifications that the Department historically had difficulty filling. Hiring supervisors may request approval for permanent or one-time use of the Rapid Hire Program for job classifications that are not on the Department’s list of approved titles.

The Department did not adequately document and support the rationale for permanently adding certain Flight Services Section job classifications to the list of approved Rapid Hire Program job classifications. Those classifications include Aircraft Mechanic I and II and Aircraft Pilot I and II. The Department did not have a formal process in place for authorized hiring supervisors to request the addition of job classifications to the Rapid Hire Program list.

The Department asserted that those Flight Services Section classifications were historically difficult to fill because the salaries were not competitive with equivalent positions in the private sector. However, the average Aircraft Mechanic and Aircraft Pilot salaries at the Department were significantly lower than the maximum salary allowed for those job classifications under the State’s Position Classification Plan. Without adequate documentation justifying the use of the Rapid Hire Program, the Department may be using the program to fill vacancies that could be filled through normal hiring procedures.

The Department used the Rapid Hire Program to hire all six Flight Services Section employees hired from September 1, 2008, through December 31, 2011. Due to the Department’s record retention policy, auditors could review only three of the six hiring files. For those three hires, the Department did not comply with state hiring requirements related to the public advertisement of
job openings. Specifically, the Department was unable to provide documentation showing that a job posting was published with the Texas Workforce Commission as required by Texas Government Code, Section 656.001. The Department’s Human Resources Manual did not include the requirement to publicly post job openings filled using the Rapid Hire Program. Failure to publically advertise job postings reduces competition and may result in a less qualified individual being hired to fill an open position. This failure also may adversely affect diversity and other requirements of applicable equal employment opportunity laws.

Recommendations

The Department should:

- Formalize its procedures for requesting and approving both one-time and permanent additions to the list of approved Rapid Hire Program job classifications.

- Ensure that all external job openings are publicly advertised as required by Texas Government Code, Section 656.001.

Management’s Response

The Department’s Human Resources Division (HRD) established the Rapid Hire Program to provide an accelerated hiring process for meeting critical staffing needs. This program provides hiring managers and supervisors the opportunity to hire for job classifications that are critical and difficult to fill.

The AVN Division’s Flight Services Director posted six (6) positions between 2006 and 2008. TxDOT received an average of eleven applications and no successful applicants were found for four (4) of the six (6) postings. Recruiting efforts were made by posting ads online to different Aviation associations and organizations but with little results. The job posting in 2008 resulted in one application.

In 2008 the Aviation Division’s Flight Services Director requested to add the classifications of Aircraft Pilot I & II and Aircraft Mechanic I & II to the Rapid Hire list and was given approval by the Human Resources Division Director.

Through Flight Services Director’s efforts TxDOT was able to recruit six (6) qualified applicants through networking within the industry. HRD reviewed each and every Rapid Hire packet and found that policy was followed.

The Department finds this program to be beneficial to our hiring managers and supervisors. Both of these job classifications have been difficult to fill due
to low compensation and lack of applicants therefore, the need to continue using this program to obtained qualified and certified personnel is critical.

Currently, the Department maintains pilot and mechanic licenses and certifications. The Department will look into formalizing our procedures by creating a form that hiring managers and supervisors can complete when requesting approval to make additions to the Rapid Hire list. The Department will also track expiration dates for licensed pilots.

TxDOT will evaluate our Rapid Hire Program requirements to comply with state hiring requirements related to the public advertisement of job openings. A correction action plan will be developed and implemented by July 31, 2012 to meet this requirement.
The Flight Services Section had effective general controls over its Flight and Maintenance Systems; however, it should strengthen its access and change management controls.

Chapter 3

The Department Had Effective General Controls Over Its Flight and Maintenance Systems; However, It Should Strengthen Its Access and Change Management Controls

The Flight Services Section used two primary information systems for its flight and maintenance operations: the Flight Billing System, which it used to track flight information, and the Flight Services Maintenance System, which it used to initiate purchase requests, track stock inventory, and maintain maintenance records and requirements for state-owned aircraft.

The Flight Services Section had effective general controls over the Flight Billing System and Flight Services Maintenance System. Those controls included documented information technology policies, strong password requirements for the network, and appropriately restricted access to its production servers. However, auditors noted the following weaknesses in access and change management controls:

- The Flight Services Section did not perform periodic reviews of user access to the Flight Billing System and the Flight Services Maintenance System. The Flight Services Section asserted that it reviewed user access to its information system applications upon hiring and termination of employees, but it did not review user access to its applications on a periodic basis. A lack of a formal user access review process increases the risk of unauthorized or inappropriate access to information systems going undetected.

