

**THE TRANSPORTATION SECURITY  
ADMINISTRATION'S AIRLINE PASSENGER  
AND BAGGAGE SCREENING**

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**HEARING**

BEFORE THE

**COMMITTEE ON COMMERCE,  
SCIENCE, AND TRANSPORTATION  
UNITED STATES SENATE**

**ONE HUNDRED NINTH CONGRESS**

SECOND SESSION

APRIL 4, 2006

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ONE HUNDRED NINTH CONGRESS

SECOND SESSION

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**THE TRANSPORTATION SECURITY  
ADMINISTRATION'S AIRLINE PASSENGER  
AND BAGGAGE SCREENING**

TUESDAY, APRIL 4, 2006

U.S. SENATE,  
COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION,  
*Washington DC.*

The Committee met, pursuant to notice, at 10:19 a.m. in room SD-562, Dirksen Senate Office Building, Hon. Ted Stevens, Chairman of the Committee, presiding.

**OPENING STATEMENT OF HON. TED STEVENS,  
U.S. SENATOR FROM ALASKA**

The CHAIRMAN. Let me welcome you to the Committee hearing today. We appreciate your willingness to participate in our review of TSA. This is the second in the series of hearings held by this committee on aviation security. The first was conducted on February 9, when the Committee examined two of TSA's airline passenger non-physical prescreening programs, the secured flight and registered traveler systems. That hearing focused on the policy and management issues that have prevented TSA from launching those programs and using intelligence in a more integrated fashion.

The purpose of today's hearing will be to evaluate TSA's physical screening of airline passengers and their baggage. The hearing will focus generally on TSA's security checkpoint screening processes, the agency's deployment of new screening technologies, screener workforce issues, and TSA's procurement processes.

It has been more than 4 years since Congress created TSA to ensure, in part, the viability of commercial aviation as a secure means of travel within the United States.

Well, I commend you, Mr. Hawley, for your tireless work over the past year. We believe TSA has made significant strides toward fulfilling a security mission. The agency is still experiencing its share of growing pains. The agency has been criticized for inconsistent screening policies, privacy invasions at the checkpoint and search of baggage, ineffectiveness in detection of explosives, and changes to its carry-on prevented items list and excessive no-bid contracts.

Our committee wants to seek some information today from you as witnesses regarding ways to make passenger screening checkpoints more efficient, effective, without compromising privacy. We want to seek TSA's vision for the checkpoint of the future and review whether existing technologies can be integrated to a single more effective portal that can be applied in the short term.

This hearing will also focus on ways to reduce the attrition and injury rate among the TSA screener force, something that surprised me to hear about. But we look forward to constructive dialogue with you today and I do hope the other Senators will be here soon. Senator, do you have an opening statement?

[The prepared statement of Senator Stevens follows:]

PREPARED STATEMENT OF HON. TED STEVENS, U.S. SENATOR FROM ALASKA

We welcome each of the witnesses who appear before the Committee today, and thank you for your willingness to participate in this hearing.

Today represents the second in a series of hearings held by the Committee on aviation security. The first hearing was conducted on February 9, when the Committee examined two of TSA's airline passenger *non-physical* pre-screening programs, Secure Flight and Registered Traveler. That hearing focused on the policy and management issues that have prevented TSA from launching those programs and using intelligence in a more integrated fashion.

The purpose of today's hearing will be to evaluate TSA's *physical* screening of airline passengers and their baggage. The hearing will focus generally on TSA's security checkpoint screening processes, the agency's deployment of new screening technologies, screener workforce issues, and TSA's procurement processes.

It has been more than 4 years since Congress created TSA to ensure in part the viability of commercial aviation as a secure means of travel in the United States. While I commend Mr. Hawley for his tireless work over the past year, and the significant strides TSA has made toward fulfilling its security mission, the agency has experienced its share of growing pains. The agency has been criticized for inconsistent screening policies, privacy invasions at the checkpoint and in the search of baggage, ineffectiveness in the detection of explosives, changes to its carry-on prohibited items list, and excessive no-bid contracts.

The Committee will seek answers today from the witnesses regarding ways to make passenger screening checkpoints more efficient and effective without compromising privacy. The Committee will seek TSA's vision for the checkpoint of the future, and review whether existing technologies can be integrated into a single, more effective, portal that can be deployed in the short term. The hearing also will focus on ways to reduce the attrition and injury rate among the TSA screener force.

I look forward to a constructive dialogue with the witnesses.

**STATEMENT OF HON. JOHN ENSIGN,  
U.S. SENATOR FROM NEVADA**

Senator ENSIGN. I'll just make a 30 second statement, Mr. Chairman. There are a lot of good TSA employees around the country, we all deal with them. Often the unfortunate part of the whole system is that the terrorists are winning simply because of the amount of time that we all spend in airports. With all the extra time spent in line, we have to design better systems. The current system works the vast majority of the time and is a reasonable inconvenience, which I think most people are willing to put up with.

But then there are the peak times when the wait is half an hour or 45 minutes or even an hour. Most of us travel through Dulles periodically and we see it there, but other airports around the country experience this as well. In Las Vegas, McCarran Airport can really get backed up and when you spend that amount of time in line, that just hurts the country. It hurts the country and the overall economy. I think we have to continue to work to make this whole process better. Not just by improving screening technologies and performance, but by also doing it in a much more efficient fashion.

The CHAIRMAN. Our first witness is Edmund "Kip" Hawley, Assistant Secretary for the Transportation Security Administration.

Let me say to all of you that your statements will be printed in full in the record. We are not going to put a time limit on you now, so give us as much as you think we should hear of the statements, please.

**STATEMENT OF HON. EDMUND "KIP" HAWLEY, ASSISTANT SECRETARY, TRANSPORTATION SECURITY ADMINISTRATION**

Mr. HAWLEY. Thank you Mr. Chairman and good morning and Senator Ensign and other members.

Thank you for the opportunity to comment on aviation security and the physical screening of airline passengers and baggage. I'm pleased also to appear with two of our key partners at TSA, Cathy Berrick of GAO and Greg Principato of ACI. I look forward to hearing their insights.

In my prepared remarks I outlined the many layers of security that are in place to protect airline passengers. Each of them, and I listed 15, is formidable. Each one of them by itself is capable of stopping a terrorist attack. Together, as one system, they have tremendous resilience against expected and unexpected attack scenarios. Not only does each of the 15 security layers add to security, their combination multiplies their security value, creating a much stronger system. Truly the whole is greater than the sum of the parts and together they are formidable.

TSA is now in transition as the Chairman and Senator Ensign mentioned at the beginning. We're moving from a startup mode, when large scale acquisitions and hiring were needed to quickly stand up the agency. We're becoming more nimble and flexible and our needs are becoming more targeted. We face an ever-changing threat and TSA must now adapt while we constantly improve. TSA is approaching the challenge in three ways: one, strengthen each individual layer; two, increase the number of layers; and three, add additional flexibility and unpredictability to the equation.

First, what are we doing to strengthen the most visible layer, TSA passenger checkpoints? Increased and enhanced security training for our TSO's, our front line security officers, aimed at detecting IED components. Finding IED's at the checkpoint is our number one goal and well-trained, motivated TSO's significantly improve the effectiveness of the system. The best technology we have is the human mind, and our security process and training should be based at taking advantage of the combined thinking power of everyone at every level of TSA. Continued challenging training is the way to do that.

Retain our core TSO's, who's experience and judgment represent both our biggest investment and biggest payback. As we increase TSO capability by training, it is even more important to keep the excellent TSO's we have by creating a stable, positive work environment. We are rolling out this week some initial steps based on recommendations from TSOs that are aimed at increasing retention of our critical front line officers.

Give our Federal Security Directors more flexibility, both in hiring and in designing the best security system for each airport's unique environment. Having completed the massive startup hiring needed to get TSA off the ground, we are giving our airport FSD's

the authority and the tools to hire locally. This will help us with quality and improve retention as well.

Technology is a critical part of today's system and holds the promise to make dramatic improvements over time. We're in the process of testing new technologies, some of which are in airports today. In order to get the big benefits we seek in effectiveness and efficiency, in order to take our system up to the next level, more needs to be done on detection, throughput, and on the economic model itself.

What more can we do with layers? Deploy a new layer of security, behavior observation, using existing resources and budget. We've already tested this capability and it adds considerable additional security while protecting our constitutional guarantees. Improve identity verification throughout the airport for passengers and workers. We are working on using biometric ID's for all workers who have access to secure parts of the airport, and we are working for improved identity verification for passengers as well. I know that this committee is well aware of the value of biometrics in security work, and it has already given strong direction to TSA regarding biometrics in ATSA, as well as regarding Registered Traveler and TWIC.

Focus on explosives expertise as a core competence again, with our existing resources. We've used professional Bomb Appraisal Officers to train our TSO's, now we'd like to make these BAO's available at checkpoints on a regular basis.

The addition of flexibility and unpredictability into our security system is the most important new requirement for TSA. This doesn't cost more money, but it does require a willingness to change. It has been 4 years since we constructed the ATSA required security system. I believe its biggest vulnerability has been its predictability. Just as we can't depend on the idea that terrorists would plan and train for 4 years to run exactly the same attacks as they've done in the past, we can't allow them the luxury of being able to make their plans knowing exactly what defense they will face. We cannot sit back as a good security system loses its effectiveness by becoming static, rigid, and ultimately defeatable.

By refreshing our layers of security, building unpredictability into our operations, deploying new technology as it becomes ready, and getting the most out of our excellent people, we can keep our security system flexible, dynamic, unpredictable, and effective against attacks that we prepare for or may not expect.

Thank you Mr. Chairman. I'd be happy to answer questions.

[The prepared statement of Mr. Hawley follows:]

PREPARED STATEMENT OF HON. EDMOND "KIP" HAWLEY, ASSISTANT SECRETARY,  
TRANSPORTATION SECURITY ADMINISTRATION

Good morning Chairman Stevens, Co-Chairman Inouye, and distinguished members of the Committee. Thank you for this opportunity to speak with you about aviation security and to continue our dialogue regarding improvements to physical screening of airline passengers and baggage.

Created in the aftermath of the 9/11 terrorist attacks, the Transportation Security Administration continues to pursue its vital mission of protecting our Nation's transportation systems. With ATSA as its statutory foundation, TSA has worked with the airlines, airports, shipping industry, flight crews, law enforcement, and passengers to take aviation security orders of magnitude beyond where it stood on

9/11. Today, our challenge is to keep it fresh, to make our security regime as flexible, dynamic, adaptable, and unpredictable as the enemy we face.

When I appeared in December before this committee, I noted the numerous independent layers of security that reinforce each other. The recent classified GAO test demonstrated that an individual security layer can probably be beaten; but, together, the layers of the security network are formidable. Physical screening at the airport is only one of these layers.

Aviation security begins well before a passenger arrives at the airport.

1. U.S. Government agencies work with others around the globe to identify and disrupt terrorist activities at their source.
2. Customs and Border Protection activities further identify potential terrorists and bar their entry into the United States.
3. Federal, state, and local law enforcement work together with the FBI in Joint Terrorism Task Forces across the United States to identify and disrupt terrorist activities within the U.S.
4. A No-Fly system is used to prevent anyone known to an agency of the U.S. Government to be a threat to commit a terrorist act from flying into or in the United States.
5. Airline flight crews and airport employees who have access to an aircraft are subject to an even stricter vetting standard than the No-Fly analysis.

These first five security elements mean that anybody known to U.S. intelligence or law enforcement agencies as a terrorist or a close terrorist associate never gets close to an airplane. But there is much more.

6. An additional, risk-based computer-assisted pre-screening of passengers is conducted before a boarding pass is issued.
7. Hundreds of canine teams and local law enforcement officers are working at airports across the country to identify suspicious articles or people.
8. Surveillance activities take place in and around the airport environment on a daily basis.

All of this happens before a passenger even shows up at a TSA checkpoint.

9. At the checkpoint, a professional, well-trained, experienced team of Transportation Security Officers (TSO), assisted by multiple technologies, screens passengers and their carry-on bags for weapons and explosives.

10. In the baggage area, similarly well-trained, experienced Transportation Security Officers use a variety of technologies to screen baggage, and, when necessary, they physically search baggage to resolve anomalies.

Then, on the aircraft:

11. Thousands of Federal Air Marshals fly undercover on a very significant number of flights, both domestic and international.
12. Thousands of pilots who undergo special training and become Federal Flight Deck Officers are authorized and ready to protect the cockpit with firearms.
13. Other local, state, and Federal law enforcement officers travel armed as part of their normal duties and are prepared to intervene.
14. Hardened cockpit doors prevent unauthorized access to the flight deck.
15. And sitting on every airplane are passengers who remember the courage and commitment of the men and women on United Flight 93, and who are prepared to act, if necessary.

Each and every one of these 15 security layers is important.

#### **Important Principles of Passenger Screening**

Two important principles drive our decisions about the physical screening of passengers. First, we are focusing our investments in both people and technology on the highest risks. As we discussed at the hearing last December, this means that we are placing less emphasis on, and spending less time finding items that do not pose a threat of taking over an airplane. For example, taking small scissors and certain small tools off the prohibited items list has allowed us to spend TSO time on training to find the more serious threat of improvised explosive devices. Since last November, more than 20,000 TSOs have received instructor-led training in enhanced explosives detection. Additionally, over 20,500 TSOs have taken on-line training that includes simulated image detection instruction. Within the next sev-

eral months, we anticipate that all checkpoint screeners will have completed both on-line training and instructor-led hands-on training in explosives detection.

Second, we seek to avoid giving terrorists an advantage based on our predictability. We know that terrorists will look for ways to defeat our security measures, and that they will adapt to changes in our security measures. If we follow exactly the same procedures everywhere, every time, we make it easier for terrorists to break the security code. If, on the other hand, we build a measure of unpredictability into our operations, terrorists cannot use our consistency to their advantage in planning an attack. Our approach, therefore, must be based upon flexibility and unpredictability.

Our current screening process, however, is overly rigid, static and predictable. Terrorists can more easily “engineer around” these highly structured defenses. Therefore, we need to build more flexibility and more layers of security into our current checkpoint screening process, so that terrorists conducting pre-operational surveillance will not be able to plan based on what they observe.

Starting last December, TSA piloted new protocols to implement unpredictable screening procedures at ten airports. In these pilots, a customized schedule of enhanced screening procedures was created for each new TSO shift. The schedule dictated the type and frequency of property and/or passenger searches to be conducted. Each of the enhanced screening procedures was designed to specifically address the threat of explosives, and the procedures were carried out regardless of whether a passenger cleared the walk-through metal detector or a carry-on bag successfully passed through the x-ray machine. None of the airports reported any significant impact on passenger wait times, and for any individual passenger, the extra time required to undergo a particular screening procedure was very short. More importantly, however, no passenger—and, therefore, no terrorist—could predict exactly what screening procedure he or she would be subject to. Based on this successful pilot, we intend to incorporate similar unpredictable additional screening into our standard operating procedures.

In addition, TSA has begun developing a plan to train TSOs in behavior pattern recognition and to begin deploying trained individuals at high-risk airports. Last December, TSA piloted the use of behavior pattern recognition techniques at some ticket checker positions in ten airports (including Logan Airport in Boston, which began utilizing trained TSOs at ticket checker positions in September 2005). Each airport in the pilot utilized five to eight TSOs from that airport who had received classroom and on-the-job training in behavior pattern recognition techniques. If a passenger was identified as exhibiting behaviors indicative of fear, stress and/or deception, they were either referred for additional screening, or referred for selectee screening and an evaluation interview with a law enforcement officer. Under the program now being developed, trained TSOs can be deployed in conjunction with a variety of functions, including checkpoint screening, passenger verification (ticket checking), gate screening, or as part of specific threat mitigation efforts. This capability will add further unpredictability to passenger screening at the airport.

#### **A Professional, Highly Motivated Workforce**

Since returning to TSA almost 9 months ago, I have been reminded daily that TSA is full of Americans who serve their country with dignity and diligence. Our Transportation Security Officers are at the front-line. They have difficult, complex jobs. They must evaluate the behavior of every passenger who seeks to board a commercial airliner; identify and find weapons and explosive devices that may have been hidden in luggage or clothing; perform hand searches of personal belongings, some of which may contain dangerous articles or weapons; pat down individuals who set off alarms or are selected for secondary screening; operate sophisticated equipment used to detect explosives or other dangerous weapons; and be able to control people who seek to do harm, while expediting the passage of law-abiding customers and workers.

TSOs have frequent and recurrent contact with airline passengers and employees, airport employees and vendors, and law enforcement personnel, all of whom must follow strict security requirements before gaining access to secure areas of airports. On a daily basis, they interact with people of different nationalities, cultures and backgrounds, and who have varying degrees of experience with the security laws, regulations, and procedures which TSOs must implement and enforce. In this environment, TSOs encounter fear, cynicism and stress among the traveling public. They must be able to deliver business-like directions to guide travelers through security procedures, and must remain professional, even when travelers become aggravated or angry by procedures.

As you know, when TSA was created in 2002, a centralized hiring and human resources infrastructure was created to support the rapid stand-up of the federalized

screening workforce. Now that the agency is essentially hiring to maintain an employee base of 43,000 TSO FTEs, that centralized model is no longer cost-effective. We have begun, therefore, to develop a local hiring and training system in order to achieve efficiencies and better meet our current and expected hiring requirements. These requirements include an increase in the proportion of our screening workforce that is part-time, to better match the daily peak-load workflow at airports.

In addition, we recognize that high employee turnover rates drive up hiring and training costs, and lower the overall experience level of our workforce. Yet our screening workforce has few upward mobility opportunities within their profession, and TSA has not fully utilized performance incentives. Therefore, we have reclassified the agency's 43,000 screeners as Transportation Security Officers (TSOs). This new classification acknowledges the judgment and skills required and the standards to which we hold our workforce. It also gives TSOs an opportunity to step onto a career ladder and apply for DHS law enforcement positions. In addition, in order to encourage top performance, we are deploying a pay-for-performance system and have requested an additional \$10 million in Fiscal Year 2007 to support pilot programs to improve recruitment and retention.

TSA has also taken steps to reduce TSO injury rates, which are a significant drain on our workforce. Based on the recommendations of our Screener Injury Task Force, we have implemented a TSA-wide nurse case management program to assist TSOs in getting the medical attention they need to return to work as soon as possible. In addition, we are sending teams of industrial engineers to evaluate the 25 airports with the worst injury rates and make recommendations for improvements, including simple configuration changes and small equipment purchases (like roller tables and floor mats) that could have significant impacts on injury rates.

### **Technology**

Technology plays a critical role at TSA, now and in the future. We deploy sophisticated and effective technology in all phases of our security process. We invest in new technology that holds the promise for better security, more efficiently delivered. I believe that we are in a period where we have deployed the best, most reliable, and operationally effective technology available. There are many promising new technologies, such as Explosives Trace Portals (ETPs) Automated Carry-On Bag Explosives Detection Systems (EDS), and Whole Body Imaging Technology (backscatter). However, until that technology is available, we are best served by a focus on getting the most out of what we have deployed today—in terms of both people and equipment. When the technology is available, it should be ready for widespread economical deployment, as part of an integrated screening process that includes behavior pattern recognition, document checking, and other security measures.

### **Closing**

TSA's mission is to protect the Nation's transportation systems while facilitating the movement of people and commerce. We recognize the importance of physical screening to the security of our aviation network, and our risk-based strategy includes innovations and investments in training, workforce deployment, and technology. At the same time, we are committed to a strategy that goes far beyond physical screening. It begins with intelligence gathered by multiple U.S. agencies that is analyzed, shared, and applied. It includes checking every passenger manifest against terror watch lists and observing behaviors and activities in the airport environment. And, finally, it includes a law enforcement presence in airports and on aircraft, and a partnership with airlines, airports, pilots, flight crew members, and the traveling public—all of whom are committed to stopping terrorists in their tracks.

