

# DIA Safety Culture Follow-up Report

June 2013

Office of the Auditor  
Audit Services Division  
City and County of Denver



Dennis J. Gallagher  
Auditor

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### Office of the Auditor

201 West Colfax Avenue, Department 705 ♦ Denver CO, 80202

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# City and County of Denver

201 West Colfax Avenue, Department 705 • Denver, Colorado 80202 • 720-913-5000 •  
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*Dennis J. Gallagher*

Auditor

June 30, 2013

Ms. Kim Day, Manager  
Department of Aviation  
City and County of Denver  
Re: Audit Follow-Up Report

Dear Ms. Day:

In keeping with professional auditing standards and the Audit Services Division's (Division) policy, as authorized by D.R.M.C. § 20-276, the Division has a responsibility to monitor and follow up on audit recommendations to ensure audit findings are being addressed and to aid us in planning future audits.

This report is to inform you that we have completed our follow-up effort for the Department of Aviation Safety Culture audit issued on August 19, 2010. Our review determined that the Department of Aviation has adequately implemented many of the recommendations made in the audit report. Despite the Department of Aviation's efforts, auditors determined that the risk associated with the audit team's initial findings has not been fully mitigated. As a result, the Division may revisit these risk areas in future audits to ensure appropriate corrective action is taken.

For your reference, this report includes a Report Highlights page that provides background and summary information on the original audit and the completed follow-up effort. Following the Report Highlights page is a detailed implementation status update for each recommendation.

This concludes audit follow-up work related to this audit. I would like to express our sincere appreciation to you and to the Department of Aviation personnel who assisted us throughout the audit and follow-up process. If you have any questions, please feel free to contact me at 720-913-5029 or Chris Horton, Internal Audit Supervisor, at 720-913-5024.

Sincerely,

Kip Memmott, MA, CGAP, CRMA  
Director of Audit Services

KRM/bmd

*To promote open, accountable, efficient and effective government by performing impartial reviews and other audit services that provide objective and useful information to improve decision making by management and the people. We will monitor and report on recommendations and progress towards their implementation.*

cc: Honorable Michael Hancock, Mayor  
Honorable Members of City Council  
Members of Audit Committee  
Ms. Cary Kennedy, Deputy Mayor, Chief Financial Officer  
Ms. Janice Sinden, Chief of Staff  
Ms. Stephanie O'Malley, Deputy Chief of Staff  
Ms. Beth Machann, Controller  
Mr. Doug Friednash, City Attorney  
Ms. Janna Young, City Council Executive Staff Director  
Mr. L. Michael Henry, Staff Director, Board of Ethics  
Patrick Heck, Department of Aviation Chief Financial Officer  
Ken Greene, Deputy Manager of Maintenance  
Kate Tremblay, Risk Manager  
Keith Williams, Safety Manager  
John Smithwick, Terminal Operations Manager

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## REPORT HIGHLIGHTS



### Department of Aviation Safety Culture Performance Audit Follow-up Report: June 2013

The Department of Aviation has implemented nine of the thirteen recommendations made in the Division's August 2010 audit report.

#### Audit Background

The Department of Aviation (Aviation) manages the Denver International Airport (DIA) for the City and County of Denver. As part of its operational oversight, Aviation works to address risks to health and safety in multiple ways. Aviation's Risk and Safety section manages the airport's insurance and worker's compensation programs, develops safety policies, designs and conducts safety trainings, and performs job hazard analyses and safety inspections. Aviation also has an employee safety committee, through which representatives from various Aviation divisions discuss safety issues. In early 2010, the Manager of Aviation also appointed a Safety Evaluation Team (SET) to evaluate areas in which Aviation could improve its safety strategy and programs. Aviation's Safety Manager chairs the employee safety committee, and Risk and Safety personnel are represented on SET.

#### Purpose

The purpose of the audit was to assess the adequacy of Aviation's safety culture.