- The Flight Services Section did not appropriately restrict user access to the Flight Billing System and the Flight Services Maintenance System. Specifically, one part-time programmer had administrative access to the applications and databases in the production environment, and one employee had administrative rights that were inconsistent with that employee’s job responsibilities. To establish sufficient segregation of duties and reduce the likelihood of unauthorized changes, programmers should not have access to an application’s production environment.

- The Flight Services Section did not configure password settings for some of its applications and their associated databases in accordance with Department policy. Strong password requirements can help prevent unauthorized access and protect against external threats to data security.

- The Flight Services Section did not retain documentation of management approvals or user acceptance testing of application changes in the Flight Services Maintenance System. While the Flight Services Section asserted that it had an informal process to review and test system changes prior to the changes being implemented in its information systems, it did not retain documentation of management approvals or user acceptance testing. The
lack of a formalized change management process increases the likelihood of unauthorized changes being made to applications and data, either inadvertently or fraudulently.

Auditors assessed the reliability of the Flight Services Section’s Flight Billing System by reviewing information contained in that system, interviewing employees knowledgeable about the data, performing tests of key data elements, and comparing information in that system to hard-copy flight logs. Auditors determined that the data in the Flight Billing System was sufficiently reliable for the purposes of this audit. As of April 2012, the Flight Services Section asserted that it was in the process of replacing the Flight Billing System with a new Web-based application that will increase functionality to meet Flight Services Section needs.

Recommendations

The Department should ensure that its Flight Services Section:

- Performs and documents periodic reviews of user access to the Flight Services Section information systems and appropriately restricts access to those systems based on users’ job responsibilities.

- Reviews the password settings for all applications and databases and modifies those settings as necessary to ensure compliance with Department policy.

- Retains documentation demonstrating that changes to Flight Services Section information systems were tested and approved by management prior to the changes being implemented. The Department also should consider requiring the applications to be subject to the Department’s “enterprise” or centralized change management process.

Management’s Response

The Flight Services Section (FSS) will evaluate access and change management controls for information systems it utilizes. FSS plans to implement the following corrective action:

- Create a log of system end users and perform annual access reviews

- Utilize the user security matrix to restrict access based on user’s job description and responsibilities

- Implement necessary changes to password settings to ensure compliance with Department policy
- Improve change management procedures to ensure code migration and installation are properly approved and documented

Estimated completion date for above corrective action is July 1, 2012.
Objective

The objective of this audit was to determine whether the Department of Transportation (Department) and the Department’s Flight Services Section have controls designed and operating to help ensure that:

- Assets are properly safeguarded.
- Expenditures are allowable, properly authorized, and reasonable for the performance of the Flight Services Section’s functions.
- Staff receives required training.
- Selected human resources activities comply with applicable laws and agency policies.
- Flight activity and other selected operations of the Flight Services Section are fully and accurately documented.

Scope

The scope of this audit included activities related to the Department’s Flight Services Section from September 1, 2008, through December 31, 2011.

Methodology

The audit methodology included collecting and reviewing information from the Department and Flight Services Section, conducting interviews with Department and Flight Services Section staff, and reviewing Department policies and applicable state and federal requirements. Specifically, auditors reviewed processes and controls related to asset management, hiring, training, expenditures, and flight and maintenance activities.

Auditors assessed the reliability of Flight Services Section’s Flight Billing System by reviewing information contained in that system, interviewing entity personnel knowledgeable about the data, performing tests of key data elements, and comparing information in that system to hard-copy flight logs. Auditors determined that the data in the Flight Billing System was sufficiently reliable for the purposes of this audit.
Information collected and reviewed included the following:

- Inventory records.
- Insurance policies.
- Expenditure information and purchasing records.
- Employee hiring and training files.
- Flight log forms.
- Billing information for flight and maintenance services provided.
- Aircraft logbooks.
- Maintenance work orders.
- Internal databases and queries.

Procedures and tests conducted included the following:

- Interviewed Department and Flight Services Section management and employees.
- Traced assets to Department inventory systems and verified whether physical inventories of these assets were performed periodically.
- Verified whether assets were insured against loss or damage and that insurance requirements related to asset management were met.
- Examined the disposal of surplus property for compliance with applicable laws and Department policies.
- Verified whether routine aircraft maintenance was performed in accordance with Department policies and procedures.
- Tested expenditures to determine whether purchases were allowable, authorized, and reasonable.
- Examined the Department’s and the Flight Services Section’s hiring processes for compliance with applicable laws and Department policies.
- Verified whether employees met training, currency, and licensure requirements.
- Analyzed and evaluated flight activity and billing data.
- Verified whether flight and maintenance activities were accurately documented and supported.
Reviewed data queries to determine whether the information provided to auditors was complete and accurate.