Mr. Chairman, thank you again for the opportunity to testify today. I am happy to respond to the Committee's questions.

The CHAIRMAN. Our next witness is Cathleen Berrick, who is a Director of Homeland Security and Justice for the U.S. Government Accountability Office.

Ms. BERRICK. Correct.

The CHAIRMAN. Ms. Berrick?

**STATEMENT OF CATHLEEN A. BERRICK, DIRECTOR,  
HOMELAND SECURITY AND JUSTICE ISSUES,  
U.S. GOVERNMENT ACCOUNTABILITY OFFICE**

Ms. BERRICK. Thank you Mr. Chairman and Senator Ensign for inviting me to discuss the physical screening of passengers and checked baggage at the Nation's airports.

My testimony today focuses on the progress TSA has made and the challenges it faces related to three key components of the screening system, the deployment, management, and training of the Transportation Security Officer workforce, or TSOs, screening procedures used to screen passengers and their baggage and TSA's efforts to leverage and deploy needed screening technologies.

Regarding TSA's efforts to deploy, manage and train the TSO workforce, TSA has made significant progress in these areas, but continues to face staffing and training challenges. For example, TSA has significantly increased the amount of training available to TSOs to include focusing on explosive detection and has made changes to training programs based on identified vulnerabilities.

However, insufficient staffing has made it difficult for all TSOs to have the time needed to take required training. We found the Federal Security Directors at about half of the 263 airports we surveyed reported that there was not sufficient time for TSOs to receive required training within regular work hours. In addition, a lack of high speed Internet capability at about half the Nation's airports has prevented many TSOs from fully utilizing TSA's online learning center.

TSA has also developed a staffing allocation model to more effectively determine TSO allocations at airports. This model takes into account unique airport configurations and other important factors. However, TSA has had difficulty attracting and retaining a part-time TSO screener workforce needed to address staffing needs, and some screeners are used to perform administrative duties at airports due to a lack of administrative staff.

Related to screening procedures, we found that TSA creates new or modifies existing procedures to improve the efficiency of the screening process or to enhance security. These changes are based on operational experience, stakeholder concerns, and risk-based factors, including available intelligence information. We are encouraged by TSA's consideration of risk-based factors and the development and modification of screening procedures, which is consistent with previous GAO recommendations.

Regarding screening technologies and, in particular, the ability to detect explosives on passengers, more work remains. TSA has taken action to address identified gaps and is investing in fielding technology for this purpose. However, more progress is needed to deploy these technologies on a large scale basis.

TSA also has the potential to achieve significant efficiencies and enhanced security through integrating explosive detection systems in line with airport baggage conveyor systems to screen checked baggage. Limited analysis has shown that integrating this equipment in line, although requiring a significant up front investment, could result in savings of over \$1 billion to the Federal Government over 7 years for 9 airports that TSA reviewed. This estimated sav-

ings is due in large part to the significantly fewer number of screeners that will be required to operate the equipment in line.

We recommended that TSA more systematically plan for the deployment of this equipment, including the installation of in-line systems. TSA recently published a strategic framework for its checked baggage screening program and is exploring financing strategies to support the installation of in-line systems. However, these efforts are not yet complete.

Regarding measuring effectiveness of its screening systems, TSA has made significant progress in testing its screening components, including establishing an annual recertification for TSOs. However, although TSA's TSOs generally perform well during annual recertification testing, covert testing has shown that weaknesses and vulnerabilities continue to exist in the screening system.

In conclusion, TSA has made significant progress in ensuring the security of airline passengers and their baggage despite many obstacles and challenges, including hiring a workforce of over 40,000 TSOs and deploying explosive detection systems at over 400 airports. As TSA moves forward opportunities for further strengthening these screening systems exist.

Mr. Chairman, this concludes my opening statement. I would be happy to respond to questions at the appropriate time.

[The prepared statement of Ms. Berrick follows:]

PREPARED STATEMENT OF CATHLEEN A. BERRICK, DIRECTOR, HOMELAND SECURITY  
AND JUSTICE ISSUES, U.S. GOVERNMENT ACCOUNTABILITY OFFICE

Mr. Chairman and members of the Committee:

I appreciate the opportunity to participate in today's hearing to discuss the progress made and challenges remaining in the physical screening of airline passengers and their checked baggage, and in the deployment of explosive detection technologies. Securing commercial aviation is a daunting task—with hundreds of airports, thousands of aircraft, and thousands of flights daily carrying millions of passengers and pieces of checked baggage. The Aviation and Transportation Security Act (ATSA), enacted on November 19, 2001, created the Transportation Security Administration (TSA) and mandated actions designed to strengthen aviation security, including requiring that TSA assume responsibility for conducting passenger and checked baggage screening at over 400 commercial airports in the United States by November 19, 2002. It has been over 3 years since TSA assumed this responsibility, and the agency has spent billions of dollars and implemented a wide range of initiatives to strengthen the key components of its passenger and checked baggage screening systems—people, processes, and technology. These components are interconnected and are critical to the overall security of commercial aviation.

My testimony today focuses on the progress TSA is making in strengthening airline passenger and checked baggage screening, and the challenges that remain. In particular, my testimony highlights four key areas, including TSA's efforts to (1) enhance the performance of the transportation security officer (TSO—formerly referred to as screeners) workforce and manage and deploy the TSO workforce; (2) strengthen procedures for screening passengers and checked baggage on passenger aircraft; (3) leverage and deploy screening technologies; and (4) measure the effectiveness of its passenger and checked baggage screening systems.

My comments are based on issued GAO reports and testimonies addressing the security of the U.S. commercial aviation system and our preliminary observations from ongoing work on TSA's passenger checkpoint screening procedures and staffing standards for TSOs. We did our work in accordance with generally accepted government auditing standards. Appendix I contains a list of related GAO products released since September 11, 2001.

**Summary**

TSA has taken steps to enhance the performance, management, and deployment of its TSO workforce, but it continues to face staffing and training challenges. Acknowledging imbalances in the screener workforce, TSA developed standards for de-

termining TSO staffing for all airports at which Federal screening is required and developed a Screening Allocation Model (SAM) to determine airport staffing levels. In determining staffing allocations, the SAM takes into account not only flight and passenger data, but also data unique to each airport—including flight schedules, load factors, passenger and baggage distribution curves, and TSA passenger and baggage screening configurations. However, in interviewing several Federal Security Directors (FSD)—the ranking authorities responsible for the leadership and coordination of TSA security activities at the Nation’s commercial airports—we identified some preliminary concerns about the SAM. For example, one assumption of the SAM is that 20 percent of the TSO workforce at airports will be part-time. However, FSDs whom we spoke to said that it has been a challenge to attract, hire, and retain TSA’s part-time TSO workforce, which has made this goal difficult to achieve. Further, several of the FSDs we interviewed stated that they had not been able to hire up to their authorized staffing levels, and that the SAM did not take into account that TSOs were also being routinely used to carry out non-screening and administrative duties. TSA has established the National Screening Force to provide screening support to all airports in times of special need, and implemented a number of initiatives to reduce attrition among its TSO workforce. In addition to having an adequate number of screeners, effective screening involves screeners being properly trained to do their job. TSA has taken numerous steps to expand training beyond the basic training requirement to include self-guided courses on its Online Learning Center; a recurrent training requirement of 3-hours per week, averaged over a quarter; and training on threat information, explosives detection, and new screening approaches. However, insufficient TSO staffing and a lack of high-speed Internet/intranet connectivity create impediments to the TSO workforce taking full advantage of training opportunities.

TSA is proposing changes to its screening procedures to enhance detection capabilities, but could strengthen its evaluation of these procedures. Since April 2005, TSA has gathered proposals for passenger screening procedural changes from a variety of sources within the agency. Based on preliminary observations from our ongoing review, we found that most of these proposed changes for passenger screening were intended to improve efficiency or TSA’s ability to detect prohibited items. Other security-related changes to passenger screening procedures are made based on several risk-based factors, including results of covert (undercover, unannounced) tests that are designed to reveal vulnerabilities in the screening system. TSA also recently piloted additional procedures that would incorporate unpredictability into the screening system and allow TSOs to determine the level of screening passengers should receive based on suspicious behavior. TSA vets proposed screening procedural changes through various TSA offices and tests significant proposed changes in an operational environment. However, our preliminary observations indicate that TSA’s evaluation of procedural changes could be strengthened to include how the procedure would reduce vulnerability to a terrorist attack.

TSA is supporting the development and deployment of technologies to strengthen commercial aviation security but faces management and funding challenges. Effective screening depends on having the right technology in place to detect threats, and TSA has taken steps to deploy and develop technologies to strengthen commercial aviation security. However, challenges in funding and planning created impediments to the technology’s implementation. For example, to improve explosives detection at some passenger screening checkpoints, TSA has deployed explosives trace portal machines, which use puffs of air to help detect the presence of explosives on individuals. The Department of Homeland Security’s (DHS) Fiscal Year 2007 budget request states that about 434 explosive trace portal machines will be in operation throughout the country during Fiscal Year 2007.

However, limited progress has been made in fielding other explosives detection technology at passenger checkpoints. At baggage screening checkpoints, TSA has been effective in deploying explosive trace detection systems (in which TSOs collect samples by rubbing bags with swabs, which are chemically analyzed to identify any traces of explosive materials) and the more efficient explosive detection systems (in which probing radiation is used to examine objects inside baggage and identify characteristic signatures of threat explosives). Now that the initial deployment of this equipment has been completed, however, TSA must focus on deploying enhanced explosive detection systems, including larger or smaller models depending on the needs of a particular airport, and on incorporating explosive detection systems in-line with baggage conveyor systems, to further enhance efficiency and security. In looking to the future, DHS has agreed with our recommendations to improve its research and development (R&D) management and planning, including completing basic research, strategic planning, and risk assessment efforts; coordinating R&D efforts with transportation stakeholders; and assessing the costs and benefits of de-

ploying explosive detection systems—either in-line or stand-alone at the Nation’s airports. In February 2006, TSA took a positive step forward by completing a strategic framework for its checked baggage screening operations that will help ensure the efficient allocation of limited resources to maximize technology’s effectiveness in detecting threats. However, additional work will be needed to determine funding and deployment strategies to support the implementation of in-line baggage screening systems.

TSA has measures in place to assess the effectiveness of passenger and checked baggage screening systems. TSA headquarters has conducted covert testing of passenger and checked baggage screening by having inspectors attempt to pass threat objects through checkpoints in order to measure vulnerabilities and identify systematic problems affecting TSO performance in the areas of training, procedures, and technology. These tests have identified that, overall, weaknesses and vulnerabilities exist in the passenger and checked baggage screening systems. Implemented in September 2002, the testing protocols for passenger and checked baggage screening changed in September 2005 to implement a more risk-based approach and focus on catastrophic threats to aircraft. Additionally, in February 2004 and February 2005, for passengers and checked baggage, respectively, TSA issued protocols to help FSDs conduct covert testing of local airport screening activities. Other ways TSA tests the effectiveness of passenger and baggage screening include the use of the Threat Image Projection System, which projects threat images onto a screen as the bag is screened to test the screener’s ability to positively identify the threat; annual screener recertification testing; and passenger and checked baggage performance indexes. These performance indexes reflect indicators of effectiveness, efficiency, and customer satisfaction. However, due to a lack of targets for each component of the index, TSA may have difficulty performing meaningful analyses of the parts of the index.

### **Background**

Following the terrorist attacks of September 11, the President signed the Aviation and Transportation Security Act into law on November 19, 2001, with the primary goal of strengthening the security of the Nation’s aviation system. To this end, ATSA created TSA as an agency with responsibility for securing all modes of transportation, including aviation.<sup>1</sup> As part of this responsibility, TSA oversees security operations at the Nation’s more than 400 commercial airports, including passenger and checked baggage screening operations. Prior to the passage of ATSA, the screening of passengers and checked baggage had been performed by private screening companies under contract to the airlines. The Federal Aviation Administration (FAA) was responsible for ensuring compliance with screening regulations. Today, TSA security activities, including passenger and checked baggage screening at airports, are overseen by Federal Security Directors—the ranking authorities responsible for the leadership and coordination of TSA security activities at the Nation’s commercial airports. Each FSD is responsible for overseeing security activities, including passenger and checked baggage screening, at one or more commercial airports.

TSA reported that between October 2004 and September 2005, about 735 million passengers were physically screened. In addition, 550 million bags were screened using explosive detection systems with standard screening procedures.

#### *Passenger and Checked Baggage Screening*

In addition to establishing TSA and giving it responsibility for passenger and checked baggage screening operations, ATSA set forth specific enhancements to screening operations for TSA to implement, with deadlines for completing many of them. These requirements included:

- assuming responsibility for screeners and screening operations at more than 400 commercial airports by November 19, 2002;
- establishing a basic screener training program composed of a minimum of 40 hours of classroom instruction and 60 hours of on-the-job training;
- conducting an annual proficiency review of all screeners;
- conducting operational testing of screeners;<sup>2</sup>
- requiring remedial training for any screener who fails an operational test; and
- screening all checked baggage for explosives using explosives detection systems by December 31, 2002.<sup>3</sup>

Passenger screening is a process by which authorized TSA personnel inspect individuals and property to deter and prevent the carriage of any unauthorized explosive, incendiary, weapon, or other dangerous item onboard an aircraft or into a ster-

ile area.<sup>4</sup> TSOs (formerly referred to as screeners) must inspect individuals for prohibited items at designated screening locations.<sup>5</sup> The four passenger screening functions are: (1) X-ray screening of property, (2) walk-through metal detector screening of individuals, (3) hand-wand or pat-down screening of individuals, and (4) physical search of property and trace detection for explosives.

Checked baggage screening is a process by which authorized security screening personnel inspect checked baggage to deter, detect, and prevent the carriage of any unauthorized explosive, incendiary, or weapon onboard an aircraft. Checked baggage screening is accomplished through the use of explosive detection systems<sup>6</sup> (EDS) or explosive trace detection (ETD) systems,<sup>7</sup> and through the use of other means, such as manual searches, canine teams, and positive passenger bag match,<sup>8</sup> when EDS and ETD systems are unavailable.

The conference report accompanying the Fiscal Year 2006 DHS appropriations act allocates about \$3.6 billion to TSA for passenger and checked baggage screening operations, of which about \$2.4 billion is for the TSO workforce and the remaining amount is for private sector TSOs,<sup>9</sup> equipment purchase, installation and maintenance, and support functions associated with the TSO workforce, such as training and other human resource functions.<sup>10</sup> The President's Fiscal Year 2007 budget request includes about \$3.5 billion for passenger and checked baggage screening, of which about \$2.5 billion would support the TSO workforce.

### **TSA Has Taken Steps to Strengthen the Management and Performance of Its TSO Workforce, but Continues to Face Challenges**

#### *TSA Has Taken Steps to Better Manage Its TSO Workforce, but Faces Challenges in Hiring, Deploying, and Retaining TSOs*

TSA has taken and has planned actions to strengthen its management and deployment of the TSO workforce, but it continues to face challenges in hiring and deploying passenger and checked baggage TSOs. To accomplish its security mission, TSA needs a sufficient number of passenger and checked baggage TSOs trained and certified in the latest screening procedures and technology. We reported in February 2004 that staffing shortages and TSA's hiring process had hindered the ability of some FSDs to provide sufficient resources to staff screening checkpoints and oversee screening operations at their checkpoints without using additional measures such as overtime.<sup>11</sup> TSA has acknowledged that its initial staffing efforts created imbalances in the screener workforce and has since been taking steps to address these imbalances over the past 2 years.

The Intelligence Reform and Terrorism Prevention Act of 2004 required TSA to develop and submit to Congress standards for determining the aviation security staffing for all airports at which screening is required.<sup>12</sup> The act also directed GAO to review these standards, which we are doing. These staffing standards are to provide for necessary levels of airport security, while also ensuring that security-related delays experienced by airline passengers are minimized. In June 2005, TSA submitted its report on aviation security staffing standards to Congress. Known as the Screening Allocation Model (SAM), these standards are intended to provide an objective measure for determining TSO airport staffing levels, while staying within the congressionally mandated limit of 45,000 full-time equivalents (FTE) screeners.<sup>13</sup>

Whereas TSA's prior staffing model was demand-driven based on flight and passenger data, the SAM model analyzes not only demand data but also data on the flow of passenger and baggage through the airport and the availability of the workforce. In determining the appropriate TSO staffing levels, the SAM first considers the workload demands unique to each individual airport—including flight schedules, load factors and connecting flights, and number of passenger bags. These demand inputs are then processed against certain assumptions about the processing of passengers and baggage—including expected passenger and baggage processing rates, required staffing for passenger lanes and baggage equipment, and equipment alarm rates. Using these and various other data, the SAM determines the daily workforce requirements and calculates a work schedule for each airport. The schedule identifies a recommended mix of full-time and part-time staff and a total number of TSO FTE needed to staff the airport, consistent with a goal of 10 minutes maximum wait time for processing passengers and baggage.

For Fiscal Year 2006, the SAM model estimated a requirement of 42,170 TSO FTEs for all airports nationwide. In order to stay within a 43,000 TSO FTE budgetary limit for Fiscal Year 2006, TSA officials reduced the number of FTEs allocated to airports to 42,056, which allowed it to fund the 615 TSO FTEs in the National Screener Force—a force composed of TSOs who provide screening support to all airports—and to maintain a contingency of 329 TSO FTEs in reserve to meet unanticipated demands, such as a new air carrier coming on line at an airport.<sup>14</sup> As of January 2006, there were 37,501 full-time TSOs and 5,782 part-time TSOs on board na-

tionwide, representing an annualized rate of 41,085 TSO FTEs. According to TSA headquarters officials, the SAM can be adjusted to account for the uniqueness of particular airport security checkpoints and airline traffic patterns. Further, it is up to the FSDs to ensure that all of the data elements and assumptions are accurate for their airports, and to bring to TSA's attention any factors that should be reviewed to determine if changes to the SAM are appropriate. The President's Fiscal Year 2007 budget requests a total of 45,121 FTEs for TSO personnel compensation and benefits.

As part of our ongoing review of the SAM model, we have identified several preliminary concerns about TSA's efforts to address its staffing imbalances and ensure appropriate coverage at airport passenger and checked baggage screening checkpoints, which we are continuing to assess. At the five airports we visited, FSD staff raised concerns about the SAM assumptions as they related to their particular airports.<sup>15</sup> Among other things, they noted that the recommendation for 20 percent part-time TSO workforce—measured in terms of FTEs—often could not be reached, the expected processing rates for passenger and baggage screening were not being realized, non-passenger screening at large airports was higher than assumed, and the number of TSO FTEs needed per checkpoint lane and per baggage screening machine was not sufficient for peak periods. Regarding the SAM assumption of a 20 percent part-time TSO FTE level across all airports, FSD staff we visited stated that the 20 percent goal has been difficult to achieve because of, among other things, economic conditions leading to competition for part-time workers, remote airport locations coupled with a lack of mass transit, TSO base pay that has not changed since Fiscal Year 2002, and part-time workers' desire to convert to full-time status. According to TSA headquarters officials, while the nationwide annual TSO attrition rate is about 23 percent (compared to a rate of 14 percent reported in February 2004), it is over 50 percent for part-time TSOs. TSA has struggled with hiring part-time TSOs since it began actively recruiting them in the summer of 2003. In February 2004, we reported that FSDs at several of the airports we visited stated that they experienced difficulty in attracting needed part-time screeners, which they believed to be due to many of the same factors, such as low pay and benefits, undesirable hours, the location of their airport, the lack of accessible and affordable parking or public transportation, and the high cost of living in the areas surrounding some airports.<sup>16</sup> These FSDs stated that very few full-time screeners were interested in converting to part-time status—a condition that still exists—and TSA officials stated that attrition rates for part-time screeners were considerably higher than those for full-time screeners.