#### Highlights from Original Audit

**Tone at the Top:** At the time of the audit, the Department of Aviation (Aviation) management had implemented several measures to establish an effective safety culture including the creation of the Safety Evaluation Team (SET) and the issuance of an employee safety perception survey. However, we identified some additional steps that Aviation management could take to demonstrate a long-term commitment to developing an effective safety culture. First, we recommended that they should ensure that safety audit findings made by Risk and Safety personnel are immediately corrected when first identified. Second, Aviation management should ensure that it adequately balances the pressure of ensuring expeditious movement of airplanes and passengers with the need for safe operations.

**Employee Collaboration:** We also found during the audit that Aviation management had taken some steps to involve employees in safety culture development, but additional measures could establish more effective collaboration between management and employees. Auditors observed that Aviation employees generally did not trust that safety information they shared with management would not be used against them. To improve communication department-wide, we recommended that Aviation place safety comment boxes for employees at the airport, as well as implement a no-fault system for reporting near-miss incidents. Further, we recommended that the Manager of Aviation institute a distribution list for senior management to ensure that useful safety information is widely shared.

#### Findings at Follow up

Aviation took many steps to enhance the safety culture among management and employees by implementing nine of the thirteen audit recommendations. Aviation did not implement two of the remaining four audit recommendations because its actions will be dependent on a forthcoming rule on Safety Management Systems by the Federal Aviation Administration (FAA).

# Recommendations: Status of Implementation

Recommendation	Auditee Action	Status
<b>Finding 1: Further Challenges Face Management in Developing Aviation’s Safety Culture</b>		
<b>1.1</b>	The Manager of Aviation should reiterate the organization’s commitment to safety by ensuring that safety audit findings are immediately rectified and do not recur.	Aviation assigned two Maintenance Administration Safety Representatives to follow up on deficiencies identified in quarterly Risk and Safety audits. In addition, managers are now required to submit Corrective Action Reports to Risk and Safety within one week of the audit. These reports document findings that have already been mitigated and contain timelines for addressing deficiencies that cannot be immediately corrected.
<b>1.2</b>	The Manager of Aviation should ensure that the organization provides relevant safety leadership training, and that supervisors and management avail themselves of this training.	Aviation implemented a Safety Leadership Training series, and during testing one year after the original audit, at least 97 percent of Maintenance Division managers and supervisors had participated in the training.
<b>1.3</b>	The Manager of Aviation should ensure that specific activities, such as runway clearance, that are central to its key business processes have related performance standards that hold management and employees accountable for operating safely.	Aviation intends to implement performance standards to hold management and employees accountable for operating safely, but is awaiting the issuance of a forthcoming Federal Aviation Administration (FAA) rule on Safety Management Systems. Aviation intends to use the rule as a tool to implement this recommendation in order to avoid duplicate effort. The FAA rule has been delayed several times, and the current anticipated issuance date is December 2013.

# Recommendations: Status of Implementation

	<b>Recommendation</b>	<b>Auditee Action</b>	<b>Status</b>
<b>1.4</b>	The Manager of Aviation should focus on ensuring ongoing direct communication between Risk and Safety and senior management.	Risk and Safety now provides a quarterly safety report to senior leadership. In addition, a year-end report is developed and provided to senior leadership, and Risk and Safety communicates with leadership through regular meetings with the Managers' Safety Committee.	<b>Implemented</b>
<b>1.5</b>	Risk and Safety should find ways to incorporate active learning into its training activities to increase internalization of safety messages.	Aviation incorporated several active learning techniques in safety training courses.	<b>Implemented</b>
<b>1.6</b>	The Manager of Aviation should ensure effective follow-up on all safety comment cards submitted.	Aviation created a formal documentation process to track employee safety suggestions and to ensure that the suggestions are evaluated and implemented when practical.	<b>Implemented</b>
<b>1.7</b>	The Manager of Aviation should also determine whether the organization will provide the public an opportunity to make comments about DIA safety issues.	Aviation implemented a public comment system prior to the audit publication.	<b>Implemented</b>
<b>1.8</b>	The Manager of Aviation should ensure that senior management with decision-making authority has representation on the employee safety committee.	Aviation senior leadership are formally invited to regular employee safety committee meetings, but rarely attend, according to Risk and Safety officials.	<b>Agree/Not Implemented</b>