Criteria used included the following:

- Texas Government Code, Chapter 403 (Comptroller of Public Accounts).
- Texas Government Code, Chapter 656 (Job Notices and Training).
- Texas Government Code, Chapter 2175 (Surplus and Salvage Property).
- Texas Government Code, Chapter 2205 (Aircraft Pooling).
- Title 43, Texas Administrative Code, Chapter 4 (Employment Practices).
- Title 34, Texas Administrative Code, Chapter 20 (Texas Procurement and Support Services).
- Texas Transportation Code, Chapter 201 (General Provision and Administration).
- Title 14, Code of Federal Regulations, Chapter 61.
- Title 14, Code of Federal Regulations, Chapter 65.
- Title 14, Code of Federal Regulations, Chapter 91.
- Federal Aviation Administration directives.
- Department of Transportation policies and procedures including:
  - Purchasing Manual.
- Aircraft manufacturer guidelines.
Project Information

Audit fieldwork was conducted from January 2012 through March 2012. 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.

The following members of the State Auditor’s staff performed the audit:

- Kristin Alexander, CIA, CFE, MBA (Project Manager)
- Kendra Shelton, CPA, MAC (Assistant Project Manager)
- Scott Armstrong, CGAP
- Justin Griffin, CISA
- Norman G. Holz, II
- Darcy Melton, MAcy
- Charles P. Dunlap, Jr., CPA (Quality Control Reviewer)
- John Young, MPAff (Audit Manager)
Appendix 2

Analysis of Flight Activity

Based on the Department of Transportation’s (Department) Flight Services Section’s aircraft use and the number of flights for which it billed other entities, the number of total flights that the Flight Services Section operated generally increased from September 1, 2003, through August 31, 2011. As Figure 1 shows, after a peak of 1,459 flights in fiscal year 2008, the number of total flights leveled off and averaged 963 flights per fiscal year in fiscal years 2009 through 2011.

Figure 1

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Non-revenue Flights</th>
<th>Revenue Flights</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>324</td>
<td>58%</td>
</tr>
<tr>
<td>2005</td>
<td>748</td>
<td>50%</td>
</tr>
<tr>
<td>2006</td>
<td>1,226</td>
<td>11%</td>
</tr>
<tr>
<td>2007</td>
<td>884</td>
<td>9%</td>
</tr>
<tr>
<td>2008</td>
<td>1,459</td>
<td>17%</td>
</tr>
<tr>
<td>2009</td>
<td>945</td>
<td>10%</td>
</tr>
<tr>
<td>2010</td>
<td>930</td>
<td>14%</td>
</tr>
<tr>
<td>2011</td>
<td>1,014</td>
<td>10%</td>
</tr>
</tbody>
</table>

\(a\) Revenue flights during fiscal years 2004 and 2005 included flights with billing descriptions of Aerial Survey, Aerial Photo, Dead Head (flights taken without passengers to position flight crew for upcoming scheduled flights), Drop Off, Pick Up, and Regular. Non-revenue flights during fiscal years 2004 and 2005 included flights with billing descriptions of Maintenance, Non-revenue, and Pilot Training.

\(b\) Revenue flights during fiscal years 2006 through 2011 included flights with billing descriptions of Aerial Survey, Aerial Photo, and Regular. Non-revenue flights during fiscal years 2006 through 2011 included flights with billing descriptions of Dead Head, Drop Off, Pick Up, Maintenance, Pilot Training, and Non-revenue.

Source: The Department.

Non-revenue Flights

The Department’s Flight Services Section conducts a certain number of flights for which it does not bill an agency or higher education institution. Most of those non-revenue flights are for training or maintenance. The Department’s Flight Services Section has reduced its percentage of non-revenue flights since fiscal year 2005.
Users of Flight Services

From September 1, 2008, through December 31, 2011, the Department’s Flight Services Section provided flight services to 40 agencies and higher education institutions. The Department was the most frequent user of flight services (see Figure 2), comprising 39 percent of the total flights during that time period, including maintenance and training flights conducted by the Flight Services Section. Higher education institutions were also among the most frequent users of Flight Services Section services. The University of Texas System, the University of Texas at Austin, and the Texas A&M University System’s board of regents combined accounted for 29 percent of all Flight Services Section flights from September 1, 2008, through December 31, 2011.