At two of the five airports we visited as part of our ongoing review of the SAM model, FSD staff told us that they had not been able to hire up to their authorized staffing levels. In February 2004, we reported that many of the FSDs we interviewed expressed concern that TSA's hiring process was not responsive to their needs and hindered their ability to reach their authorized staffing levels and adequately staff screening checkpoints. Specifically, FSDs expressed concern with the lack of a continuous hiring process to backfill screeners lost through attrition, and their lack of authority to conduct hiring on an as-needed basis. We reported that TSA was taking steps to make the hiring process more responsive to FSDs' needs. Since then, TSA has provided FSDs with more input into the hiring process in an effort to streamline the process and enable FSDs to more quickly meet their staffing needs.

During our five airport visits, some FSD staff also cited another limitation of the SAM—specifically, that the model does not account for screeners who are performing administrative or other duties. The officials also noted that, because they are not authorized to hire a sufficient number of mission support staff, TSOs are being routinely used—in some cases full time—to carry out non-screening and administrative duties, including supporting payroll, scheduling, uniform supplies, legal support, logistics, and operations center activities. At the five airports we visited in January and February 2006, out of a total of 2,572 TSO FTEs on-board at those airports, roughly 136 FTEs (just over 5 percent) were being used for administrative duties. FSD staff stated that some of these TSOs are being used on a part-time basis, while others are used on a full-time basis. The use of TSOs in these support functions could adversely affect the ability of FSDs to adequately staff their screening checkpoints.

To compensate for screener shortages and to enable operational flexibility to respond to changes in risk and threat, in October 2003, TSA established a National Transportation Security Officer (TSO) Force (formerly known as the Mobile Screening Force established in November 2002) to provide screening support to all airports in times of emergency, seasonal demands, or under other special circumstances that require a greater number of screeners than regularly available to FSDs. In February

2004, we reported that the National Screening Force consisted of over 700 full-time passenger and baggage TSOs. TSA officials stated that while these screeners have a home airport to which they are assigned, they travel to airports in need of screening staff approximately 70 percent of the year.

TSA budgeted for 615 FTEs for the National Screening Force in Fiscal Year 2006. The President's Fiscal Year 2007 budget request includes \$35 million for operational expenses of the force (not including salaries and benefits of force members). According to the budget request, in Fiscal Year 2007, the National Screening Force will generally be deployed only to those airports experiencing significant staffing shortfalls associated with increased seasonal traffic or when a special event, such as a Super Bowl or a large national conference, occurs requiring an immediate influx of additional TSO support. At one category X airport we recently visited, the FSD stated that because of challenges in hiring and retaining TSOs for this airport, he currently had 59 members of the National Screening Force deployed to his airport, and had been relying on this force since 2004. The President's Fiscal Year 2007 budget request states that TSA will continue to review methods for reducing costs associated with this force, including ensuring that each airport has a sufficient staffing program in place to address short-term needs.

In February 2006 in the President's Fiscal Year 2007 budget request, TSA identified a number of initiatives it has under way to address the management of the TSO workforce, including:

- requesting \$10 million to support TSO retention programs, including utilizing workforce retention flexibilities to potentially include pay for performance, performance bonuses, retention allowances, college credit reimbursement, and flexible staffing; and
- establishing retention incentives for part-time screeners.

We will continue to examine these efforts as part of our ongoing work on TSA's aviation security staffing standards.

*TSA Has Strengthened TSO Training but Faces Challenges in Delivering the Training*

Since we reported on TSO training in September 2003,<sup>17</sup> TSA has taken a number of actions designed to strengthen training available to the TSO workforce as part of its efforts to enhance the performance of TSOs. Additionally, TSA's Office of Inspections (OI, formerly the Office of Internal Affairs and Program Review) makes recommendations to TSA leadership in its reports on covert (undercover, unannounced) testing results. These recommendations address deficiencies identified during testing and are intended to improve screening effectiveness. As of December 2005, OI had issued 29 reports to management on the results of its checkpoint and checked baggage covert testing. In total, the reports include 19 distinct recommendations related to passenger and checked baggage screening.<sup>18</sup> Of these 19 recommendations, 11 relate to screener training.

In September 2003, we reported that TSA had not fully developed or deployed a recurrent training program for passenger TSOs. At that time, little training was available to TSOs once they completed their basic TSO training. Since then, TSA has expanded training available to the TSO workforce, such as introducing an Online Learning Center that makes self-guided courses available over TSA's intranet and the Internet and expanding training available to supervisory TSOs. TSA also established a recurrent training requirement of 3 hours per week, averaged over a quarter, and provided FSDs with additional tools to facilitate and enhance TSO training, including at least one modular bomb set kit—containing components of an improvised explosive device (IED)—and at least one weapons training kit. TSA has also instituted a program called "Threat in the Spotlight" that, based on intelligence TSA receives, provides screeners with the latest in threat information regarding terrorist attempts to get threat objects past screening checkpoints. Additionally, in December 2005, TSA reported completing enhanced explosives detection training for over 18,000 TSOs. This training included both classroom and hands-on experiences, and focused particularly on identifying X-ray images of IED component parts, not just a completely assembled bomb. TSA plans for the remaining TSO workforce to receive this training by June 2006 through the Online Learning Center or other delivery methods. TSA also has developed new training curricula to support new screening approaches. For example, TSA recently developed a training curriculum for TSOs in behavior observation and analysis at the checkpoint to identify passengers exhibiting behaviors indicative of stress, fear, or deception.

However, as we reported in May 2005, insufficient TSO staffing and a lack of high-speed Internet/intranet connectivity to access the Online Learning Center have made it difficult for all TSOs at many airports to receive required training and has

limited TSO access to TSA training tools.<sup>19</sup> As previously discussed, TSA is taking steps to address the TSO staffing challenges. However, it is too soon to determine whether TSA's efforts will address TSA's ability to provide required training while maintaining adequate coverage for screening operations. In terms of access to the Online Learning Center, TSA plans to complete the deployment of high-speed Internet/intranet connectivity to airports during Fiscal Year 2007. TSA established its Online Learning Center to provide passenger and baggage screeners with online, high-speed access to training courses. However, effective use of the Online Learning Center requires high-speed Internet/intranet access, which TSA had not been able to provide to all airports. In May 2005, we reported that as of October 2004, about 45 percent of the TSO workforce did not have high speed Internet/intranet access to the Online Learning Center. The President's Fiscal Year 2007 budget request reports that approximately 220 of the more than 400 airport and field locations have full Information Technology (IT) infrastructure installation, to include high-speed network connectivity, while the rest of the airports operate with dial-up access to TSA systems. According to the budget request, TSA will use \$120 million in Fiscal Year 2006 to deploy high-speed connectivity to all category X and I airports and preliminary high-speed connectivity to all category II, III, and IV airports. The budget request includes a request for a total of \$90 million to support this effort in Fiscal Year 2007, of which \$54 million is needed to complete the deployment of high-speed connectivity at category II, III, and IV airports.<sup>20</sup>

**TSA Is Making Changes to Its Passenger Screening Procedures to Enhance Detection Capabilities Based on Risk and Other Factors, but Could Strengthen Its Evaluation of Proposed Procedures**

*Proposed Passenger Checkpoint Screening Procedural Changes Are Generally Based on Operational Experience and Risk-Based Assessments*

Our preliminary analysis of TSA data indicates that since April 2005, TSA has considered 70 proposed changes to passenger checkpoint screening procedures.<sup>21</sup> Most of these proposed changes were generated by TSA airport officials and TSA's Security Operations division, which is responsible for developing and overseeing the implementation of checkpoint screening procedures. TSA headquarters also formally solicited input from TSA airport staff by initiating a field review of standard operating procedures (SOP), which involved representatives from airports across the Nation. This review resulted in 120 suggested revisions to the passenger checkpoint screening procedures. To a lesser extent, changes to checkpoint screening procedures are recommended by TSA senior leadership, such as the Assistant Administrator of Security Operations or the Assistant Secretary. Congress has also proposed and subsequently mandated changes to checkpoint screening procedures, such as adding lighters to the list of items prohibited on aircraft. According to a senior TSA official, recent suggestions for procedural changes, such as removing small scissors from the prohibited items list to allow TSOs to focus on higher risk items, were generated by a TSA task force focused on improving the agency's ability to detect explosives at the screening checkpoint.

Based on our preliminary analysis, the majority of proposed SOP changes considered by TSA in April 2005, August 2005, September 2005, and December 2005 were not specifically designed to enhance the security of the screening process.<sup>22</sup> Of the 70 proposed checkpoint screening SOP changes considered by TSA, 23 were intended to improve the efficiency of the screening process (e.g., passenger flow) such as modifying the HazMat reporting requirements to exclude torch lighters and pepper spray in quantities less than 4 ounces. Seven of the 70 proposed changes considered by TSA during this period were intended to specify or clarify procedures for passengers requiring special consideration, such as law enforcement officers. Ten of the proposed changes were specifically intended to improve TSA's ability to detect prohibited items. Sixteen proposed changes were intended to enhance customer service or clarify the wording of the SOP. Fourteen of the 70 proposed changes were not included in these categories.<sup>23</sup>

According to TSA, security-related proposed changes to checkpoint screening procedures are based on risk-based factors, including previous terrorist incidents, threat information, vulnerabilities of the screening system, as well as operational experience and stakeholder concerns. For example, according to TSA officials, the initial change to the pat-down procedure in September 2004 was based on the attacks carried out on two Russian aircraft. According to TSA, the pat-down procedure was further revised in response to passenger concerns that the procedure was too invasive. TSA officials stated that the pat-down procedure was changed a third time based on additional threat information. TSA also informed us that reported threat information led them to further amend the pat-down procedure in December 2005.

Recommended changes to passenger checkpoint screening procedures are also generated based on the results of covert testing conducted by TSA's Office of Inspections and the DHS Office of Inspector General (OIG). Covert tests are designed to assess vulnerabilities in the checkpoint screening system to specific threats, such as vulnerability to the various methods by which terrorists may try to conceal hand guns, knives, or IEDs. OI and the DHS OIG identified vulnerabilities in the checkpoint screening system, which existed, in part, due to deficiencies in screening procedures. To address these vulnerabilities, since March 2005, OI and the DHS OIG recommended four changes to the passenger checkpoint screening procedures.<sup>24</sup> TSA has also made procedure changes in response to operational experience and stakeholder concerns. For example, TSA changed the SOP to specify the "individual tester" instead of "supervisor" to alleviate field confusion that supervisors were the only ones allowed to perform a particular task. Also, based on field input, TSA is changing the SOP to allow TSOs to instruct passengers with long hair to hold their hair during the explosives trace portal (ETP) screening process. TSA also made changes due to stakeholder concern, such as modifications to the pat-down procedure. After passengers expressed discomfort with the invasive nature of the procedure, TSA modified it to be less invasive while maintaining its security effectiveness.

*TSA Could Strengthen Its Evaluation of Proposed Screening Procedural Changes Based on our Preliminary Observations*

As previously mentioned, TSA airport staff and headquarters officials suggest changes to checkpoint screening procedures to generally improve the efficiency, effectiveness and clarity of screening procedures. These proposed procedural changes are periodically gathered and vetted through various TSA offices, and ultimately the Assistant Administrator of Security Operations, for approval. The offices involved in the review process for SOP changes include Security Operations, Office of Chief Counsel, and the Office of Training. As required, proposed procedural changes are also evaluated by other offices including the Office of Intelligence and Analysis, Office of Civil Rights, and Office of Passengers with Disabilities. Representatives of these component divisions meet informally or formally to discuss proposed changes and determine whether the changes should be incorporated into the checkpoint screening SOP.

In addition, TSA officials informed us that the agency evaluates all significant proposed changes in an operational environment prior to determining whether such changes should be implemented nationwide. Specifically, under the current Assistant Secretary, TSA pilot tests changes that require substantial training or that may generate concerns from the traveling public. The significant changes implemented in December 2005 include revisions to the pat-down procedure, the procedure for searching carry-on luggage, the process for screening selectee passengers,<sup>25</sup> and the list of items prohibited on aircraft. The major changes also include a new procedure for screening passengers for IEDs. While TSA evaluated these procedures in an operational environment, our preliminary analysis suggests that the evaluations primarily focused on the operational feasibility of the procedures, and less on how these procedures would reduce vulnerability to a terrorist attack. TSA assesses the vulnerability of the existing checkpoint screening system by conducting covert tests in which persons attempt to carry prohibited items through the checkpoint without the items being detected. However, TSA officials questioned whether covert testing could be used to assess statistically whether new procedures would decrease the vulnerability of the screening system. For example, TSA officials stated that since some procedures are only piloted in the operational environment for a few days, TSA could not run enough covert tests for the results to allow for comprehensive analysis of reduced vulnerability. TSA officials also stated that because the agency implements a layered approach to passenger screening, it would be difficult to determine the extent to which any one layer reduces vulnerability of the checkpoint screening system.

During the course of our review, we met with five aviation security experts, four of which identified covert testing as the best way to assess the security effectiveness of new and existing procedures. However, they also acknowledged the difficulty of using covert testing to assess the extent to which specific procedures would reduce vulnerabilities, especially considering that the effectiveness of a procedure also relies on the capability of TSOs and screening equipment.

TSA also recently piloted additional procedures that would incorporate unpredictability into the screening system and that would allow TSOs to determine the level of screening passengers should receive based on suspicious behavior. While TSA has not yet determined whether to incorporate these new procedures into the SOP, our preliminary observations indicate that TSA did not have a formal evaluation plan

in place when piloting these procedures. Regarding screening passengers based on suspicious behavior, TSA officials stated that this method has been successful for law enforcement officials, including those operating in airports, as well as aviation officials in other countries such as Israel. FSD staff at three airports that participated in the piloting of these procedures identified factors TSA headquarters should consider prior to implementing these procedures, one of which is the lack of TSOs to conduct these procedures. FSD staff at one airport said that they had to close a screening lane in order to have a sufficient number of TSOs to implement the piloted procedure. FSD staff at all three airports also reported that some TSOs had to work overtime so that other TSOs could be trained to implement these procedures. TSA headquarters staff stated that the prohibited items list and changes to other programs would offset the additional TSO resources needed to implement these procedures. However, FSD staff with whom we spoke at 2 of the airports that piloted these procedures stated that the changes made did not free up screening resources as was planned.

**TSA Is Supporting the Development and Deployment of Technologies To Strengthen Commercial Aviation Security, but Faces Management and Funding Challenges**

*DHS and TSA Are Taking Steps To Develop and Deploy Technologies for Screening Passengers and Checked Baggage, but Further Planning Is Needed To Focus R&D Efforts*

DHS's and TSA's research and development efforts for passenger and checked baggage screening are part of a broader DHS program focused on researching and developing technologies to detect, prevent, and mitigate terrorist threats. History has shown that terrorists will adapt their tactics and techniques in an attempt to bypass increased security procedures, and are capable of developing increasingly sophisticated measures in an attempt to avoid detection. This ever changing threat necessitates the need for continued R&D of new technologies and the fielding of these technologies to strengthen aviation security.

In March 2005, the DHS OIG reported that significant improvement in screener performance may not be possible without greater use of new technology. The DHS OIG encouraged TSA to expedite its testing programs and give priority to technologies that will enable the screening workforce to better detect both weapons and explosives. In addition, the President's Fiscal Year 2007 budget request states that checkpoints do not currently have the ability to accurately and quickly detect explosives on all passengers, and only a minimal number of airline passengers are directed to a selectee lane for further inspection in which they are manually searched for explosives. The request further states that "many travelers are allowed to pass through the checkpoints without complete testing and detection," and recognizes the importance of filling this detection gap. TSA officials stated that the agency is addressing this issue through a variety of security measures. TSA has recently put increased focus on the threats posed by IEDs and is investing in technology for this purpose. For example, about 60 explosive trace portal machines have been installed at over 20 airports. This new technology uses puffs of air to help detect the presence of explosives on individuals. DHS's Fiscal Year 2007 budget request states that TSA expects that about 434 explosive trace portal machines will be in operation throughout the country by September 2007. TSA is also developing backscatter technology, in which backscatter signals interact with explosives, plastics and metals, giving them shape and form and making them easy to visually interpret. However, limited progress has been made in fielding this technology at airport passenger screening checkpoints. We will soon begin a review of DHS's and TSA's progress in planning for, managing, and deploying their R&D programs in support of passenger checkpoint screening operations.

To enhance checked baggage screening, TSA is developing and testing next-generation EDS machines. Most of the currently deployed EDS technology was developed prior to the passage of ATSA and was based on criteria set forth by Congress in the Aviation Security Improvement Act of 1990. According to TSA, since the large-scale deployment of EDS machines in 2002 and 2003, manufacturers have only marginally improved false alarm rates and throughput capabilities of the equipment. The maximum number of bags an EDS machine can screen per hour is 500, which can be achieved only when the machines are integrated in-line with the baggage conveyor system. New EDS equipment was certified in 2005, including a smaller EDS machine designed to replace ETD machines used for primary screening and an upgraded large EDS machine. In September 2005, TSA entered into a \$24.8 million contract to purchase 72 smaller EDS machines to be installed at 24 airports. The President's Fiscal Year 2007 budget request for TSA includes funding to support research and development for EDS machines that can operate at up to 900 bags

per hour and employ new threat detection concepts. In its February 2006 strategic framework for checked baggage screening, TSA identified development of high-throughput EDS machines and lowering of false alarm rates as key arenas for improving investment management of next-generation technologies.

We reported in September 2004 that DHS and TSA have made some progress in managing transportation security R&D programs according to applicable laws and R&D best practices. However, we found that their efforts were incomplete in several areas, including preparing strategic plans for R&D efforts that contain measurable objectives, preparing and using risk assessments to select and prioritize R&D projects, and coordinating with stakeholders—a condition that increases the risk that their R&D resources will not be effectively leveraged. We also found that TSA and DHS delayed several key R&D projects and lacked both estimated deployment dates for the vast majority of their R&D projects and adequate data bases to effectively manage their R&D portfolios. We recommended that DHS and TSA: (1) conduct some basic research in the transportation security area; (2) complete their strategic planning and risk assessment efforts; (3) develop a management information system that will provide accurate, complete, current, and readily accessible project information for monitoring and managing their R&D portfolios; and (4) develop a process with the Department of Transportation to coordinate transportation security R&D efforts and share this information with transportation stakeholders. DHS and TSA agreed that the recommendations were key to a successful R&D program. We will examine DHS's and TSA's efforts to implement these recommendations as part of our upcoming review of TSA's checkpoint R&D program.