# Recommendations: Status of Implementation

	Recommendation	Auditee Action	Status
1.9	In addition to placing representation on the employee safety committee, the Manager of Aviation should ensure there are other forms of direct communication about safety issues between management, including senior management, and employees who encounter safety threats as part of their normal routine.	Aviation Maintenance Division now conducts monthly all-employee meetings, during which relevant safety topics are discussed. In addition, Aviation implemented a program, <i>The Sky's the Limit!</i> , to receive employee safety comments through the intranet. Manager of Aviation Kim Day often addresses the comments in her Weekly Chats, which is a communiqué to all DIA employees.	Implemented
1.10	Risk and Safety should continue to ensure that safety enhancements identified in its discussion with employees are communicated to the Aviation management for timely action.	Risk and Safety now provides a quarterly safety report to senior leadership. In addition, a year-end report is developed and provided to senior leadership, and Risk and Safety communicates with leadership through regular meetings with the Managers' Safety Committee. Aviation senior leadership are formally invited to regular employee safety committee meetings, but rarely attend, according to Risk and Safety officials.	Implemented

# Recommendations: Status of Implementation

Recommendation	Auditee Action	Status
<p><b>1.11</b> The Manager of Aviation should determine whether any additions should be made to the current safety incentive program to further reinforce the idea that the organization values safe operations.</p>	<p>In spring of 2012, Aviation initiated an employee recognition program to promote efforts to go above and beyond in the name of safety. Although not an incentive program, the recognition program serves the central purpose of the recommendation: to demonstrate organizational commitment to safety culture and safe operations. However, the program did not continue through 2012 or into 2013 due to a change in management. According to the agency, leadership is currently developing a plan to restart the program under the new leadership.</p>	<p><b>Agree/Not Implemented</b></p>
<p><b>1.12</b> The Manager of Aviation should ensure that a no-fault near-miss reporting system is developed and implemented.</p>	<p>Aviation is waiting for the SMS rule changes to be complete by the FAA to finalize safety policy revisions, including the development of a no-fault near-miss reporting system. The FAA rule has been delayed several times, and is not expected to be issued until December 2013.</p>	<p><b>Agree/Not Implemented</b></p>
<p><b>1.13</b> The Manager of Aviation should identify key safety information to be shared with all senior management, and institute a distribution list including senior management in each department to help ensure that useful safety information is widely shared.</p>	<p>Risk and Safety now distributes a quarterly safety report to all DIA managers and supervisors. Risk and Safety also communicates with managers and supervisors on a routine basis in order to share information and to address specific safety concerns within work groups.</p>	<p><b>Implemented</b></p>

# Conclusion

Although the Department of Aviation (Aviation) has implemented the majority of recommendations made in the DIA Safety Culture audit report, others have yet to be acted upon or fully implemented. Most importantly, Aviation has not yet developed and implemented a no-fault near-miss reporting system as a tool for identifying potential hazards and further strengthening Aviation's safety culture. As identified in the audit, a no-fault near-miss reporting system is a critical tool for developing a broad range of safety information, setting the tone at the top regarding safety, and removing psychological barriers to employees reporting safety problems. Aviation management cited the delay of a Federal Aviation Administration (FAA) rule on safety management systems (SMS) as the primary reason for not implementing two recommendations. However, auditors believe that Aviation should not wait to implement the recommended safety measures and systems, as the FAA has repeatedly postponed the issuance of the SMS rule over the past two years. As a result, the Division may revisit this and other risk areas in future audits to ensure appropriate corrective action is taken.