Memorandum



DATE: December 6, 2013

To: Honorable Mayor and Members of the City Council

SUBJECT: Audit of the City of Dallas' Aircraft Rescue and Firefighting Unit 1

The City of Dallas' (City) Aircraft Rescue and Firefighting Unit (Unit) has designed internal controls to help ensure the Unit consistently complies with certain Federal Aviation Administration (FAA) regulations related to the certification and operation of airports. There are opportunities, however, to improve internal controls in the following areas:

Love Field Airport Highest Level Airport Index

An airport's index, A-E, is classified by the FAA based upon the amount of air traffic and size of aircraft in operation at its airfield. The Love Field Airport (Love Field) is classified by the FAA as Index C. In practice, however, Love Field maintains an Index E, the highest level, which means that the amount of personnel, equipment, and firefighting agents is at the maximum FAA recommended level.

Source: Department of Dallas Fire-Rescue (DFR)

Documentation of FAA Required Training

The Unit complies with FAA training curriculum requirements and unit personnel have completed the required training. The Unit, however, does not have procedures to monitor Unit personnel's progress in meeting the established FAA training curriculum. Additionally, training is not always recorded accurately and timely in the FAA Forms and in the Unit's summary training spreadsheet. Audit testing showed:

• Five of 78, or six percent, of the training hours were incorrectly calculated in the FAA Forms (three calculations resulted in under-

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¹ The audit objective was to verify whether the Unit complies with certain FAA guidelines, which may include emergency response time, Unit training, and inspection / maintenance / quantity of Unit vehicles and extinguishers. This performance audit was conducted under the authority of the City Charter, Chapter IX, Section 3 and in accordance with the Fiscal Year 2013 Audit Plan approved by the City Council. This performance audit was conducted 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 objective. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objective. We interviewed Unit and Department of Aviation (AVI) personnel, reviewed applicable federal regulations, policies/procedures, prior audit reports, and performed various analyses.

recording training hours and two calculations resulted in over-reporting training hours on the FAA Forms)

- Two hundred eighteen of 816, or 27 percent, of the training dates found on the FAA Forms did not match dates recorded on the Unit's summary training spreadsheet
- Unit personnel's training attendance is not always documented timely and reviewed timely by supervisors

Apparatus Self-Inspections

The Unit conducts daily apparatus self-inspections; however, the Unit has not defined and formally documented Unit personnel's and the Battalion Chiefs' self-inspection responsibilities for Unit apparatus. Audit testing showed:

- Nine self-inspections out of 319, or three percent, where Unit apparatus were missing at least one recorded self-inspection in the DFR's automated system
- Sixteen self-inspections out of 319, or five percent, where two self-inspections were entered on the same day for the same apparatus
- Six self-inspections out of 319, or two percent, where maintenance items were noted during the self-inspection, but not timely followed up on, or mentioned in subsequent self-inspections consistently

Apparatus Preventive Maintenance

The DFR's Manual of Procedures requires emergency response vehicles to be maintained in a state of readiness. While Unit apparatus are repaired when needed, there is no specified preventive maintenance interval, and some maintenance records do not indicate when all preventive maintenance activities were performed.

Improving internal controls over training documentation and monitoring will help provide assurance the Unit: (1) complies with FAA training curriculum requirements; (2) personnel training records accurately reflect the dates training occurred and/or the personnel attending the training; (3) self-inspections are performed daily; (4) apparatus received proper preventive maintenance; and, (5) is fully prepared to respond to an aircraft emergency.

Honorable Mayor and Members of the City Council December 6, 2013 Page 3 of 3

We recommend the Fire Chief:

- I. Ensure FAA training for Unit personnel is recorded accurately and timely in each individual's FAA Form and reconciled to the Unit's summary training spreadsheet
- **II.** Monitor, at least semi-annually, Unit personnel's progress in meeting the established FAA training curriculum
- III. Define and formally document Unit personnel's and the Battalion Chiefs' self-inspection responsibilities for Unit apparatus
- **IV.** Establish, formally document, and follow routine preventive maintenance schedules for Unit apparatus

Please see Attachment II for management's response to the recommendations.

We would like to acknowledge the Unit's and AVI's cooperation during this audit. If you have any questions or need additional information, please contact me at 214-670-3222 or Carol Smith, First Assistant City Auditor, at 214-670-4517.

Sincerely,

Craig D. Kinton City Auditor

Craig D. Kinton

Attachments

C: A.C. Gonzalez, Interim City Manager Charles M. Cato, Interim Assistant City Manager Chief Louie Bright, III – Department of Dallas Fire-Rescue Mark Duebner, Director – Department of Aviation

Attachment I

Background

The City of Dallas' (City) Aircraft Rescue and Firefighting Unit (Unit) provides firefighting and rescue services for Dallas Love Field Airport (Love Field) and Executive Airport. Federal Aviation Administration (FAA) regulations govern Unit operations, training, and equipment.