*TSA Is Focusing Its Checked Baggage Strategic Planning Efforts on Deployment of In-line EDS Systems, but Faces Challenges in Funding These Systems on a Large-Scale Basis*

TSA has made substantial progress in installing EDS and ETD systems at the Nation's airports—mainly as part of interim lobby screening solutions—to provide the capability to screen all checked baggage for explosives, as mandated by Congress. Although TSA made progress in fielding EDS and ETD equipment at the Nation's airports, TSA placed this equipment in a stand-alone mode—usually in airport lobbies—to conduct the primary screening of checked baggage for explosives, rather than integrating EDS machines in-line with airports' baggage conveyor systems. TSA officials stated that they employed these interim solutions because of the significant costs required to install in-line systems and the need to reconfigure many airports' baggage conveyor systems to accommodate the equipment. These interim screening solutions led to operational inefficiencies, including requiring a greater number of screeners and screening fewer bags for explosives each hour, as compared with using EDS machines in-line with baggage conveyor systems. Performing primary screening using ETD machines, as is the case for more than 300 airports, is more labor intensive and less efficient than screening using the EDS process. TSA's placement of stand-alone EDS and ETD machines in airport lobbies also resulted in passenger crowding, which presented unsafe conditions and may have added security risks for passengers and airport workers. In May 2004, TSA conducted a retrospective cost-benefit analysis on nine airports with agreements to install in-line screening systems and found that significant savings and other benefits, including reduced screener staffing requirements and increased baggage throughput, may be achieved through the installation of in-line systems. TSA estimated that in-line baggage screening systems at these nine airports would save the Federal Government about \$1 billion over 7 years,<sup>26</sup> compared with stand-alone EDS systems, and that initial investment would be recovered in a little over 1 year.<sup>27</sup> TSA's analysis also showed that a cost savings may not be achieved for all airports. According to TSA's data, Federal cost savings varied from about \$50 million to over \$250 million at eight of the nine airports, while at one airport, there was an estimated \$90 million loss.<sup>28</sup>

With the objective of initially fielding this equipment largely accomplished, TSA is shifting its focus from equipping airports with interim screening solutions to systematically planning for the more optimal deployment of checked baggage screening systems, although identifying the resources to fund the systems on a large-scale basis continues to be a challenge. To assist TSA in planning for the optimal deployment of checked baggage screening systems, we recommended in our March 2005 report that TSA systematically evaluate baggage screening needs at airports, including the costs and benefits of installing in-line baggage screening systems—explosive detection systems integrated in-line with airport baggage conveyor systems—at airports that do not yet have in-line systems installed. We suggested that part of such planning should include analyzing which airports should receive Federal support for in-line EDS baggage screening systems based on cost savings that could be achieved

from more effective and efficient baggage screening operations and on other factors, including enhanced security. Also, for airports where in-line systems may not be economically justified because of high investment costs, we suggested that a cost-effectiveness analysis be used to determine the benefits of additional stand-alone EDS machines to screen checked baggage in place of the more labor-intensive ETD machines. We also recommended that TSA consider the costs and benefits of the new technologies being developed through its research and development efforts, which could provide smaller EDS machines that have the potential to reduce the costs associated with installing in-line EDS baggage screening systems or to replace ETD machines currently used as the primary method for screening at over 300 airports nationwide. DHS agreed with our recommendations and stated that TSA had initiated an analysis of deploying in-line EDS machines and was in the process of formulating criteria to identify those airports that would benefit from an in-line EDS system. DHS also stated that TSA had begun conducting an analysis of the airports that rely heavily on ETD machines as the primary checked baggage screening technology to identify those airports that would benefit from augmenting ETDs with stand-alone EDS equipment.

On February 8, 2006, TSA issued a report to Congress outlining a framework for a strategic plan for its TSA Checked Baggage Screening Program. TSA plans to finalize the plan, including funding and cost-sharing strategies for in-line baggage screening systems, in Spring 2006. The framework introduces a strategy intended to increase security through deploying EDS to as many airports as practicable, lower life-cycle costs for the program, minimize impacts to TSA and airport/airline operations, and provide a flexible security infrastructure for accommodating growing airline traffic and potential new threats. The framework addresses the following issues:

- Optimized checked baggage screening solutions—finding the ideal mix of higher-performance and lower-cost alternative screening solutions.
- Funding prioritization schedule by airport—which airports should receive funding for an in-line baggage screening system based on quantitative modeling of security, economic, and other factors.
- Deployment strategy—a plan for the acquisition of next-generation EDS systems, the redeployment of existing EDS assets, and investment in life-cycle extension programs.
- EDS Life-Cycle Management Plan—structured guidelines for EDS R&D investment, procurement specifications for next-generation EDS systems, and the redeployment of existing EDS assets and investment in life-cycle extension programs that minimize the cost of ownership of the EDS systems.
- Stakeholder collaboration plan—TSA plans to work closely with airport operators and other key stakeholders to develop airport-specific screening solutions, refine the nationwide EDS deployment strategy, and investigate alternative funding programs that may allow for innovative as well as non-federal sources of funding or financing, including formulas for sharing costs between different government entities and the private sector. This strategic framework is a positive step forward in systematically planning for TSA's checked baggage screening program. The completion of a strategic plan for this program should help TSA ensure that it is efficiently allocating its limited resources to maximize the effectiveness of its checked baggage screening operations. However, it will be important for TSA to complete their analysis and plans for the funding of in-line EDS systems, which has been the primary obstacle to the deployment of these systems over the past few years.

#### **TSA Has Strengthened Its Efforts to Measure the Effectiveness of Screening Systems**

TSA has strengthened its efforts to measure the performance of the various components of the passenger and checked baggage screening systems—people, processes, and technology—but results of covert testing identified that weaknesses and vulnerabilities continue to exist. In November 2003, we reported on the need for TSA to strengthen its efforts to measure the performance of its aviation security system.<sup>29</sup> At that time, TSA had collected limited data on the effectiveness of its aviation security programs and initiatives. Specifically, limited covert testing had been performed, the Threat Image Projection (TIP) system<sup>30</sup> was not fully operational at passenger screening checkpoints and was not available for checked baggage screening systems, and TSA had not fully implemented a congressionally mandated annual screener proficiency review (referred to as the recertification program).

Since then, TSA has implemented and strengthened efforts to collect performance data in these areas.

In the area of covert testing, TSA headquarters increased the amount of passenger and checked baggage screening covert tests it performs and recently changed its approach to covert testing to focus its resources on catastrophic threats—threats that can take down an airplane or blow up an airplane. These tests, in which undercover OI inspectors attempt to pass threat objects through passenger screening checkpoints and in checked baggage, are designed to measure vulnerabilities in passenger and checked baggage screening systems and to identify systematic problems affecting performance of TSOs in the areas of people (training), processes (procedures), and technology. OI began conducting covert testing in September 2002, conducting test scenarios for the passenger checkpoint and for checked baggage. These scenarios were carried over from tests developed and conducted under FAA, but OI reported using more updated weapons than those used by FAA and more robust tests. TSA considers its covert testing as a snapshot of a TSO's ability to detect threat objects at a particular point in time, as one of several indicators of system-wide screener performance, and as an important mechanism for identifying areas in passenger and checked baggage screening needing improvement.

In September 2003, we reported that OI had conducted limited covert testing, but planned to double the amount of tests it conducted during Fiscal Year 2004, based on an anticipated increase in its staff from about 100 full-time equivalents to about 200 full-time equivalents.<sup>31</sup> TSA officials stated that based on budget constraints, OI's Fiscal Year 2004 staffing authorization was limited to 183 full-time equivalents.<sup>32</sup> Despite a smaller than expected staff increase, by the end of the second quarter of Fiscal Year 2004, OI had already surpassed the number of tests it had performed during Fiscal Year 2003—conducting a total of 836 tests in Fiscal Year 2003 and 1,233 in the first two quarters of Fiscal Year 2004.<sup>33</sup>

Our analysis of TSA's covert testing results for tests conducted between September 2002 and September 2005 identified that overall, weaknesses existed in the ability of screeners to detect threat objects on passengers, in their carry-on bags, and in checked baggage. Covert testing results in this analysis cannot be generalized either to the airports where the tests were conducted or to airports nationwide.<sup>34</sup>

During the first 3 years of covert testing, OI decided to maintain the same test scenarios and same level of difficulty so that test results would be comparable over time.<sup>35</sup> In July 2005, OI began revamping its covert testing program based on the results of the Secretary of DHS's Second Stage Review—a review of the department's programs, policies, operations, and structure.<sup>36</sup> Specifically, the Assistant Secretary of DHS, TSA, instructed OI to implement a more risk-based approach and focus its resources on catastrophic threats—threats that can take down an airplane or blow up an airplane. In August 2005, the Assistant Secretary of DHS, TSA, further instructed OI to discontinue its former covert testing program and implement the revamped covert testing program. OI began implementation of its revamped testing in September 2005. OI conducted 117 tests over a 1-week period at one airport focusing on catastrophic threats and incorporated additional testing elements that had not previously been included. According to OI officials, this testing involved over 50 personnel from various TSA components. Since then, OI has conducted tests at three additional airports.<sup>37</sup> OI officials stated that TSA leadership is considering these initial tests in making final determinations regarding the revised testing program that OI will implement, and that final decisions regarding the structure, content, and frequency of these tests have not yet been made.

In February 2004, TSA provided protocols to help FSDs conduct their own covert testing of local airport passenger screening activities—a practice that TSA had previously prohibited.<sup>38</sup> Between May 2004 and April 2005, FSDs conducted a total of 17,954 local covert tests at 350 airports; as of February 2006, TSA reported that FSDs had conducted a total of 48,826 local covert tests. In February 2005, TSA released a general procedures document for local covert testing at checked baggage screening locations. Between March 2005 and September 2005, 1,370 local tests of EDS screening were conducted at 71 airports. TSA headquarters officials stated that a key challenge FSDs face in conducting local testing is the lack of available Federal staff to conduct the testing, particularly at smaller airports. In May 2005, we reported that TSA officials stated that they had not yet begun to use data from local covert testing to identify training and performance needs because of difficulties in ensuring that local covert testing is implemented consistently nationwide.<sup>39</sup> TSA officials stated in March 2006 that data is available for use by FSDs to identify training needs and TSO performance.

Covert testing is one method TSA uses to measure the security effectiveness of passenger and checked baggage screening procedures and technologies in the oper-

ating environment in addition to other TSA measures that assess the performance of passenger and checked baggage TSOs. One other source of information on TSO performance in detecting threat objects is the results from the TIP system. TIP is designed to test passenger screeners' detection capabilities by projecting threat images, including images of guns, knives, and explosives, onto bags as they are screened during actual operations. TSOs are responsible for identifying the threat image and calling for the bag to be searched. Once prompted, TIP identifies to the screener whether the threat is real and then records the TSO's performance in a data base that could be analyzed for performance trends.<sup>40</sup> TIP threat detection results in conjunction with OI covert test results and local testing are intended to assist TSA in identifying specific training and performance improvement efforts.

In May 2005, we reported that in October 2003 TSA reactivated TIP as planned with an expanded library of 2,400 images at all but 1 of the more than 1,800 checkpoint lanes nationwide. In December 2005, TSA reported that it has further expanded the image library to include additional images of IEDs and IED components as part of its effort to improve TSOs' detection of explosives. Additionally, the President's Fiscal Year 2007 budget request states that TSA plans to maximize the training benefits of the TIP system by tailoring TIP sessions to address individual TSO weaknesses revealed in user performance data. For example, if a TSO has particular difficulty identifying IEDs, the TIP would trigger the projection of a higher proportion of simulated IEDs while that TSO was operating the machine than under standard circumstances. While there have been improvements in TIP for passenger screening, TIP is not yet available for checked baggage screening. In April 2004, we reported that TSA officials stated that they were working to resolve technical challenges associated with using TIP for checked baggage screening on EDS machines and have started EDS TIP image development.<sup>41</sup> However, in December 2004, TSA officials stated that because of severe budget reductions, TSA will be unable to begin implementing a TIP program for checked baggage in Fiscal Year 2005. Officials did not specify when such a program might begin.

Another measure of TSO performance is the results of annual recertification testing. ATSA requires that each TSO receive an annual proficiency review to ensure he or she continues to meet all qualifications and standards required to perform the screening function. To meet this requirement, TSA established a recertification program. The first recertification program—which was conducted during the period October 2003 through March 2004—was composed of two assessment components, one of TSOs' performance and the other of TSOs' knowledge and skills. During the performance assessment component of the recertification program, TSOs are rated on both organizational and individual goals, such as maintaining the Nation's air security, vigilantly carrying out duties with utmost attention to tasks that will prevent security threats, and demonstrating the highest levels of courtesy to travelers to maximize their levels of satisfaction with screening services. The knowledge and skills assessment component consists of three modules: (1) knowledge of standard operating procedures, (2) image recognition, and (3) practical demonstration of skills.

Across all airports, TSOs performed well on the recertification testing for the first 2 years the program was in place, with about 1 percent of TSOs subject to recertification failing to complete this requirement. In both years, TSOs faced the greatest difficulty on their first attempt to pass the practical demonstration of skills module—a hands-on simulated work sample used to evaluate a screener's knowledge, skill, and ability when performing specific screener tasks along with the ability to provide customer service.<sup>42</sup> According to TSA officials, at the completion of recertification at an airport, TSA management has access to reports at both the individual TSO and airport level, which identify the specific areas that were missed during testing. National level reports are also available that isolate areas that need improvement and can be targeted in basic and recurrent training. In Fiscal Year 2004, TSA established a performance measure for the recertification program.<sup>43</sup>

During the first year of recertification testing, dual-function TSOs who were actively working as both passenger and checked baggage TSOs were required to take only the recertification test for passenger TSOs. They were therefore not required to take the recertification testing modules required for checked baggage, even though they worked in that capacity.<sup>44</sup> TSA's second annual recertification testing, which began in October 2004, included components for dual-function TSOs, but did not include an image recognition module for checked baggage TSOs—which would include dual-function screeners performing checked baggage screening. TSA officials stated that a decision was made to not include an image recognition module for checked baggage TSOs during this cycle because not all checked baggage TSOs would have completed training on the onscreen resolution protocol by the time recertification testing was conducted at their airports.<sup>45</sup> In October 2005, TSA released

guidance for screener recertification that included an image recognition module for checked baggage and dual-function screeners trained in the onscreen alarm resolution protocol.

In addition to enhancing its efforts to measure the performance of TSOs, TSA also has developed two performance indexes to measure the effectiveness of the passenger and checked baggage screening systems. These indexes measure overall performance through a composite of indicators and are derived by combining specific performance measures relating to passenger and checked baggage screening, respectively. Specifically, these indexes measure the effectiveness of the screening systems through machine probability of detection and covert testing results;<sup>46</sup> efficiency through a calculation of dollars spent per passenger or bag screened; and customer satisfaction through a national poll, customer surveys, and customer complaints at both airports and TSA's national call center. We reported in May 2005 that the screening performance indexes developed by TSA can be a useful analysis tool, but without targets for each component of the index, TSA will have difficulty performing meaningful analyses of the parts that make up the index. For example, without performance targets for covert testing, TSA will not have identified a desired level of performance related to screener detection of threat objects. Performance targets for covert testing would enable TSA to focus its improvement efforts on areas determined to be most critical, as 100 percent detection capability may not be attainable. In January 2005, TSA officials stated that the agency planned to track the performance of individual index components and establish performance targets against which to measure these components.

#### **Concluding Observations**

Since its inception, TSA has achieved significant accomplishments in meeting congressional mandates related to establishing passenger and checked baggage screening operations. With the initial congressional mandates now largely met, TSA has turned its attention to assessing and enhancing the efficiency and effectiveness of its passenger and checked baggage screening systems. As threats and technology evolve, it is vital that TSA continue to enhance training and procedures for the TSO workforce. Over the past several years, TSA has strengthened its TSO training program in an effort to ensure that TSOs have the knowledge and skills needed to successfully perform their screening functions. However, without addressing the challenges to delivering ongoing training, including installing high-speed connectivity at airport training facilities, TSA may have difficulty maintaining a screening workforce that possesses the critical skills needed to perform at a desired level. TSA is also revising existing screening procedures and developing new procedures to enhance security effectiveness, many of which are risk-based, as we have previously advocated. Additionally, TSA has developed a staffing model intended to provide the necessary levels of TSOs to support security activities at the Nation's airports. However, given the challenges TSA faces in determining appropriate staffing levels at airports—to include hiring the appropriate mix of part-time TSOs needed to support screening functions—it is critical that TSA carefully consider how it strategically hires, deploys, and manages its TSO workforce to help strengthen its passenger and checked baggage screening programs.

As TSA works toward improving the performance of individual TSOs and screening operations, it will also be important that the agency deploy and leverage screening equipment and technologies, sustain its research and development efforts, and strengthen its R&D management and planning efforts. We are encouraged that TSA is currently undertaking efforts to systematically analyze the cost and benefits of in-line baggage screening systems and to identify innovative funding and financing options. This planning should help TSA support future funding requests by demonstrating enhanced security, improved operational efficiencies, and cost savings to both TSA and the affected airports.

Mr. Chairman, this concludes my statement. I would be pleased to answer any questions that you or other Members of the Committee may have at this time.

#### **Related GAO Products**

*Aviation Security: Significant Management Challenges May Adversely Affect Implementation of the Transportation Security Administration's Secure Flight Program.* GAO-06-374T. Washington, D.C.: February 9, 2006.

*Aviation Security: Federal Air Marshal Service Could Benefit from Improved Planning and Controls.* GAO-06-203. Washington, D.C.: November 28, 2005.

*Aviation Security: Federal Action Needed to Strengthen Domestic Air Cargo Security.* GAO-06-76. Washington, D.C.: October 17, 2005.

*Transportation Security Administration: More Clarity on the Authority of Federal Security Directors Is Needed.* GAO-05-935. Washington, D.C.: September 23, 2005.

*Aviation Security: Flight and Cabin Crew Member Security Training Strengthened, but Better Planning and Internal Controls Needed.* GAO-05-781. Washington, D.C.: September 6, 2005.

*Aviation Security: Transportation Security Administration Did Not Fully Disclose Uses of Personal Information During Secure Flight Program Testing in Initial Privacy Notes, but Has Recently Taken Steps to More Fully Inform the Public.* GAO-05-864R. Washington, D.C.: July 22, 2005.

*Aviation Security: Better Planning Needed to Optimize Deployment of Checked Baggage Screening Systems.* GAO-05-896T. Washington, D.C.: July 13, 2005.

*Aviation Security: Screener Training and Performance Measurement Strengthened, but More Work Remains.* GAO-05-457. Washington, D.C.: May 2, 2005.

*Aviation Security: Secure Flight Development and Testing Under Way, but Risks Should Be Managed as System Is Further Developed.* GAO-05-356. Washington, D.C.: March 28, 2005.

*Aviation Security: Systematic Planning Needed to Optimize the Deployment of Checked Baggage Screening Systems.* GAO-05-365. Washington, D.C.: March 15, 2005.

*Aviation Security: Measures for Testing the Effect of Using Commercial Data for the Secure Flight Program.* GAO-05-324. Washington, D.C.: February 23, 2005.

*Transportation Security: Systematic Planning Needed to Optimize Resources.* GAO-05-357T. Washington, D.C.: February 15, 2005.

*Aviation Security: Preliminary Observations on TSA's Progress to Allow Airports to Use Private Passenger and Baggage Screening Services.* GAO-05-126. Washington, D.C.: November 19, 2004.

*General Aviation Security: Increased Federal Oversight Is Needed, but Continued Partnership with the Private Sector Is Critical to Long-Term Success.* GAO-05-144. Washington, D.C.: November 10, 2004.

*Aviation Security: Further Steps Needed to Strengthen the Security of Commercial Airport Perimeters and Access Controls.* GAO-04-728. Washington, D.C.: June 4, 2004.

*Transportation Security Administration: High-Level Attention Needed to Strengthen Acquisition Function.* GAO-04-544. Washington, D.C.: May 28, 2004.

*Aviation Security: Challenges in Using Biometric Technologies.* GAO-04-785T. Washington, D.C.: May 19, 2004.

