DEPARTMENT OF HOMELAND SECURITY

Office of Inspector General

Audit of
Passenger and Baggage Screening Procedures
At Domestic Airports

Homeland
Security

Preface

The Department of Homeland Security (DHS) Office of Inspector General (OIG) was
established by the Homeland Security Act of 2002 (*Public Law 107-296*) by
amendment to the Inspector General Act of 1978. This is one of a series of audit,
inspection, investigative, and special reports prepared by the OIG as part of its DHS
oversight responsibility to identify and prevent fraud, waste, abuse, and
mismanagement.

This report represents an abbreviated version of our classified report assessing
compliance by the Transportation Security Administration with federal aviation
requirements to inspect passengers and property for explosives and weapons. It is
based on interviews with employees and officials of relevant agencies and
institutions, direct observations, and a review of applicable documents.

The recommendations contained in this report have been developed to the best
knowledge available to the OIG, and have been discussed in draft with those
responsible for implementing them. It is my hope that this report will result in more
effective, efficient, and economical operations. I express my appreciation to all of
those who contributed to the preparation of this report.

Clark Kent Ervin
Inspector General

OIG

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Introduction

In response to concerns about the vulnerability of airplane passenger and baggage screening processes to terrorist activity, we reviewed the aviation security screening function at selected domestic airports nationwide. The purpose of the review, which consisted of undercover tests of screener and equipment performance, was to evaluate compliance with federal aviation security requirements to inspect passengers and property for explosives and weapons. Following is an abbreviated, public version of a classified report made available to the relevant congressional committees.

Results in Brief

Improvements are needed in the screening process to ensure that dangerous prohibited items are not being carried into the sterile areas of heavily used airports or do not enter the checked baggage system. There were four areas that caused most of the test failures and were in need of improvement: training; equipment and technology; policy and procedures; and management and supervision. We made recommendations that addressed these areas and would improve overall screener performance. TSA implemented significant improvements since the conclusion of our testing.

Background

The Aviation and Transportation Security Act (ATSA) - (Public Law 107-71), enacted November 19, 2001, created TSA. The ATSA mandated, among other things, that the airlines, who had contracted with private security companies, transfer the responsibility for screening passengers and baggage to the federal government.[1] This transfer of responsibility was effected on November 19, 2002.

At the direction of the President, the Department of Transportation's (DOT) OIG conducted a series of undercover tests of security at airports throughout the country from November 2001 to July 2002. DOT OIG testing indicated many areas of vulnerability.

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[1] The ATSA also directed TSA to establish a pilot program under which the screening of passengers and property will be carried out by qualified private screening companies. TSA chose five airports of varying sizes: San Francisco, Kansas City, Rochester, Jackson Hole, and Tupelo.

In response to DOT OIG's findings and recommendations, and for other reasons, TSA established an Office of Internal Affairs and Program Review (OIAPR). The OIAPR developed criteria to evaluate the performance of TSA's newly hired and trained screener workforce and to assess the adequacy of security systems and controls at commercial airports nationwide.

In July 2003, we initiated our own undercover tests of screener and equipment performance at airports nationwide. Fieldwork concluded in November 2003, and included hundreds of screening checkpoint and checked baggage tests at different categories of airports.[2] For example, a "test" at a passenger screening checkpoint consisted of one tester attempting to take one threat object through the checkpoint into the sterile area undetected on his or her body or in his or her carry-on bag. To the extent practicable, we duplicated DOT OIG's checkpoint test methodology.

At the conclusion of each test, we met with the screeners involved and their supervisors to discuss the nature and results of the test. We also met with the Federal Security Director, or a representative if the FSD was unavailable, and the staff at each airport at the end of each testing period to summarize and discuss the results of our testing.

We also met with the TSA's OIAPR to discuss their internal testing. We obtained and reviewed all pertinent TSA Security Directives (SDs) and Standard Operation Procedures (SOPs) relating to screening of checked baggage, and passengers and their carry-on items. We designed our test protocols from those SDs and SOPs.

We interviewed officials from the TSA's Office of Workforce Performance and Training and the Office of Operations Policy on an ongoing basis to discuss and clarify training, policy issues, and updates to the SOPs. In addition, we made several visits to the Transportation Security Laboratory (TSL) in Atlantic City, New Jersey, to discuss our test methodology and to obtain technical guidance on the equipment available at the airports to screen passengers and their property. The TSL also provided us with some of the test items used during our testing.

Screener Training, Use of Technology, Procedures, and Management Needed Improvement

Although each test was a discrete and unique event that challenged an individual screener to make judgments or perform specific actions in response to the unfolding test scenario, there are four areas that we concluded were the cause of most of the test failures: training; equipment and technology; policy and procedures; and management and supervision. These four areas should not be viewed in isolation, however, as certain of their aspects often overlap one another. For example, screener's failure to follow a standard operating

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[2] Commercial airports are categorized based on the number of annual enplanements. The nation's busiest airports are termed Category X airports while airports with fewer enplanements are categorized as Category I, Category II, or Category III.

procedure may reflect supervisor's and manager's failure to train screeners or monitor their performance adequately.