Figure 2

<table>
<thead>
<tr>
<th>Agency</th>
<th>Flights</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Texas Senate</td>
<td>176</td>
<td>5%</td>
</tr>
<tr>
<td>Texas House of Representatives</td>
<td>101</td>
<td>3%</td>
</tr>
<tr>
<td>Comptroller of Public Accounts</td>
<td>117</td>
<td>3%</td>
</tr>
<tr>
<td>Texas Film Commission</td>
<td>79</td>
<td>2%</td>
</tr>
<tr>
<td>Commission on Environmental Quality</td>
<td>159</td>
<td>4%</td>
</tr>
<tr>
<td>Department of Transportation</td>
<td>1,379</td>
<td>39%</td>
</tr>
<tr>
<td>The University of Texas System</td>
<td>188</td>
<td>5%</td>
</tr>
<tr>
<td>The University of Texas at Austin</td>
<td>596</td>
<td>17%</td>
</tr>
<tr>
<td>Texas A&amp;M University System’s Board of Regents</td>
<td>238</td>
<td>7%</td>
</tr>
<tr>
<td>Other Agencies</td>
<td>532</td>
<td>15%</td>
</tr>
</tbody>
</table>

*Source: The Department.*

*a “Other Agencies” includes agencies that individually comprise less than 2 percent of all flights.*
Purposes of Flights

From September 1, 2008, through December 31, 2011, agencies and higher education institutions flew 3,233 flights using the Department’s Flight Services Section. As Figure 3 shows, the most common purposes (or “mission codes”) recorded for those flights were Meeting (Other than Board) (40 percent of total flights) and Interview/Recruitment (11 percent of total flights).

Figure 3

“Other Mission Codes Used” includes mission codes that individually comprised less than 4 percent of total flights. Those mission codes were: Aerial Mapping, Aerial Photography, Aerial Surveillance, Aerial Survey, Audit/Inspection, Awards Ceremony/Reception, Board Meeting, Client/Prisoner/Witness Transport, Conference/Convention, Deposition/Trial, Field/Regional Office Visit, Hearing, Investigation, and Task Force/Legislative Committee.

Source: The Department.
Billed Services

The Department’s Flight Services Section billed agencies and higher education institutions $14,059,547 from September 1, 2008, through August 31, 2011, for providing flight services, maintaining aircrafts, providing fuel, and providing aircraft hangar rental. As Figure 4 shows, maintenance was the largest category of billed services, comprising 70 percent of all services billed. In addition to providing maintenance on aircraft owned by the Department, the Flight Services Section provided maintenance services on aircraft owned by the Department of Public Safety, the Parks and Wildlife Department, the Department of Criminal Justice, the Texas A&M University System, and the University of Texas at Austin.

Figure 4

<table>
<thead>
<tr>
<th>Services Billed by Flight Services Section</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flight Services</td>
<td>2,635,659 (19%)</td>
</tr>
<tr>
<td>Maintenance Services</td>
<td>9,845,385 (70%)</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>604,816 (4%)</td>
</tr>
<tr>
<td>Fuel</td>
<td>973,687 (7%)</td>
</tr>
</tbody>
</table>

*a Miscellaneous billings include hangar rental fees, off-site fuel charges, and other fees incurred during flights.

Source: The Department.
## Appendix 3
### Related State Auditor’s Office Work

<table>
<thead>
<tr>
<th>Number</th>
<th>Product Name</th>
<th>Release Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>09-011</td>
<td>A Follow-up Audit Report on Flight Services Provided by the Department of Transportation’s Aviation Division Flight Services Section</td>
<td>October 2008</td>
</tr>
<tr>
<td>07-001</td>
<td>An Audit Report on Flight Services Provided by the Department of Transportation’s Aviation Division Flight Services Section</td>
<td>September 2006</td>
</tr>
</tbody>
</table>
Copies of this report have been distributed to the following:

**Legislative Audit Committee**
The Honorable David Dewhurst, Lieutenant Governor, Joint Chair
The Honorable Joe Straus III, Speaker of the House, Joint Chair
The Honorable Steve Ogden, Senate Finance Committee
The Honorable Thomas “Tommy” Williams, Member, Texas Senate
The Honorable Jim Pitts, House Appropriations Committee
The Honorable Harvey Hilderbran, House Ways and Means Committee

**Office of the Governor**
The Honorable Rick Perry, Governor

**Department of Transportation**
Members of the Texas Transportation Commission
  Mr. Ted Houghton, Chair
  Mr. Jeff Austin, III
  Mr. Ned S. Holmes
  Mr. William Meadows
  Mr. Fred Underwood
  Mr. Phil Wilson, Executive Director