*Nonproliferation: Further Improvements Needed in U.S. Efforts to Counter Threats from Man-Portable Air Defense Systems.* GAO-04-519. Washington, D.C.: May 13, 2004.

*Aviation Security: Private Screening Contractors Have Little Flexibility to Implement Innovative Approaches.* GAO-04-505T. Washington, D.C.: April 22, 2004.

*Aviation Security: Improvement Still Needed in Federal Aviation Security Efforts.* GAO-04-592T. Washington, D.C.: March 30, 2004.

*Aviation Security: Challenges Delay Implementation of Computer-Assisted Passenger Prescreening System.* GAO-04-504T. Washington, D.C.: March 17, 2004.

*Aviation Security: Factors Could Limit the Effectiveness of the Transportation Security Administration's Efforts to Secure Aerial Advertising Operations.* GAO-04-499R. Washington, D.C.: March 5, 2004.

*Aviation Security: Computer-Assisted Passenger Prescreening System Faces Significant Implementation Challenges.* GAO-04-385. Washington, D.C.: February 13, 2004.

*Aviation Security: Challenges Exist in Stabilizing and Enhancing Passenger and Baggage Screening Operations.* GAO-04-440T. Washington, D.C.: February 12, 2004.

*The Department of Homeland Security Needs to Fully Adopt a Knowledge-based Approach to Its Counter-MANPADS Development Program.* GAO-04-341R. Washington, D.C.: January 30, 2004.

*Aviation Security: Efforts to Measure Effectiveness and Strengthen Security Programs.* GAO-04-285T. Washington, D.C.: November 20, 2003.

*Aviation Security: Federal Air Marshal Service Is Addressing Challenges of Its Expanded Mission and Workforce, but Additional Actions Needed.* GAO-04-242. Washington, D.C.: November 19, 2003.

*Aviation Security: Efforts to Measure Effectiveness and Address Challenges.* GAO-04-232T. Washington, D.C.: November 5, 2003.

*Airport Passenger Screening: Preliminary Observations on Progress Made and Challenges Remaining.* GAO-03-1173. Washington, D.C.: September 24, 2003.

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*Transportation Security: Post-September 11th Initiatives and Long-Term Challenges.* GAO-03-616T. Washington, D.C.: April 1, 2003.

*Airport Finance: Past Funding Levels May Not Be Sufficient to Cover Airports' Planned Capital Development.* GAO-03-497T. Washington, D.C.: February 25, 2003.

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*Aviation Safety: Undeclared Air Shipments of Dangerous Goods and DOT's Enforcement Approach.* GAO-03-22. Washington, D.C.: January 10, 2003.

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*Aviation Security: Registered Traveler Program Policy and Implementation Issues.* GAO-03-253. Washington, D.C.: November 22, 2002.

*Airport Finance: Using Airport Grant Funds for Security Projects Has Affected Some Development Projects.* GAO-03-27. Washington, D.C.: October 15, 2002.

*Commercial Aviation: Financial Condition and Industry Responses Affect Competition.* GAO-03-171T. Washington, D.C.: October 2, 2002.

*Aviation Security: Transportation Security Administration Faces Immediate and Long-Term Challenges.* GAO-02-971T. Washington, D.C.: July 25, 2002.

*Aviation Security: Information Concerning the Arming of Commercial Pilots.* GAO-02-822R. Washington, D.C.: June 28, 2002.

*Aviation Security: Vulnerabilities in, and Alternatives for, Preboard Screening Security Operations.* GAO-01-1171T. Washington, D.C.: September 25, 2001.

*Aviation Security: Weaknesses in Airport Security and Options for Assigning Screening Responsibilities.* GAO-01-1165T. Washington, D.C.: September 21, 2001.

*Homeland Security: A Framework for Addressing the Nation's Efforts.* GAO-01-1158T. Washington, D.C.: September 21, 2001.

*Aviation Security: Terrorist Acts Demonstrate Urgent Need to Improve Security at the Nation's Airports.* GAO-01-1162T. Washington, D.C.: September 20, 2001.

*Aviation Security: Terrorist Acts Illustrate Severe Weaknesses in Aviation Security.* GAO-01-1166T. Washington, D.C.: September 20, 2001.

#### ENDNOTES

<sup>1</sup>ATSA created TSA as an agency within the Department of Transportation (DOT) with responsibility for securing all modes of transportation, including aviation. Pub. L. No. 107-71, § 101, 115 Stat. 597 (2001). The Homeland Security Act of 2002, signed into law on November 25, 2002, transferred TSA from the DOT to the new Department of Homeland Security Pub. L. No. 107-296, § 403, 116 Stat. 2135, 2178.

<sup>2</sup>TSA defines an operational screening test as any covert test of a screener conducted by TSA, on any screening function, to assess the screener's threat item detection ability or adherence to TSA-approved procedures.

<sup>3</sup>Pursuant to the Homeland Security Act, the deadline for screening all checked baggage using explosive detection systems was, in effect, extended until December 31, 2003.

<sup>4</sup>Sterile areas are areas located within the terminal where passengers wait after screening to board departing aircraft. Access to these areas is generally controlled by TSA screeners at checkpoints where they conduct physical screening of passengers and their carry-on baggage for weapons and explosives.

<sup>5</sup>TSOs must deny passage beyond the screening location to any individual or property that has not been screened or inspected in accordance with passenger screening standard operating procedures. If an individual refuses to permit inspection of any item, that item must not be allowed into the sterile area or aboard an aircraft.

<sup>6</sup>Explosive detection systems use probing radiation to examine objects inside baggage and identify the characteristic signatures of threat explosives. EDS equipment operates in an automated mode.

<sup>7</sup>Explosive trace detection works by detecting vapors and residues of explosives. Human operators collect samples by rubbing bags with swabs, which are chemically analyzed to identify any traces of explosive materials.

<sup>8</sup>Positive passenger bag match is an alternative method of screening checked baggage that requires that the passenger be on the same aircraft as the checked baggage.

<sup>9</sup>ATSA required that TSA begin allowing all commercial airports to apply to TSA to transition from a Federal to a private TSO workforce. To support this effort, TSA created the Screening Partnership Program to allow all commercial airports an op-

portunity to apply to TSA for permission to use qualified private screening contractors and private sector screeners. Currently, private screening companies provide passenger and checked baggage screening at six airports.

<sup>10</sup>Department of Homeland Security Appropriations Act, 2006, Pub. L. No. 109-90, 119 Stat. 2064 (2005); H.R. Conf. Rep. No. 109-241, at 49-50 (2005).

<sup>11</sup>GAO, *Aviation Security: Challenges Exist in Stabilizing and Enhancing Passenger and Baggage Screening Operations*, GAO-04-440T (Washington, D.C.: Feb. 12, 2004).

<sup>12</sup>Intelligence Reform and Terrorism Prevention Act of 2004, Pub. L. No. 108-458, § 4023, 118 Stat 3638, 3723-24.

<sup>13</sup>One full-time-equivalent is equal to one work year or 2,080 non-overtime hours.

<sup>14</sup>This budgetary FTE limit is not to be confused with the 45,000 FTE screener cap imposed by Congress in the FY 2006 DHS Appropriations Act that limits the total number of FTE screeners available to TSA.

<sup>15</sup>We interviewed FSD staff at 3 category X airports, one category I airports, and one category III airport. TSA classifies the commercial airports in the United States into one of six security risk categories (X, I, II, III, IV, and V) based on various factors, such as the total number of takeoffs and landings annually, and other special security considerations. In general, category X airports have the largest number of passenger boardings, and category IV airports have the smallest.

<sup>16</sup>GAO-04-440T.

<sup>17</sup>GAO, *Airport Passenger Screening: Preliminary Observations on Progress Made and Challenges Remaining*, GAO-03-1173 (Washington, D.C.: Sept. 24, 2003).

<sup>18</sup>Some recommendations appear repeatedly in multiple reports issued by OIAPR.

<sup>19</sup>GAO, *Aviation Security: Screener Training and Performance Measurement Strengthened but More Work Remains*, GAO-05-457 (Washington D.C.: May 2, 2005).

<sup>20</sup>According to the budget request, the remaining \$36 million is needed to support operations and maintenance costs, including recurring costs for routers, switches, circuits, cabinets, racks, and network monitoring.

<sup>21</sup>In April 2005, TSA began documenting proposed changes to passenger checkpoint screening procedures.

<sup>22</sup>TSA does not review proposed SOP changes on a regular basis. Rather, the administration accumulates proposed changes and reviews them periodically on an as-needed basis. Since TSA began documenting proposed changes to checkpoint screening procedures, the agency has conducted three reviews of proposed changes, which took place in April 2005, August 2005, and September 2005.

<sup>23</sup>TSA attributed nine proposed changes to senior leadership direction, and TSA did not categorize five proposed changes from 2005.

<sup>24</sup>Office of Inspections recommended two additional changes to checkpoint screening procedures prior to March 2005.

<sup>25</sup>A selectee is a person identified for additional screening by a computer-assisted passenger screening system or another process as determined and approved by TSA.

<sup>26</sup>This figure refers to the net present value saved over 7 years if received up front.

<sup>27</sup>For a basis of comparison, Office of Management and Budget Circular A-94 stipulates using a 7 percent real discount rate to compute the present value of cost savings. TSA used a 4 percent real discount rate. Following Office of Management and Budget guidance, cost savings are \$1.14 billion. In addition, in TSA's analysis, the Federal Government does not pay for \$319 million, or 25 percent, of project costs. Accounting for these costs to reflect total costs, as recommended by Circular A-94, lowers overall savings to \$820 million.

<sup>28</sup>The relatively large costs for upfront in-line EDS at one airport are not offset by the modest amount of estimated operation and maintenance cost savings; therefore, the in-line EDS system may be more costly than EDS stand-alone. By contrast, at another airport the upfront costs of in-line EDS are lower than for stand-alone EDS, and there is a substantial amount of estimated operation and maintenance cost savings. Therefore, the in-line EDS system for this latter airport may be less costly than stand-alone EDS.

<sup>29</sup>GAO, *Aviation Security: Efforts to Measure Effectiveness and Address Challenges*, GAO-04-232T, (Washington, D.C.: Nov. 5, 2003).

<sup>30</sup>The Threat Image Projection system is designed to test TSOs' detection capabilities by projecting threat images, including images of guns and explosives, into bags as they are screened. TSOs are responsible for positively identifying the threat image and calling for the bag to be searched.

<sup>31</sup>GAO-03-1173.

<sup>32</sup>Covert testing is an ancillary duty and not a full-time assignment for the majority of OI staff. According to OI, 14 full-time-equivalent positions in headquarters are

dedicated fully to the covert testing program, which includes covert testing of all modes of transportation, not just airports. These 14 full-time-equivalents are in a special group that forms the core of team leaders for the covert testing trips.

<sup>33</sup>OI conducted a total of 2,369 passenger and checked baggage covert tests in Fiscal Year 2004.

<sup>34</sup>Test results cannot be generalized because sample tests were not identified using the principles of probability sampling. In a probability sample to assess screener detection of threat objects, each screening of a passenger or baggage would have to have a chance of being selected. A well-designed probability sample would enable failure rates to be generalized to all airports. However, for cost and operational reasons, probability sampling may not be feasible for passenger and checked baggage screening because it would require a very large sample size and an exhaustive examination of each sampled passenger or baggage to determine if there was a threat object to detect.

<sup>35</sup>In August 2004, OI began piloting various enhanced covert test scenarios based on more current threat information.

<sup>36</sup>The review examined elements of the Department of Homeland Security in order to recommend ways that DHS could better manage risk in terms of threat, vulnerability, and consequence; prioritize policies and operational missions according to this risk-based approach; and establish a series of preventive and protective steps that would increase security at multiple levels.

<sup>37</sup>OI conducted testing at two of the three airports twice during September 2005 through December 2005.

<sup>38</sup>The local covert testing protocols were updated in June 2004 and August 2004 to provide information on alternative testing methods.

<sup>39</sup>GAO-05-457.

<sup>40</sup>The TIP data base records both the TIP hit rate and TIP false alarm rate. These two results are used to determine the probability of detection and probability of false alarm, which determine overall TIP performance. The TIP performance measure is classified as sensitive security information.

<sup>41</sup>GAO, *Aviation Security: Private Screening Contractors Have Little Flexibility to Implement Innovative Approaches*, GAO-04-505T (Washington, D.C.: April 22, 2004).

<sup>42</sup>We cannot report on the specific results of the testing due to the security classification of this testing.

<sup>43</sup>Information related to the measures is sensitive security information.

<sup>44</sup>As of January 7, 2005, TSA reported that its workforce included approximately 25,947 dual-trained TSOs who were certified to serve as passenger or baggage TSOs.

<sup>45</sup>TSA's onscreen resolution protocol requires that when an EDS machine alarm goes off, indicating the possibility of explosives, TSA screeners, by reviewing computer-generated images of the inside of the bag, attempt to determine whether or not a suspect item or items are in fact explosive materials. If the screener is unable to make this determination, the bag is diverted from the main conveyor belt into an area where it receives a secondary screening by a screener with an ETD machine.

<sup>46</sup>According to TSA, the machine probabilities of detection are established by the certification standards for each particular model of machine, and machines are not deployed unless they have met those standards.

The CHAIRMAN. Thank you very much. Our next witness is Mr. Gregory Principato, President of the Airports Council International. Mr. Principato?

**STATEMENT OF GREGORY O. PRINCIPATO, PRESIDENT, AIRPORTS COUNCIL INTERNATIONAL—NORTH AMERICA (ACI-NA); ON BEHALF OF THE AMERICAN ASSOCIATION OF AIRPORT EXECUTIVES (AAAE)**

Mr. PRINCIPATO. Thank you, Senator Stevens, Senator Ensign for the opportunity today to share the views of the airport community on aviation passenger and baggage screening. As you said, I'm Greg Principato, President of Airports Council International—North America.

I'm testifying today on behalf of ACI-North America, the American Association of Airport Executives, and our joint legislative organization, the Airport Legislative Alliance. ACI-North America represents local, state, and regional governing bodies that own and operate commercial airports throughout the United States and Canada. AAAE represents the men and women who manage primary, commercial service, reliever and general aviation airports.

Passengers have returned to our skies in record numbers. The increasing numbers of passengers, combined with today's labor-intensive screening system, have pushed the TSA's passenger and baggage screening capabilities to the limit. This has resulted in ever-increasing wait times at passenger screening checkpoints and growing problems with checked baggage screening. Without dramatic changes to today's aviation security model, we will not be able to meet the demands created by the nearly 300 million additional passengers who will be added to our crowded aviation system within the next decade. That's the combined population of the United States and Canada that we're going to add to our system in the next decade.

The airport community, backed by a recommendation of the 9/11 Commission, believes that TSA can enhance aviation security by the permanent installation of in line explosive detection equipment at airports. We need to move oversized, bulky explosive detection equipment, referred to as EDS, out of passenger terminal lobbies and relocate them where we can facilitate in-line solutions. This will improve security screening operations and increase public safety and security.

In-line systems can also improve efficiency and reduce TSA's personnel costs. Ms. Berrick has already alluded to some of that. At the Lexington/Bluegrass Airport in Kentucky, for example, a \$3.5 million investment to modify the terminal for an in-line baggage system has resulted in annual personnel savings of more than \$3 million. I believe in my prepared testimony, I talked about San Francisco and the tens of millions of dollars that have been saved annually there.

TSA has been able to use four screeners for the in-line system in Lexington per shift, rather than the 30 that would have been necessary to screen checked bags using explosive trace detection machines. In addition, the in-line EDS option in Lexington allows for reduced congestion in terminal areas. Unfortunately, the Fiscal Year 2007 budget calls for only \$344 million for EDS installation. While this is an increase of \$49 million over last year's inactive level, it falls far short of the billions that are necessary to fully integrate EDS machines in-line with baggage systems at airports where such a solution makes sense.

It's now four and a half years since September 11, 2001 and the Federal Government does not yet have a long term EDS solution for airports. Only nine airports have received funds for in-line EDS installation from the TSA's Letter of Intent Program in which the Federal Government reimburses an airport for project costs. A few others have received funding from TSA via the other transactions agreement program. Despite the success of the Letter of Intent Program, the Administration has stated that it will not issue new ones. This matter cannot go unaddressed another year. We must

move beyond our current, labor-intensive screening system and adopt a more efficient means of using technology and personnel.

In addition to moving EDS equipment in-line, the airport community believes that a registered traveler program can help the TSA use its checkpoint screeners more effectively. This could help expedite the screening process for all travelers and allow screeners to focus more intensely on unknown and potential threats. It is our hope that TSA will meet the deadlines the agency has announced to have an effective registered traveler program operational later this year.

In the mean time, and considering EDS technologies will not be made available immediately, Congress and TSA should take steps to improve passenger and baggage screening in the short term. These options might include: expansion of the Screening Partnership Program, also known as opt-out, so that it becomes a real alternative for airports; providing Federal security directors more autonomy to work with airports to address unique local situations relative to screening; adoption of screening performance standards so that TSA can more effectively manage limited resources, and keeping TSA focused on its mission of passenger and baggage screening while avoiding mission creep and, I'd say, including the continued staffing of exit lanes.

To conclude, I'd like to thank you Chairman Stevens, Co-Chairman Inouye, and the other members of the Committee for the opportunity to appear before you today. We have great challenges facing the aviation industry and airports stand ready to be a partner in meeting those challenges. We believe that by providing TSA with the long and short term solutions it needs, limited Federal resources can be leveraged to produce enhanced security and better results for America's taxpayer and traveling public. We look forward to working with you and TSA to ensure that our Nation's aviation system is the most secure and efficient in the world. Thank you very much.

[The prepared statement of Mr. Principato follows:]

PREPARED STATEMENT OF GREGORY O. PRINCIPATO, PRESIDENT, AIRPORTS COUNCIL INTERNATIONAL-NORTH AMERICA (ACI-NA); ON BEHALF OF THE AMERICAN ASSOCIATION OF AIRPORT EXECUTIVES (AAAE)

Thank you for the opportunity to share with the Committee the views of the airport community on aviation passenger and baggage screening. I am Greg Principato, President of Airports Council International-North America (ACI-NA). I am testifying today on behalf of ACI-NA, the American Association of Airport Executives (AAAE), and our Airport Legislative Alliance, a joint legislative advocacy organization. ACI-NA represents local, regional and state governing bodies that own and operate commercial airports in the United States and Canada. AAAE represents the men and women who manage primary, commercial service, reliever, and general aviation airports.

I want to thank you Chairman Stevens and Co-Chairman Inouye, for holding this series of hearings on the responsibilities, operations and priorities of the Transportation Security Administration (TSA) in aviation passenger and baggage screening.

Since the TSA's creation, airports have striven to be an active partner with the TSA in meeting its mandates and its mission. We look forward to continuing our work with the TSA and with this Committee to ensure we have the highest level of security as well as high levels of customer service for the traveling public.

As the members of this committee are well aware, passengers have returned to our Nation's skies in record numbers. The increased volume combined with problems inherent in today's labor intensive screening system have pushed the TSA's passenger and baggage screening capabilities to the limit as evidenced by ever in-

creasing wait times at passenger screening checkpoints and by growing problems with checked baggage screening. Without dramatic changes to the aviation security model in use today, we will not be able to meet the demands created by the nearly 300 million passengers who will be added to today's already crowded aviation system within the next decade.

### **Technological Improvements Needed To Move Beyond Labor Intensive Screening System**

Airports maintain that one of the most important ways to improve passenger and baggage screening is to move oversized, bulky explosive detection equipment out of public circulation areas in passenger terminal lobbies to restore capacity in existing terminal facilities and to increase public safety and security. To the extent the Federal Government invests in in-line baggage-screening equipment, TSA's operating costs will be reduced and airlines will see improved baggage services for their passengers through reduced lost and mishandled luggage.