Training

Screeners currently receive a minimum of 40 hours of classroom instruction and 60 hours of on-the-job instruction before they are qualified to make independent judgments as to whether individuals or property may enter a sterile area or aircraft without further inspection. Because there was no formal program of recurrent training in the field, qualified screeners may not have received any continuous professional training to enhance and refine their skills. The lack of recurrent training led to many of the checkpoint test failures. We recommended that the TSA Assistant Secretary develop and implement a program of recurrent professional training to enhance screener performance. The program should require a mandatory minimum amount of documented, continuous professional training for each screener every calendar quarter, be standardized, scheduled during duty hours, and performed locally. The training should also include testing to determine mastery of the material, and the test results made an element of the annual screener performance evaluation.

In October and November 2003, TSA initiated a Screener Performance Improvement Program and a recurrent training program.

Equipment and Technology

There are several aspects of passenger screening that would benefit from the improvement or initial deployment of technology, as discussed below.

Multi-view x-ray. At the screening checkpoint, several technological innovations or upgrades could improve the detection rate of test and actual threat objects. One such innovation is a dual- or multi-view x-ray machine. This x-ray machine has the potential to provide screeners with high resolution 3-D images that can be rotated on the screening monitor for optimal viewing, enabling screeners to identify both explosives and weapons easily. This technology, assuming such things as cost, size, weight, and other considerations are not an obstacle, might significantly increase screeners' ability to detect prohibited items, and prevent them from being carried into the sterile area and onto airplanes.

Walk-Through Metal Detector Alarm Resolution (WTMD). There were instances where the WTMD alarmed, but screeners failed to resolve[3] the alarm properly. A technology

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[3] Passenger Screening Standard Operating Procedures require screeners to resolve WTMD alarms by performing secondary screening. This involves the use of a handheld metal detector (HHMD). Screeners are required to resolve all areas that cause an HHMD to alarm to determine whether the passenger is carrying a prohibited item into the sterile area.

that could be used to manage the resolution of WTMD alarms is backscatter x- rays.[4]
Backscatter technology offers a more effective and unambiguous alarm resolution
strategy than a pat-down inspection. Backscatter technology has some drawbacks,
however, including the size and amount of space needed for the equipment, its cost, the
rate of passengers screened per hour, and concerns about radiation exposure and privacy.[5]

We recommended that TSA aggressively pursue the development and deployment of
innovations and improvements to aviation security technologies, particularly for use at
the screening checkpoint. TSA agreed with our recommendation and is working to
implement it.

Threat Image Projection (TIP). TIP is a computer software program that displays
fictitious images of threat items in the actual image of passenger bags, or that projects
entirely fictitious bags, with or without threat items, on to the x-ray monitor. TIP can be
used both to train x-ray operators and evaluate their performance. TIP had been installed
at all of the checkpoints at eight airports, at some of the checkpoints at four airports, and
at none of the checkpoints at three airports. Also, there were some deployed x-ray
machines that were not TIP-ready, i.e., that were not able to have the TIP library installed
or operated. As of February 10, 2004, TSA reported that all of the TIP-ready x-ray
machines had the full TIP library installed and activated, meaning that TIP was activated
and being used to train and evaluate screeners.

We recommended that the TSA Assistant Secretary improve and expand the TIP library.
TSA noted that it has significantly expanded its image library, and plans to produce new
images regularly to expand the image library.

Policy and Procedures

There are several areas where a change in screening checkpoint SOPs could increase the
effectiveness of the screening process. TSA is evaluating our recommended changes.

Management and Supervision

While screeners are the first line of defense in preventing prohibited items from being
carried into the sterile area, supervisors and screening managers are the first line of
defense in ensuring that the screening force is performing its job diligently and
effectively. The TSA Checked Baggage SOP requires screening supervisors to "actively
monitor all screening activities… to ensure effective, vigilant, and courteous screening."

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[4] Backscatter is a non-physically intrusive inspection technology that displays both organic and inorganic
materials hidden on a person's body. With backscatter technology, x-rays deflected off dense materials
such as metal or plastic produce a darker image than those deflected off skin.

[5] Backscatter images can be very revealing and may make many passengers reluctant to submit to this type
of screening. However, there are ways to mitigate passenger concerns, including separating the backscatter
operator and the subject, and using software enhancements to obfuscate the images.

Supervisors and screening managers needed to be more attentive in identifying and correcting improper or inadequate screener performance. Screening supervisors and screening managers must be trained and sensitized to the primary role that they play in improving the performance of checkpoint screeners. Further, screening managers and screening supervisors must ensure that screeners are meeting a high standard of performance and are complying with published SOPs at *all* times. *Any* instances of non-compliance must be corrected on the spot. Screening managers and supervisors should receive specific training in detecting and correcting improper screening performance and should have that aspect of their responsibility made an element of their performance evaluations.

We recommended that the TSA Assistant Secretary take appropriate steps to improve management and supervisory oversight of screeners. TSA initiated specific training for supervisors to address this recommendation.

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