The Department of Dallas Fire-Rescue (DFR) is responsible for managing the Unit; however, the majority of the Unit's funding (\$5,350,248 of the Fiscal Year 2012-2013 adopted budget of \$5,980,800) is provided by the Department of Aviation (AVI). The Unit has one fire chief and 84 staff members – 42 are permanently assigned to Love Field, and the other 42 are assigned to Executive Airport. Staff members "float in and float out" of both locations to address operational needs.

The FAA conducts annual inspections of indexed airports. An airport's index is determined by the amount of air traffic and size of aircraft in operation at its airfield. This index determines the amount of personnel, equipment, firefighting agents an airport is required to maintain. Currently, Love Field is classified by the FAA as an Index C airport; however, due to Love Field's close proximity to Downtown Dallas, the Unit maintains an Index E, which is the highest Index level (see text box).

FAA Index E Requirements

Three vehicles -

- (1) One vehicle carrying the extinguishing agents as specified in paragraph (a)(1) or (a)(2) of this section (139.317); and,
- (2) Two vehicles carrying an amount of water and the commensurate quantity of aqueous film forming foam agent (AFFF) so the total quantity of water for foam production carried by all three vehicles is at least 6,000 gallons.

Source: Code of Federal Regulations Part 139, Section 317(c)

According to the FAA inspector assigned to Love Field, if a discrepancy is noted by the inspector, it is included in the annual report to the airport. The airport then has an opportunity to respond to the report by providing an action plan and indicating when the discrepancy will be addressed. Once the discrepancy has been addressed, the FAA will send a letter acknowledging the correction. No other activity is generally conducted until the following year's inspection. If, during the subsequent inspection, it is found that the discrepancy has not been addressed, a letter of warning is generally issued to the airport giving them an additional year to address the problem. If, after the second inspection the problem is not addressed, a legal enforcement action may be brought against the City in the form of civil penalties.

According to the FAA inspector, the City of has not been subject to any civil penalties resulting from a failure to address noted discrepancies from the FAA inspector for the past 20 years.

Attachment II

Management's Response

Memorandum



DATE: November 21, 2013

TO: Craig D. Kinton, City Auditor

SUBJECT: Response to Audit Report:

Audit of the City of Dallas' Aircraft Rescue and Firefighting Unit

Our responses to the audit report recommendations are as follows:

Recommendation I

We recommend the Fire Chief ensure FAA training for Unit personnel is recorded accurately and timely in each individual's FAA Form and reconciled to the Unit's summary training spreadsheet.

Management Response / Corrective Action Plan

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Agree	IXI	Disagree	
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FAA training is required once per year with no more than 12 months since the last training in each subject. We have continually satisfied this requirement. In January of this year, we implemented a twice per year training cycle (double what the FAA requires), ensuring that if a member missed as much as one complete training cycle, the member would still be in compliance with FAA regulations. Documentation regularly occurs after each training session on two documents: the Form 156 (ARFF training) and the 2013 FAA Summary spreadsheet. At the end of every training session, shift officers will document the firefighters that completed the training. The ARFF Coordinator will verify monthly that all training sessions has been recorded accurately.

Implementation Date January 1, 2014

Responsible Manager
Aircraft Rescue Fire Fighting Coordinator

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Recommendation II We recommend the Fire Chief monitor, at least semi-annually, Unit personnel's progress in meeting the established FAA training curriculum. Management Response / Corrective Action Plan Agree 🖂 Disagree Verification of personnel's compliance with the established FAA training curriculum will be conducted approximately two weeks after the end of each training cycle, no later than May 15th and November 15th. compliance will be sent to the Deputy Chief, Special Operations. Implementation Date January 1, 2014 Responsible Manager Aircraft Rescue Fire Fighting Coordinator Recommendation III We recommend the Fire Chief define and formally document Unit personnel's and the Battalion Chiefs' self-inspection responsibilities for Unit apparatus. Management Response / Corrective Action Plan Agree 🛛 Disagree ___ The Shift Captain, or acting Captain, will verify daily that self-inspection of the apparatus has been conducted and recorded in the Internal Document System. In addition, the Battalion Chief in the station's chain of command will verify before the end of the shift that the inspection has been completed and recorded. A monthly review will also be conducted by the ARFF Coordinator to verify completion of the records. Implementation Date January 1, 2014 Responsible Manager Battalion 7

Recommendation IV

We recommend the Fire Chief establish, formally document, and follow routine preventive maintenance schedules for Unit apparatus.

Management Response / Corrective Action Plan			
,	Agree ☑ Disagree □		
1 1	The current Manual of Procedure covering maintenance of apparatus was updated last year and the specification of a yearly preventative maintenance was inadvertently left out of the revision as it was in the prior manual. The yearly time frame will be put back into the Manual of Procedure as a minimum requirement. Beside the regularly scheduled preventative maintenance, immediate attention will be given to any maintenance need that is identified during the self-inspection time.		
	Implementation Date January 1, 2014		
Responsible Manager Maintenance Division Manager			
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6	Louie W. Bright, III, Fire Chief		
Dallas Eiro Rescue Department			
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(C: Charles Cato, Interim Assistant City Manager		
Tommy Tine Jr, Executive Assistant Chief, Dallas Fire-Rescue Department			