In order to meet congressional deadlines to screen all checked baggage placed aboard commercial aircraft, TSA quickly placed thousands of explosive detection system (EDS) and explosive trace detection (ETD) machines in airports across the country. Many of those machines have been placed in airport ticketing lobbies without an integrated plan to take maximum advantage of their certified throughputs and alarm reconciliation capabilities. The result, too often, is crowded airport lobbies (a safety and security hazard), major backups at security screening checkpoints, and an unnecessarily large number of TSA personnel necessary to operate the equipment.

The airport community, backed by a recommendation of the 9/11 Commission, continues to believe that TSA can enhance aviation security and restore capacity in existing terminal facilities by quickly moving forward with the permanent installation of in-line explosive detection equipment in airports. ACI-NA would note that the Canadian Air Transportation Security Authority (CATSA), working with airport operators, has already paid for the installation and is now operating in-line baggage screening at all major Canadian airports. Unfortunately, the Fiscal Year 2007 TSA budget calls for only \$344 million for EDS installation funding. While this is an increase of \$49 million from the 2006 enacted level, it falls far short of the billions of additional dollars that are necessary to fully integrate EDS machines in-line with baggage systems at airports where such a solution makes sense, and regrettably provides little new money for converting existing, inefficient systems.

To date, only a handful of U.S. airports have received Federal funding for in-line systems. Nine airports—Atlanta, Boston, Dallas/Fort Worth, Denver, Las Vegas, Los Angeles, Ontario, Phoenix, and Seattle—have received funds for in-line EDS installation from the TSA's Letter of Intent (LOI) program and a few additional airports, including Chicago O'Hare and Harrisburg, have received funding from TSA via Other Transactional Agreements (OTAs).

Airports contend that the cost of in-line projects should be met entirely by the Federal Government, given its direct responsibility for baggage screening established in law, in light of the national security imperative for doing so, and because of the economic efficiencies of this strategy. Airports have agreed to provide a local match of 10 percent in the case of large and medium hubs and 5 percent for smaller airports. However, the budget request once again includes a provision that would reduce the Federal share under any Letter of Intent to 75 percent at medium or large hub airports and 90 percent at all other airports. We strongly oppose proposals to increase the local share beyond the levels established in VISION-100.

Of the \$344 million that TSA proposes in the 2007 budget for EDS installment, \$187 million is slated to fulfill existing LOI obligations. While the projects at those airports are necessary and a top priority, that leaves just \$157 million for the dozens of other airports that do not currently have LOIs with the TSA. Although TSA has not yet determined the total cost of installing in-line EDS baggage screening systems at airports, we estimate that costs could range from \$2 million for a category III airport to \$250 million for a category X airport. Nationwide, estimates run anywhere from \$3 billion to \$5 billion. That estimate is being revised upward, as construction costs have skyrocketed recently. In fact, construction cost inflation is now triple the consumer price index.

Despite these overwhelming needs, the Federal Government does not yet have a long-term EDS solution, a full four and a half years after 9/11. It is readily apparent that incremental installments, even at several hundred million dollars a year, will not get projects started at additional airports in the foreseeable future. Clearly, more resources and new strategies are needed to fund projects at the rest of the Nation's airports.

The TSA's task has not been made any easier by opposition from the Office of Management and Budget to issuing additional LOIs to airports for these projects. Budget rules that don't recognize the benefit of one-time capital improvements to save years of operating costs are both "pennywise and pound foolish" and continue to shortchange vital security improvements.

The Federal Government cannot allow this issue to go unaddressed another year. To help find a solution to this persistent problem, airports, airlines and other industry stakeholders are collaborating with TSA on a baggage screening investment study, expected to be completed in the next few months. The study seeks to identify innovative funding and financing alternatives for integrated EDS/out of lobby solutions for baggage systems. We welcome this study and look forward to the results which should provide TSA and airports with creative solutions to this problem.

#### **In-Line Systems Enhance Efficiency And Reduce Personnel Costs**

Although in-line systems require up-front capital expenditures, they pay for themselves in short-order through major reductions in personnel and recouped costs. Last year, the Government Accountability Office (GAO) concluded that in-line baggage screening systems at the nine airports that have received LOI funds from TSA would save the Federal Government \$1.3 billion over 7 years compared with EDS systems that are not in-line. To support GAO's findings, we have examples at the dozen or so airports where EDS systems have been installed to take advantage of their full capabilities and, as a result, dramatic savings have been achieved.

The airports that currently have "in-line" baggage systems report that they have paid for themselves with personnel cost reductions in as little as 16 months. The case of the Lexington Blue-Grass Airport in Kentucky offers a perfect example. At Lexington, a \$3.5 million investment to make the terminal modifications necessary to establish an in-line baggage system instead of a terminal lobby ETD protocol resulted in annual personnel savings of more than \$3 million. The TSA has been able to use 4 screeners for the in-line system per shift rather than the 30 screeners that would have been necessary for the ETD configuration. In addition, the in-line EDS option at Lexington allows for reduced congestion in terminal areas, a result that has improved security and enhanced passenger convenience. TSA can achieve greater savings at large airports. Modeling at San Francisco International Airport, for example, shows savings of tens of millions of dollars annually for their in-line EDS solution.

In addition, in-line screening has also been shown to reduce the rate of TSA screener on-the-job injuries. TSA Administrator Kip Hawley testified last month that he expects the agency to spend \$57 million on workers compensation claims in 2007. By moving equipment in-line, fewer personnel would be needed resulting in fewer injuries and less time off the job, all of which contribute to savings for the TSA.

#### **Registered Traveler**

As we have discussed in great detail as part of previous testimony before the Committee on TSA passenger pre-screening programs, the airport community believes a Registered Traveler program can more effectively calibrate the resource allocation at airport screening checkpoints. Relatively few passengers make up the overwhelming majority of all travel, and we should make every effort to provide a different screening protocol for this group of travelers. Doing so will help expedite the screening process for all travelers and allow screeners to focus more intensely on unknown and potential threats. It is our hope that TSA will meet the deadlines the agency has announced to have an effective Registered Traveler program operational by this summer.

#### **Short Term Steps Needed To Improve Screening**

Recognizing that Registered Traveler has yet to be deployed nationwide and that EDS technologies will not be available immediately, Congress and TSA should consider taking steps to improve passenger and baggage screening in the short-term. These options include:

- Expansion of the Screening Partnership Program (opt-out) so that it becomes a real alternative for airports.
- Providing Federal Security Directors more autonomy to work with airports to address unique local situations relative to screening.
- Adoption of screening performance standards so that TSA can more effectively manage limited resources.
- Keeping TSA focused on its mission of passenger and baggage screening including the continued staffing of exit lanes.

### **Making the Screening Partnership Program a Viable Option for Airports**

While there are a number of airports that are not interested in participating in the Screening Partnership Program under any circumstances, there are others that would like to see the program become a viable option. Unfortunately, the role of local airport operators in the existing program is minimal. The only real authority that an airport operator now has is to raise the issue at the beginning of the process and express an interest in having TSA use a private contractor. After that, airports have virtually no say in how screening operations will be designed. They are not allowed to decide the specific qualified screening company that will operate at their airport, and they have no role in deciding how screening will ultimately function at their facility. Given the existing construct, it is not surprising that only a couple of smaller airports have expressed an interest in opting out beyond the original five SPP pilot airports.

In order to make the opt-out program truly viable, the law must be changed to give airports additional control over the design and implementation of plans for passenger and baggage screening at their individual facilities. Airports must be free, should they so choose, to select and contract directly with the qualified companies with which they intend to work and establish the scope of work rather than wait for TSA to make such decisions. TSA should remain responsible for establishing standards and providing regulatory oversight, but airports should be given the freedom to decide how best to get the job done. We believe that TSA is best suited for regulatory functions while airport operators and their private sector partners are best suited for operational and customer service functions.

Many of these items obviously require statutory changes. As Congress moves forward with its discussion in this area, we would encourage you to consider the following:

- *Airport operators must be given the authority to select and enter into contracts directly with qualified screening companies to screen passengers and property at the airport.* Under current law, airports simply apply to participate in the program and then rely on TSA to select qualified vendors. TSA—as opposed to airports—enters into contracts with those vendors to perform passenger and baggage screening. Airports must be given a more prominent role in the process and more control in managing the contracts and performance.
- *Airport operators must be given the ability to perform passenger and baggage screening directly if they so choose.* The law must make clear that airport operators should be able to qualify as a qualified screening company.
- *TSA should establish a notification process under which airports submit a detailed proposal for passenger and baggage screening for approval.* Under current law, interested airports apply to participate and the process moves on from there without their involvement. Interested airports should be encouraged to work closely with qualified private sector partners and then submit that plan to TSA for approval.
- *Adequate funding must be provided to ensure that airports can cover the costs associated with screening and debt service on security-related capital improvements such as in-line EDS projects.*
- *The program should be expanded to allow interested airports to assume responsibility for screening cargo in addition to passengers and baggage screening.*

This is not intended to be a comprehensive and final list, but it is included for purposes of moving the discussion forward and to give the Committee an idea of some of the specific concerns that a number of airport operators have raised as impediments to participation. If some of these items were to be resolved, we believe that many airports would at minimum give the program a much closer look.

In addition to encouraging additional local involvement and new and creative approaches to screening, an expanded SPP program potentially could be utilized to move forward with the in-line installation of EDS equipment at participating airports. By providing interested airport operators with additional control and a steady and reliable funding stream—either by guaranteeing a base level of continued funding to support screening operations or by alternative means such as a formula that captures key airport characteristics such as passengers and amount of baggage screened—some airports might be willing to move forward on their own with in-line systems. The concept here is to capture and utilize the eventual personnel savings from in-line systems to pay for the initial capital investment and debt that a participating airport would use to fund that system.

Again, even if Congress is able to make all of the changes highlighted here, there are a number of airports across the country that will not be interested in participating in the SPP. For that reason, it is imperative that TSA be encouraged to be

innovative, creative, flexible, and inclusive in its approach to screening regardless of the type of employee who ultimately screens the passenger or their baggage. The keys are local flexibility, airport involvement, and tough security standards that all organizational models are compelled to meet.

#### **Local Flexibility Critical in Addressing Short-Term Problems With Screening**

TSA continues to struggle with recruiting, assessing, hiring, training, and retaining screeners—a fact that is evidenced by large vacancy rates at a number of airports across the country. In Oakland, for example, it is my understanding that the vacancy rate stands at 25 percent, and there are other airports that report similar problems with filling screener staff positions. The problems are exacerbated by high attrition rates for screeners.

In many instances, the strict rigidity of TSA in its hiring and staffing practices seems to be the source of current problems. A number of airports report that many issues could be resolved through more flexible staffing schedules or through the use of additional part-time workers, for example. Unfortunately, there does not yet appear to be sufficient flexibility locally to tackle problems that are inherently local in nature. TSA has made some progress in this area, but we still have a long way to go.

As is the case in so many areas relating to security, one size does not fit all. The challenges in Anchorage with regard to hiring, placing, and maintaining screeners are not the same as they are in Honolulu, Billings, or Los Angeles. Each of these locations has unique local labor markets, unique balances between local and connecting traffic, unique seasonal traffic patterns, unique airport configurations, and so on down the list. To be effective, responsiveness to local airport operational characteristics must be the guiding criterion for the hiring and management of workforces.

#### **TSA Performance Standards**

Beyond additional local flexibility, we believe that it is critical that the agency establish measures and performance standards for passenger processing. While the 10-minute goal established initially by Department of Transportation Secretary Mineta may not be exactly the right standard, it is clear that a reasonable goal must be established and that the TSA and the full array of passenger and cargo processing personnel employed by the Federal Government must be held accountable for meeting such goals. We have goals holding the airlines accountable for meeting their schedules; it is only appropriate and right that we do the same with the Federal workforce. Only by setting a standard can TSA and airport managers know that the workforce size and deployment model for their airport is the appropriate one.

#### **Focusing on TSA's Core Mission**

Given the enormous task that TSA has been given to ensure the security of the Nation's transportation system, the agency must rely on its airport partners to continue performing important functions that we have successfully performed for decades such as perimeter security and access control. Airports are organizations owned and operated by state and local governments and, therefore, have the necessary and appropriate incentives to perform security responsibilities at the highest levels. The primary mission of an airport is to establish and maintain a safe and secure environment for travelers and the general public and to serve the community and the national aviation system by encouraging competitive air service. Airports have always been responsible for the safety and security of their facilities and the people who use them, and this will continue to be so.

Despite those facts, we continue to see efforts to expand TSA's mission into areas traditionally performed by airport operators and to expand the regulatory enforcement personnel at airports. This creates a natural conflict of interest by giving a single entity operational and oversight responsibilities. Clearly, there are a number of ways to better utilize limited TSA resources. Our members have been pursuing every opportunity to refine and improve our working relationship with TSA to avoid duplication and to develop more productive working relationships, and we will continue to do so. We firmly believe that these efforts will ensure that limited TSA resources are reserved for other priorities.

#### **Exit Lanes Should Remain TSA's Responsibility**

One of the priorities that airport operators believe that TSA must continue to focus on is the monitoring of screening checkpoint exit lanes after checkpoint screening activities cease and the monitoring of exit areas that are located away from the screening checkpoint. Unfortunately, TSA has recently undertaken efforts to shift those responsibilities to airports.

TSA has repeatedly cited budget constraints as further justification for shifting this responsibility to airports. We understand the resource crunch facing the agency, and we are all struggling to do more with less. However, TSA has not in any of its presentations on the screener allocation model shown how abdicating its responsibility at the exit areas will help to meet staffing demands at the security checkpoint. Rather, it appears that TSA is choosing to interpret its responsibilities in the airport environment according to what is convenient given today's budget resources. This sets a worrisome precedent and makes us question the consistency of TSA's policy going forward as budgets ebb and flow from year to year.

Monitoring the exit areas after the security screening checkpoint operations cease and at all times at exit areas not co-located to the security screening checkpoint represents a major operational change in the airport environment. It also represents a significant non-budgeted expense that airports must address in the middle of the fiscal year. Yet, TSA chose to announce this major operational change through an action memo without any comment period and with a deadline of only 90 days. To execute such a major and unprecedented operational change, TSA should have issued a proposed amendment to the Airport Security Program or a Security Directive. This would have allowed airport operators to have a formal review and comment period.

We oppose this proposed change in policy and hope that the Congress will prevent TSA from abdicating its responsibilities in this area.

#### **Proposed Cuts to AIP Will Impact Ability of Airports to Address Security, Safety, and Capacity**

I also want to briefly mention the impact the Administration's 2007 budget request will have on airport capital improvements and operations. As this committee is well aware, the Administration has proposed significant cuts to the Airport Improvement Program (AIP). The proposed \$2.75 billion level is \$765 million below the Fiscal Year 2006 funding level and nearly \$1 billion below the 2007 authorized level. This proposed cut represents the largest percentage cut in the entire Federal budget. In addition we are concerned that the Administration's budget calls for funding FAA air traffic control modernization programs significantly below the authorized level, and cuts funding for programs aimed at providing service to smaller communities.

While the FAA budget is not the topic of today's hearing, the proposed cuts in AIP will have a profound impact on the ability of airports to address ongoing safety, capacity, and eligible security needs. In addition, at a time when congestion is returning to our airports and our skies, a reduction of airports' authorized share of the Airport and Airways Trust Fund is ill-advised.

In addition to reducing the amount of discretionary funding available to FAA for high-priority projects, funding AIP at the President's requested level of \$2.75 billion would have a significant impact on the amount of entitlement funds flowing to individual airports across the country. Under current law, a number of AIP formula changes are contingent upon AIP being funded at a minimum of \$3.2 billion. Funding at levels below \$3.2 billion would:

*Reduce Funding to Commercial Service Airports:* Under current law, primary airports—those airports with more than 10,000 annual passenger enplanements—receive an AIP entitlement based on the number of enplaned passengers they have in a given year with a minimum entitlement of \$650,000. When AIP is funded at \$3.2 billion or higher—as has been the case since Fiscal Year 2002—those entitlements double and the minimum entitlement is increased to \$1 million. Unless AIP is funded at a minimum of \$3.2 billion in Fiscal Year 2007, entitlements to primary airports could effectively be cut in half from Fiscal Year 2006 levels and the minimum entitlement paid to nearly 200 airports across the country could be reduced from \$1 million to \$650,000.

*Reduce Funding to Small Commercial and Non-Commercial Airports:* Current law also provides grants of up to \$150,000 to smaller, non-primary airports in years where the program is funded at \$3.2 billion or higher. In Fiscal Year 2006, more than 2,700 airports received funding under this entitlement. Funding AIP at \$2.75 billion would result in the elimination of the non-primary entitlement in Fiscal Year 2007. Additionally, the pool of funding for smaller airports through the Small Airport Fund would be reduced by more than \$150 million. The total amount apportioned to states for use at non-primary commercial service, general aviation, and reliever airports also falls from 20 percent of the total AIP funding level to 18.5 percent of total funds below \$3.2 billion. Certain airports in Alaska that receive a separate entitlement would also be affected by a reduction below \$3.2 billion.

With passenger traffic approaching record levels, airports throughout the country simply cannot sustain almost a \$1 billion reduction in AIP from authorized levels.

**Conclusion**

Again, I'd like to thank the Chairmen and this committee for the opportunity to appear before you today. I have highlighted how the airport community believes limited TSA resources can be leveraged to produce enhanced security and better results for America's taxpayers and the traveling public. We look forward to working with you and the TSA to ensure that our Nation's aviation system is the most secure and efficient in the world.

The CHAIRMAN. Thank you. Mr. Co-Chairman, sorry to start before you got here. Do you have an opening statement?

**STATEMENT OF HON. DANIEL K. INOUE,  
U.S. SENATOR FROM HAWAII**

Senator INOUE. I'd just like to commend TSA for what they've done. I realize that there are shortcomings. I think that we should keep in mind that we haven't had a major terrorist attack since September 11. Since I travel more often than most of my colleagues, I find that the agents are very courteous, but I get swept more often than anyone else. Maybe I'm just too attractive. But I like the vigilance, but I hope you come through with that passenger program where some of us can go through with some dispatch. Thank you.

The CHAIRMAN. Thank you. I think the two of us probably fly more than any Members of Congress, as a matter of fact. And we have sort of been exposed to every portion of your system in one way or another. I think we get more complaints than other members do, also, because we see more passengers and where we live, offshore, in my state, as you know, if you want to travel, you travel by air, whether it's in the state or traveling throughout the United States. We have a very air-minded population.

It does seem to me that airline passengers feel they deserve a little bit more attention because they're the only people in the country that pay for their own security. So they speak up—just this morning I had three more letters that I was going through last evening and this morning, and—along with Senator Inouye, I wonder why haven't we come further in terms of this registered traveler program? Why can't we establish that quicker?

Mr. HAWLEY. Mr. Chairman, we are on track for that. We had the first deadline, January 20, which we met and the industry met. And there's another one coming up in April as an interim and our expectation is to get it—our goal is to have it up and running in June and we've set a date of June 20.

A lot depends on getting the equipment that would be needed for it and work—the big issue right now is working out the security benefit for the security given at the lane. We have—today, in fact, we have some new equipment, some new technology that is being tested at our lab. And depending on that performance, that will have a role in what the security benefits will be. But it is very high on our radar screen and I expect it to go forward this year.

The CHAIRMAN. Will their baggage be handled differently?

Mr. HAWLEY. The checked baggage, no.

The CHAIRMAN. Why not?

Mr. HAWLEY. It actually is not a hold up for the passenger and it is easier to run the system with—or it is better to run the system with our existing EDS equipment, to give it the full treatment. It doesn't take a cost out of the traveling passenger.

The CHAIRMAN. Well, I fail to see that. As a matter of fact, I think we got the—and I didn't put any time on them, so I don't know what to tell them myself, either. I think we get as many complaints from passengers about baggage as we do about the system of check in.

For instance, when a bag has been inspected, we don't know who's inspected it. We get a little card saying TSA's inspected it. Why doesn't the person who's doing the inspection put a little card in the bag that says this bag's been inspected by inspector number 123.

Mr. HAWLEY. I think that has been looked at as a good idea. I will look at that again. We have put a considerable expense into having video cameras to be able to tape it so that we have evidence of what happens in the bag room, so if there are allegations of stealing out of it. But we were in fact reviewing for this hearing and that topic came up as to numbering the inspected by cards and that's something we'll look into.

The CHAIRMAN. Well, let me get to the questions raised by Mr. Principato. Just last evening when I was looking at the news, there was a person that indicated that they went into China, they had, at one place they went into they looked up at a screen and they were checked by eye identification. I thought we were going that direction too.

Mr. HAWLEY. We're looking at biometrics too. The first step will be for airport workers, the access to secure areas, to take the existing background check that we do and add a biometric to it and it would be—the protocol is essentially either iris or fingerprint so that we are rolling out both in the TWIC program, Registered Traveler, and essentially all of our biometric programs are aimed at using both a fingerprint and the iris or either/or because some people can't do one or the other.

The CHAIRMAN. A person who was demonstrating the new equipment came to our offices and showed us just a handheld device that they could take a picture of your eyes now and you'd be identified anywhere in the world that had that same system and once again reproduced a contact with your eyes. Have you looked at those systems?

Mr. HAWLEY. Yes sir, if it's the iris recognition, that is something that we're very bullish on, it's a good system and, in fact, is part of the Registered Traveler Program and that is expected to initially go out for the Registered Traveler folks. The issue is actually putting the readers at the checkpoints so that they are accessible everywhere and working that in conjunction with the airport and the funding.

The CHAIRMAN. I don't believe—

Senator LAUTENBERG. Is that an instantaneous process?

The CHAIRMAN. What?

Senator LAUTENBERG. Is that an instantaneous—

The CHAIRMAN. Pull your mike around.

Mr. HAWLEY. It's virtually, I believe it's sub-second.

The CHAIRMAN. Yes, it is instant. It was shown to us for use in military purposes first though, some time ago. Ms. Berrick, it's my understanding your investigation with undercover investigators smuggled bomb materials past checkpoints, indicated screener technology deficiencies and actually penetrated two major levels of security. Is that right?

Ms. BERRICK. Mr. Chairman, the results of those tests are classified. GAO did do some undercover testing in airports throughout the country and I would be happy to provide you a separate classified briefing on that if you would like more detail on those tests.

The CHAIRMAN. I'd be happy to have the classified stuff, but what can you tell the public?

Ms. BERRICK. What we can say publicly is GAO, in addition to doing our own covert testing, has also assessed TSA's internal covert testing program. TSA has a group of inspectors that also try to get prohibited items through the checkpoints and we've analyzed their covert testing results. What I can say publicly is that for the 2-year period we reviewed between 2002 and 2004 we identified vulnerabilities in passenger checkpoint screening and also in checked baggage screening in airports of all sizes and airports throughout the country.

The CHAIRMAN. Well we are approaching the 5th anniversary of 9/11 and when did you conduct those investigations?

Ms. BERRICK. We analyzed TSA's covert testing results between June of 2002 and June of 2004 and we're in the process of updating that analysis right now, Mr. Chairman.

The CHAIRMAN. We would like to arrange a classified briefing. But what would be more important, I think, to have people understand what the reaction to your inspections were.

Mr. Hawley, what did you do after you got that report?

Mr. HAWLEY. Sure. Well, as the Committee knows, we, this fall, put into place a very major focus on finding IED components at the passenger checkpoints and instituted a massive training program that is ongoing.

I should say with regard to the GAO testing that you referred to, that it has two principle take-aways that I would say comfortably in public. Number one, it reiterates the importance of focusing on IED components and that we agree with and feel very strongly about. The second is it points up a number of things that we've seen confirmed in our own testing, and I believe they were talking about tests in the 20 range. We've done thousands of tests, we do them frequently, we're doing them this week. We do them virtually all the time to keep our data fresh. And the second piece, in addition to the bomb finding is important, is that our supervision and level of personal engagement by the Transportation Security Officer is key, and that we need to get to a point where, rather than opening up a bag of—the TSO is thinking about a checklist, I have to do this, then I have to do this, then I have to do this, they're opening up thinking I've got to find a threat object in here. And make it more accountable to them personally and have them able to use their own personal judgment rather than just saying I followed a checklist and that's good enough.

The CHAIRMAN. I'll ask other questions, but to get back to you Ms. Berrick, we're told that TSA has the highest attrition and

worker injury rates of government and private sector jobs. Have you looked into that problem and made any suggestions for solutions to those two problems?

Ms. BERRICK. We've looked at them as a part of other engagements, but not directly. I can speak first to attrition.

We found that staffing attrition obviously has been a problem for TSA. Their attrition rate for the part-time TSO workforce is about 50 percent. And the attrition rate for the overall TSO workforce is about 23 percent and there has been some increase over the past year. That's caused a problem for the airport Federal Security Directors in making sure they have enough screeners on board to perform the screening function. We have an ongoing engagement right now looking at how TSA allocates TSOs among the airports and we believe that we'll have recommendations coming out of that work to address some of these deficiencies, but attrition certainly has been a problem for TSA.

Related to workforce injuries, we've also identified that that's been difficult for airports because when TSOs get injured, they're not available to staff the checkpoints or screen checked baggage.

The CHAIRMAN. What type of injuries are these?

Ms. BERRICK. It's typically due to lifting heavy baggage, and that could be due to a lot of different factors. This gets back to the importance of having in-line baggage screening systems. When you have stand-alone explosive detection equipment it requires the screener to lift heavy bags, take them over to the machine and put them in. If that equipment's integrated in-line with baggage conveyor systems, it takes away that impact on the screener. They don't have to physically carry the baggage. So in addition to creating a lot of efficiencies with the in-line baggage screening system, it would also help, we believe, the screener injury rate.

The CHAIRMAN. Senator Inouye?

Senator INOUE. I'm sorry. A few days ago, a gang of thieves were uncovered, arrested, they were four screeners stealing valuables from bags. Is this a common occurrence?

Mr. HAWLEY. It's not a common occurrence, but it does occur and it's something that we deal with. It goes to the very fiber of trust that we have with the American public. So we are vigorous at, A, preventing it, and B, if it does occur, enforcing immediately on it. So it is something where we build in safeguards, as I mentioned about the cameras, and I know in Honolulu, that's something that we're working on specifically to give the passengers comfort that their bags, when they are checked, are checked professionally and that nothing is taken. And theft is a problem in the industry and we're not immune to it, but it is something that we take extremely seriously and we have stringent background checks so when it does occur we'll get those people out and get them prosecuted.

Senator INOUE. Are we satisfied with the quality of screeners?

Mr. HAWLEY. I am. I think we have great Transportation Security Officers and what I hear over and over again is the desire to have more training, to be more involved, to have more discretion to use their judgment. What we need to do from our perspective is provide more and better training and I think it was touched on by a number of the Senators in the opening remarks about having the time and the focus to do the job the right way. And I think we have

an excellent source of people and our goal is let's train them and keep them. And if we can do that, then I think our total system performance will go even higher than it is today.

Senator INOUE. I presume you have been studying the technology of other lands.

Mr. HAWLEY. Yes.

Senator INOUE. How do we compare ourselves with say, the British?

Mr. HAWLEY. I think both systems are good and they're a good ally and we meet with them frequently. Our technology is the best in the world, in my opinion. We have the best technology, we use very top technology. Our security protocols are a little bit different from our partners, even in Canada, Mexico, the U.K., and around the world. We have slight variations.

But we've spent a lot of time working with each other to harmonize so there is not a gap between the two security systems. It's something that we work on all the time to see what more we can do to close those gaps.

Senator INOUE. On my last trip to Hawaii, I saw a young lady being handcuffed. She was trying to get some drugs through. How many passengers fail to go through the line properly and get arrested?

Mr. HAWLEY. I'd have to go research that number, but it is not very many. It's very few people who do turn around. And once somebody has presented themselves for screening, then we do have the opportunity to stop them from leaving, and that has happened on a number of occasions. I know it was in the last month or maybe 2 months ago in Philadelphia we had an incident where that occurred. It is not very common, but it is something that we plan for and are prepared for.

Senator INOUE. Well your job is not an easy one. You're always being criticized, but I'm pleased that we haven't had a repeat of 9/11.

Thank you.

The CHAIRMAN. Senator?

Senator ENSIGN. Thank you Mr. Chairman. I have several questions and I want to start by talking about Reno/Tahoe International Airport and the Reveal EDS system. At the Reno/Tahoe International Airport, TSA conducted a successful pilot program of the Reveal system. However, the TSA has yet to incorporate at the Airport these smaller EDS machines that can be installed right at airline ticket counters. We hear so much about the promise of in-line screening, yet very few systems have actually been installed in the field. My question is, when we have this successful pilot program at a smaller airport, why wouldn't we install that technology there and get it done?

Mr. HAWLEY. We're working very hard on getting Reno exactly the right solution and it may or may not involve one particular kind of advanced technology or the other. But it will be some form of that technology. What we're actually looking at right now is having that behind the counters and that we think we can do a more efficient, better job by putting some larger machines in-line with a higher throughput. So it's going to be the best technology and Reno is very high on our plate.

Senator ENSIGN. When you talk about full in-line EDS systems at places like Reno, the cost of installing those are prohibitive because of the modifications that have to be made at the airport. When you have a smaller, more affordable unit that was working there, I don't understand why you wouldn't use it.

Mr. HAWLEY. Yes.

Senator ENSIGN. If it wasn't working, I can understand it. But it was working.

Mr. HAWLEY. It definitely works. It's a math puzzle that says how many bags are you going to run, how much does the machine cost, and the best total deal to the government and to the airport, the analysis has showed a different solution, but it—

Senator ENSIGN. Has GAO looked at this?

Ms. BERRICK. We haven't looked at that specific airport regarding the installation of in-line baggage screening. We are looking at TSA's strategic framework for installing in-line systems in their baggage screening solutions. We know that TSA recently published a framework for a strategic plan where they've outlined some of their future vision for installing in-line systems, which is what we had previously recommended. So we think they're moving in the right direction, but more work remains in this area.

Senator ENSIGN. OK.

Ms. BERRICK. TSA established a task force to look at financing strategies for in-line systems because they are very expensive. But that task force hasn't yet completed their efforts.

Senator ENSIGN. My experience has been that the airports know what is going to save them money. They've done the analysis. The Reno/Tahoe International Airport feels that this Reveal system worked and is their most cost-efficient way to do it. I would encourage you to work with them and to keep us apprised.

I do have another question. Sorry to be parochial here, because I have some other, bigger questions, but I have to deal with these two first. Las Vegas McCarran originally had 42 EDS machines slated for their in-line system. At least from what the airport tells me, they were never given a good reason for why TSA cut down this number to 29 despite McCarran having been built out to have the 42 machines. Now they have 29 EDS machines and they have these 13 extra conveyor belts that are sitting there empty. Do you have an explanation?

Mr. HAWLEY. Yes sir. We've recently added three EDS machines in—at McCarran Airport and I think the third one is being installed next week in the southwest node. So it's my understanding that these new machines will meet the throughput. There was a period where, because of the explosive growth at Las Vegas McCarran that we were under-serving, but now these additional machines—two of them are in place and one of them is coming in next week. So that should be balanced out.

Senator ENSIGN. You're right, the growth is explosive at that airport and it's not subsiding. From all the projections, it's going to continue to grow like that. So I would encourage you, once again, to work with the folks at McCarran because it is already the second busiest origination/destination airport in the United States. So it certainly has a lot of bags going through, a lot of people going through, and it has some major, major concerns.

I have another question that has to do basically with the whole use of employees. We know that you have a cap number. We know that one of the reasons that people have not wanted to lift that cap is because a lot of people think that a lot of the employees are being used inefficiently. Mr. Principato talked about TSA employees manning exit lanes. That's never made any sense to me. I mean, you see that at Dulles. You see it at every place. You all have been up and running for a few years now and those TSA employees are still at exit lanes. It doesn't seem to me that it is a highly skilled TSA employee's job to do that. And on a related note, I was just at Denver International Airport and I see that the TSA employees are helping people out front with their bags. I see this out at Dulles quite often as well. In other words, before passengers go through the security lines we see the TSA employees, and I don't know if that's a common practice or not. I don't see that in my own airport. The airport hires lower paid, not as skilled workers because they're just helping people and getting staff ready to go on the conveyor belt. That doesn't seem to be a job for a highly skilled TSA screener. Could you address that? A third related question has to do with the in-line systems. Maybe GAO has studied this. I don't know if you've extrapolated this out from the seven airports in the GAO study, but if this technology was installed system-wide, at least where we need to at the larger airports, how many of the baggage screeners can we save to be able to shift over into passenger screening? So all of that has to do with TSA employees in general and better utilization of those employees.

Mr. HAWLEY. We agreed to split up the questions.

Senator ENSIGN. OK.

Mr. HAWLEY. Cathy's going to do the last one first.

Ms. BERRICK. Related to installing in line systems for the 9 airports TSA reviewed, they identified they could reduce screeners by 78 percent.

Senator ENSIGN. What is the total number? Can you give me—

Ms. BERRICK. I don't know off the top of my head. I can get that information for you after.

Senator ENSIGN. OK, and did you extrapolate that out?

Ms. BERRICK. No, we didn't. But one of the things we're doing is looking at TSA's strategic plan for baggage screening and we're continuing to monitor how that's playing out. Now that they're installing in line systems, are these screener savings actually being realized?

The other thing I wanted to mention, installing in line systems doesn't make sense for all airports.

Senator ENSIGN. Right.

Ms. BERRICK. Because like you mentioned it's a huge capital investment. It requires a lot of airport modifications. And of those nine airports that TSA studied, TSA identified that they probably would incur a loss at one of those airports from installing the in line systems because it was so expensive to modify the airport.

And if I could address your question on TSOs performing other duties, we are looking at this as a part of our review of TSA staff allocations. We are finding that there are about two thousand TSOs throughout the country that are being used in administrative positions, such as doing time and attendance or uniforms. Not all

of them are doing that full time, but a good portion of them are. So one of the things that we're looking at is how that is impacting the Federal Security Director's ability to staff the checkpoints when they have TSOs performing these other duties.

Senator ENSIGN. OK.

Mr. HAWLEY. OK. On the exit lanes, we totally agree. Where the TSO trained in the transportation security business performs the function of a gate, we think that's not very good use of time. We do, however, have a legitimate security need to stop people coming back in through the exit lane and also, in some airports, that's where the armed law enforcement officers come. So we have a need to have somebody in those cases.

Senator ENSIGN. Yes, but why do they have to be a TSA employee? I don't understand that. It's not like they have to be highly skilled to do that. Nobody comes through. I mean, no one goes back through. Why does it have to be somebody that's highly trained in detection and all of the things that you do at TSA. I don't understand that.

Mr. HAWLEY. I'll just say I agree with you. It does happen, though. But I agree with your punch line, which is manning the exit lanes is not a—

Senator ENSIGN. It's not—and maybe Mr. Principato can take a shot at that if you agree. You all have been doing this for so long. I don't understand why it's still happening.

Mr. PRINCIPATO. Well, to clarify my statement from before, the exit lanes have been TSA's responsibility and we in the airport community believe that that was where the responsibility rested for some of the—some of the reasons that were just discussed. And part of our problem was that when the decision was made to transfer that responsibility to the airports rather than being done in a process that included comment and working with the airport community, it was done—it was done through a memo and we were given 90 days.

Now I'll say that in the time since then, Kip and his folks have been very responsive to our concerns, allowing their Federal Security Directors to work more closely with airport directors and the security folks at the airports to try to figure—try to figure this out. But our basic view remains that this has been a TSA responsibility from the beginning and should remain. So if I didn't make—if I wasn't clear enough before, I apologize.

Senator ENSIGN. Mr. Chairman, I'll just finish with this. I've talked to everybody who's been the Administrator of TSA about this. I've mentioned this possibility and they all have seemed to think that it was at least a reasonable suggestion. We are managing risk. We understand that. Just like when you drive on the highways, you know there's a certain amount of risk involved. You can't eliminate all risk. We will never take every bit of risk out of traveling in any form, whether it's on our highways, on our airways, or wherever it is.

And, as I mentioned before, the terrorists win when we are so severely delayed at airports, when people are aggravated. Your employees deal with it and the couple hour waits all the time. The idea is using random number generators during peak times to take certain people out of line. If we're using the random number gen-

erators, you can't game the system. It'd be computerized. You could take certain percentages of people out of line and just shove them through. That seems to be managing risk. The terrorists are not going to know who gets picked. It would seem to me to be at least a reasonable thing to do, and everybody that's been through my office thought it was reasonable, but I have not seen TSA's work on that, or at least not before the Congress. Have it presented to the Congress. I know that sometimes you all are afraid that we'll come down on it if you do something like that. But it would seem to me that we could manage risk in the same way that we're doing today without compromising security to any significant degree, and still get people through the lines a lot faster.

Mr. HAWLEY. Risk-based we totally agree with, the aspect of random we totally agree with. We're not comfortable on letting anybody just go walk all the way through. But we are adding, and we'll be rolling out over the course of the year, an unpredictable screening component that will be random-based and that we will have some random impact on what screening different people get that will not be predictable.

Senator ENSIGN. Yes, but that's just adding additional screening. That's not taking away.

Mr. HAWLEY. The net effect will be not to slow things down. So it will be to take—

Senator ENSIGN. But the net effect is not going to speed things up.

Mr. HAWLEY. Well, with Registered Traveler, there will be a speed up based on lack of a risk, or less risk.

Senator ENSIGN. Has GAO looked at managing the risk in that regard? You guys have a lot of statisticians on your payroll.

Ms. BERRICK. Yes.

Senator ENSIGN. Have you looked at that at all?

Ms. BERRICK. In all of the reviews that we do at TSA, we always look at programs within a risk-based framework. How is TSA considering threats and vulnerabilities in making the decisions that they make? Right now we do have an ongoing review looking at TSA's development of screening procedures and the modification of those procedures. And TSA makes changes to procedures for a lot of different reasons, such as to improve efficiency and also based on intelligence information.

Our preliminary observation is that their decisions are risk-based. We've looked at intelligence information, we've looked at vulnerabilities at the checkpoint. And we're going to continue to review that. We'll be publishing a report this summer on TSA's efforts related to that.

This particular procedure that Mr. Hawley's talking about is one of the procedures that we're looking at. We're also talking to security experts throughout the country to get their feedback on this unpredictability screening procedure, and how might that be improved? What are their views on how that would work?

Senator ENSIGN. Thank you for your indulgence, Mr. Chairman. The CHAIRMAN. Senator Lautenberg?

**STATEMENT OF HON. FRANK R. LAUTENBERG,  
U.S. SENATOR FROM NEW JERSEY**

Senator LAUTENBERG. Yes, thanks Mr. Chairman.

As usual, you raised timely subjects here at this committee and this one is particularly timely in terms of the interest of the public and what we want to do to protect the public without drowning them in process and interfering with their time frames of getting to their destinations and making their connections. There is a serious problem, and where I come from in New Jersey we've lost 700 of our friends and neighbors in the 9/11 attacks. So this has really struck home, and there are still injuries that are being recognized as a result of that, from respiratory diseases and things of that nature.

So on one hand we say we can't do enough, and I think the Senator from Nevada was certainly correct when he said you can't protect against every eventuality no matter how hard you try. I mean, if someone hit an airplane with a bazooka or something like that it would be a terrible, terrible thing, but certainly these things exist as a possibility. We are, I think, working very hard and a lot of good people want to do the work. I don't know whether the conditions we've set for them encourage them to do their best.

When I looked at the things that I see in—I travel usually twice a week at a minimum by air, short flights from New Jersey or from the New York airports which I also use sometimes. The sky is so full that it's hard for the airlines to maintain their schedules, even after the hassle that you have to go through to get on the plane. I was one of those who supported re-focusing our efforts from the confiscation of small scissors and things of that nature. I always thought it was an effort led by the scissors manufacturer's association. They had a pretty good business going on for a while. But it certainly has speeded things up and when we look at the places that we want to make sure are secure—key checkpoints, I think we want passengers to be able to move fairly quickly to the inside of the airplane.

Now, some time ago, we thought it would be a positive thing to arm the cockpit doors and some had even suggested that we also include cameras in the cabin so that pilots could see visually what goes on in the cabin. Mr. Hawley, are you familiar with that proposal?

Mr. HAWLEY. Yes sir.

Senator LAUTENBERG. What's happened there?

Mr. HAWLEY. It has been suggested and discussed, but when we did our risk-based analysis of where to put our investments, that did not meet the hurdle of extra security added versus the cost that it would be. And that's really where it is.

Senator LAUTENBERG. What would the cost be? Do you know?

Mr. HAWLEY. I don't know, but I remember that we did look at it and that it didn't make the top of the list.

Senator LAUTENBERG. Because that would seem like a relatively small investment. So now we have plastic knives on some airlines—is there a rule on what kind of utensils are allowed in the airplane?

Mr. HAWLEY. Our rule of thumb is no blades. So we've said blades, sharp blades, knives, we do not allow and will not allow.

Scissors four inches or less are allowed. Small tools under seven inches are allowed. And we constantly look at the numbers. We're right around now, probably 20 percent of what we take at the checkpoints are knives and upwards of 75 percent are lighters. So that's really what our—

Senator LAUTENBERG. Right. But is a plastic knife with a—a saw edge pretty dangerous?

Mr. HAWLEY. Well, anything could be used as a weapon. I believe that's not a prohibited item at this point.

Senator LAUTENBERG. Because if one takes a compact disk, digital video disk, or whatever disk and breaks it in half, that's a pretty sharp weapon. And the reason I mention that is there's a degree of discomfort that comes with almost everybody who has to get in an airplane. The pain in the neck of taking off your coat and your shoes and things of this nature. Being felt to be leaning toward the criminal and having to prove that you're not is a harrowing thing. It adds anxiety, et cetera.

And I just wonder, and I'm not for abandoning our security checks, believe me, I was a Port Authority Commissioner in New York and New Jersey, which manages the four airports there, and I am very conscious of safety measures that we have to take. I've talked to air marshals and I see things that are done which are routine, but I'm not sure that they're always necessary.

How many times, do you know of, where air marshals have been called upon into active duty in the last couple years?

Mr. HAWLEY. Well, there's the one incident where they were called upon to fire their weapons in Miami, the unfortunate incident there.

Senator LAUTENBERG. Right. While the plane was on the ground.

Mr. HAWLEY. Correct.

Senator LAUTENBERG. Yes.

Mr. HAWLEY. They are frequently on mission status that does not involve physical interaction and where there are—I have to be careful because most of the work that they do is classified, but essentially, the only physical intervention, I believe, was the incident in Miami. There have been a number of others where Federal Air Marshals have certainly delivered significant security value.

Senator LAUTENBERG. Yes. And I don't want to get rid of the air marshals, I like them and know they perform an essential role. But, again, all of these things have to be examined in their value for the expenditure that it creates. And I wish that we could find a way to make flying a little more comfortable. I think it would kind of ease the national anxiety if we could do it. Two million people a day get in an airplane and two million people a day take their shoes off, and take their jackets off. I understand that you are currently evaluating something called backscatter technology that was going to identify the person without—as if they were clothes-less, that gets up front and personal, I'd say. Is that still in consideration?

Mr. HAWLEY. Yes sir. It's something we're looking at piloting this year. It is a very good, promising technology. It's not ready for widespread deployment across the system. It also has a fairly large footprint at the checkpoint and takes a relatively significant

amount of time to do the scan. So it would not be effective for large numbers of people going through.

Senator LAUTENBERG. Who's going to do the selection of those who get so examined?

Mr. HAWLEY. Well—

Senator LAUTENBERG. We'll let that question go.

Ms. Berrick, the turnover question—I thought there was some interesting consideration, and that is to give people an avenue for growth in their jobs. One of the things that I proposed is an internship for high school students who may want to become TSA screeners to develop a pool of people who have some training and who show some aptitude for it. What would you think of—of something like that?

Ms. BERRICK. I think it's important to look at creative ways to help with the retention and recruitment issue. With TSA it's not just retaining, but also recruiting has been a problem, especially with a part-time workforce. So I think we should look at any ways that may be creative to help correct that problem. We haven't specifically looked at the issue of high school students being trained. We have an ongoing review looking at TSA's staffing issues and we can look at that to see to what extent that might be a possibility. I know there was potential legislation that addressed that, and it did move forward.

Senator LAUTENBERG. Yes. What's the starting wage for a screener and what's the average wage?

Mr. HAWLEY. It's about \$28 thousand a year.

Senator LAUTENBERG. \$28 thousand a year?

Mr. HAWLEY. \$12, \$14 bucks an hour, something like that.

Senator LAUTENBERG. Yep, \$28 thousand.

Ms. BERRICK. I don't believe they've had a pay raise in 3 years, if that's correct.

Senator LAUTENBERG. Now that's a starting wage?

Mr. HAWLEY. Yes sir.

Senator LAUTENBERG. And is that also—there are promotions—are there COLs included for—as people work the job?

Mr. HAWLEY. There is the equivalent of that annually, which is on the order of like 3 percent total with everything added in.

Senator LAUTENBERG. So the average then gets up above the \$28 thousand level. Are they—these people, do they have the traditional fringe benefit programs, healthcare.

Mr. HAWLEY. Full-time, yes, part-time, no. Although we are piloting some areas with the part-time to see if that—obviously that would have a huge impact on part-time retention, which is important to us. It also has a large price tag.

Senator LAUTENBERG. Has a very large price tag, but there's a very clever, very successful company called the—the coffee—

Mr. HAWLEY. Starbucks.

Senator LAUTENBERG. Starbucks that has a—they pay part-timers a part fee for their health care. And it's helped their—they have one of the best retention levels in the country.

And so I close with this, and that is, wouldn't it make sense when taking reservations for flights to get some verifiable source of identification? Social Security number, or a credit card number, no questions beyond that. Do you have an American Express or

VISA or Master, and for how long? That information is instantaneously available and at least you have a basis for identity of the individual and it's often been talked about having some kind of a preferred status for frequent fliers or people who's background you can quickly vet in some way. Has that—has that ever been tried, ever been thought—been reviewed as a possibility?

Mr. HAWLEY. Yes sir. We're moving what we call the Registered Traveler Program that would take background information ahead of time and use that, in addition to a biometric, to give speedier treatment, still some security but not the full, for a person that we know who they are. We also are looking at, as part of our Secured Flight Program, asking for the date of birth in addition to the passenger's name to be submitted that would help us with our watch list checking. But there are, as you know, there are very, very significant privacy issues both in the United States and with our partners abroad that is a very sensitive topic.

Senator LAUTENBERG. Mr. Chairman, one last thing, please. And that is, considering the financial condition of the aviation industry, why on earth are we seeking to increase security fees? The Chairman mentioned in his early remarks about the fact that the airline industry is the one place where people pay for their own security. But to increase those security fees, I can tell you now that that kind of proposal is not going to fly through the Congress. It is an added tax and we spend so much on the infrastructure for aviation and screening and so forth that now, to add a fee on top of that, on top of an industry that's barely hanging on, I don't think is particularly wise.

Mr. HAWLEY. We came up last year with a user fee that was soundly rejected. This year we thought that—

Senator LAUTENBERG. Do the same this year.

Mr. HAWLEY. Well, it was \$2.50 plus \$2.50 and a maximum of \$5 per leg. And what we said was let's just have \$5 a leg, which for people who take two flights is no different. People who only take one, that is an increase. But the maximum does not change. It's still five bucks a one way trip, max ten bucks round trip. So it's the same maximum as it is additionally. It does get us about a billion-three, which is 40 percent of our budget. So to us it's a very significant piece of our funding in a way that is about as non-intrusive as we could come up with to raise that money.

The CHAIRMAN. Would you yield right there? What about people who fly fifty miles on a commuter? Ten bucks?

Mr. HAWLEY. Five.

The CHAIRMAN. As opposed to flying three thousand miles on a cross—intercont—transcontinental plane.

Mr. HAWLEY. The theory is you go through screening once no matter how long the flight is or whether you connect or not. So that was our judgment that we charge for that screening and whatever happens after that, the passenger does pay.

The CHAIRMAN. Well then why don't you exempt from screening all passengers that get on planes that don't connect with an interstate plane? I mean, 70 percent of my people get on planes every day and fly 30, 40, 50 miles. I don't understand that at all. And besides that, I don't understand why you can't find other people

who pay something for security in this country other than airline passengers.

Senator LAUTENBERG. Amen.

The CHAIRMAN. Senator Pryor?

**STATEMENT OF HON. MARK PRYOR,  
U.S. SENATOR FROM ARKANSAS**

Senator PRYOR. Thank you, Mr. Chairman.

Ms. Berrick, if I can start with you, you mentioned recruiting and retention a few moments ago and I think it's a very important line of questions. I am curious, and I'm sorry if I missed your opening statement, you covered this, but I am curious, your impression about some of the staffing shortages. Is it due to a lack of applicants or is it due to a poor process? And one reason I ask that is because we have a staffer in my office who actually applied for a part-time position with TSA back when he was in college and he left college, eventually came to work for me, and 16 months later he finally gets a response from TSA. So I'd like to get your impression on, is it a process issue at TSA or lack of applicants or what?

Ms. BERRICK. I think it's both. And I do think TSA's made improvements in this area. Related to a lack of applicants, this is really a concern for part-time screeners. Just about every airport we visited has had challenges in hiring a part-time screener workforce, which has to do with the pay and benefits, the hours, lack of mass transit to the airports, cost of living, a lot of different factors. So part of that is just the circumstance that TSA's facing at the airports.

I also think part of it is the process. TSA's initial process for hiring screeners was very centralized at the headquarters level. The reason they did that, is primarily because they needed to hire about 50 thousand screeners in a very short amount of time. So it was very centralized. Federal Security Directors at the airports have consistently complained that they didn't have a lot of input. It wasn't real responsive to their needs. So it wasn't satisfying them.

TSA's recently made changes to decentralize the hiring process and we actually went back and talked to some Federal Security Directors at airports and they're pleased with the direction that TSA is moving. They feel that TSA can do more to provide them the flexibility. For example, TSA is creating regional hiring centers around the country, which weren't there before.

So I think it's both process and circumstance. And I do think TSA is making improvements on the process end.

Senator PRYOR. Good, thank you. Mr. Hawley, let me ask you, if I may, and again I'm sorry I arrived to the hearing late, but I want to ask you about the explosive detection system, EDS, which, as I understand it, could save the Federal Government about a billion dollars if it's an in-line system as compared to the more traditional system. And where are we on that and what's the latest on that?

Mr. HAWLEY. Well, we had a little discussion about that earlier, but I think all of us agreed that in-line checked baggage is for large airports, high throughput the way to go for every reason, the efficiency of finding bombs, getting the bags through quickly, and decreasing injuries. So that we all agree on.

It comes down to money, really. And the issue there is TSA pays for the equipment itself, the actual bomb detection equipment. But then the conveyors and all the other associated equipment that goes to make it an in-line systems is up for grabs. Then there's also the maintenance of that system and that's where the dollars come to.

I think it's no surprise that our current—I mentioned in my opening that our economic model needs to be looked at because it is really a business expense that businesses all around the country deal with and somehow manage. And it was the way we had to jump after 9/11 to put the system up that we got to this funding scheme. But it is not going to work for us long term, and it's something that we work very closely with the industry and it's probably our biggest joint issue that we don't have completely solved. So it is something we're working on, we've done studies, we're continuing another effort that will have some ideas with the industry this spring.

Senator PRYOR. OK, Secretary Hawley, thank you. Let me now ask a question—I had a couple of constituents who've written in, I think both these are by e-mail, and one constituent was upset because their teenage son was selected for secondary screening and after it was all done they asked the—a local TSA person why he had been selected and apparently the reason is because he was wearing baggy shorts. Is that—and then they pressed further on that they apparently said that there is, “there are guidelines.” Do you all have a guideline about baggy shorts?

Mr. HAWLEY. Not specifically about baggy shorts, but there are a number of ways that you get referred to secondary screening, including random and including judgment of the TSO and we've added some particular protocols having to do with people bringing explosives in using various places to hide them. That is part of the IED training, is to say, you use your judgment. If you feel that that could be a potential vulnerability, you may use your judgment to request secondary screening.

Senator PRYOR. OK. We have another constituent who went through an airport and apparently was selected for secondary screening and had to go over to another area, but had to leave all of his stuff there and he was concerned that his stuff may not be secure there, someone may pick up something or whatever. Anyway, I think all worked out OK, but as he was talking to the TSA person there he was told, “this is not Burger King, you don't get it your way.” And on one level that's funny, but on another level that's kind of sassy and it's not really what you want to hear from a public servant there working and screening at TSA. And so, really more of a general question on training and that is kind of customer relations. How do you—how do you train your folks to—I know they work long hours and hard days, but how do you train them to always be courteous and—

Mr. HAWLEY. It's part of the training that goes on with the shift change and so it's part of the initial training and it's something that we work on as a part of the security process, that you certainly don't want to anger customers, and everybody realizes it's a stressful experience going through it, so they're trained to diffuse those situations and try—the person may have been making a bad

attempt at humor. But we do want to have the process be friendly to the customer but allow them to do their professional job.

Senator PRYOR. Let me ask one more question on your screeners. As I understand it, you do have a process whereby the TSA screeners who fail an operational test, they'll be required to do some remedial training. Do you know much about that?

Mr. HAWLEY. Yes.

Senator PRYOR. And do you have a sense of the statistics in terms of how many of your screeners do fail operational training and how many times someone can go through remedial training? Do you have a sense of that?

Mr. HAWLEY. It's twice. If they're going to be certified, if you fail it once, you have to pass it the second time. And the overall numbers are quite high, above 90 percent. I forget exactly—

Senator PRYOR. In other words, not over 90 percent fail.

Mr. HAWLEY. No, no, pass.

Senator PRYOR. Yes.

Mr. HAWLEY. And I forget what the number is on the first time through. We're changing the process now to go to a more frequent—this is, right now, an annualized system. We want to go to a quarterly system and continue to change it and not have everything ride on 1 day, but continue to build, test, train, test, train, test, train and make it more cumulative than, essentially sudden death if you don't pass.

Senator PRYOR. OK. Mr. Chairman that's all I have, thank you.

The CHAIRMAN. Sorry about that, are you finished?

Senator PRYOR. I am finished, thank you, Mr. Chairman.

The CHAIRMAN. My apologies. Got another little crisis up here on another subcommittee. But if I may, let me go back to the question of these fees that we have. We have enormous revenue coming in now. Why couldn't it be used—it is fees, it's not taxes. We have jurisdiction over it. Why don't you give us a plan to use that money in a way that you want to use it, directly. It doesn't even have to go to the Treasury under the concept of fees. Parks service takes their money directly, other people take their money directly. Why don't you take this money directly and use it for the function—we're charging people—the airline passengers to support.

Mr. HAWLEY. Essentially a trust fund?

The CHAIRMAN. Yes sir.

Mr. HAWLEY. Yes. I know that that has been looked at and there are major issues governmentwide with that, and—

The CHAIRMAN. Well get ready for it. We're going to do it, because we're getting too many complaints about the fact that these fees are not being used for what we want. You want to increase the fees, that's just merely to increase the flow of cash into the Treasury, not to increase the flow of cash into the problem. Now if you want to increase fees—if the fees you're getting aren't sufficient, we'll consider raising them, but not for the purpose of just showing an increase in the cash-flow to the Treasury.

These are not taxes, they're fees and they should be used for the people who are paying them. So I would hope you'd consider it. I do think that the problems we've had with the pace of development of the program that you administer, I think it's been related to the

amount of moneys we've been able to get to you through the Treasury after the money goes into the Treasury.

I would urge you to take a look at that and tell us why—as I understand it, you do oppose it. We could very easily do it and, as far as I'm concerned, since these fees are there for the purpose of improving airline passenger safety, that's what they should be used for.

Let me go back to the problem of the in-line screening process. Isn't it true that you physically inspect every bag before it goes on that line?

Mr. HAWLEY. It has to be lifted by somebody, but it's not really inspected until it goes through the machine.

The CHAIRMAN. I'm talking about the baggage inspections.

Mr. HAWLEY. The passenger bag?

The CHAIRMAN. Yes. When I check a bag, it's looked at, right? Every one I've checked in recent months has had that little card in it saying this has been opened. So I assume that you've been opening everybody's.

Mr. HAWLEY. No sir. It's only if there's something on the screen that the computer inside recognizes has a similarity to an explosive. And there are common—

The CHAIRMAN. An explosive?

Mr. HAWLEY. Yes sir. It looks at the image and it analyzes it using its high technology and if it looks as if it could be a bomb, it flags it for somebody to go take a look at. And there are a number of common things that could trigger that.

The CHAIRMAN. Well then I think we need some education of frequent travelers such as myself. Now, for instance, I take an old glasses case, and I put in it the things that I don't want flipping around all over the bag, OK? And it's a steel framed glasses case.

Mr. HAWLEY. Yes.

The CHAIRMAN. In it are maybe a small pen knife, some needles and thread that I use just to sew on my own buttons. Now is that going to show up as a bomb?

Mr. HAWLEY. Not likely. However, there is an improvement for this, which is better software that they add to the computer can separate what is more likely to be a bomb from what is less likely to be a bomb.

The CHAIRMAN. Well why can't we publish something to frequent fliers saying these are the things you should not use in packing. Have you done that?

Mr. HAWLEY. We have not done specifically that, but that is something that we'll look into. There gets to be a classified part because we don't want to say this is what we detect, it looks like a bomb.

The CHAIRMAN. No, what—there must be something you can tell.

Mr. HAWLEY. We'll—we'll—

The CHAIRMAN. This week I'm going to go to ten places in 12 days, alright? And every time I get back on the airplane that bag's going to be searched. Every time. Because, I don't know why, but something's in there you want to search. If you just tell me what you're looking for, I won't pack that.

Mr. HAWLEY. I think we could—we could—

The CHAIRMAN. I think every frequent flier feels the same way.

Mr. HAWLEY. Yes.

The CHAIRMAN. Have you thought about that?

Mr. HAWLEY. I am now, so we're—

The CHAIRMAN. Well, I hate to tell you, though, it's not that I want to be excluded, but I would like to be able to pack so I don't require—

Mr. HAWLEY. Right.

The CHAIRMAN.—you to look at it.

Mr. HAWLEY. Right.

The CHAIRMAN. And I'm just traveling, I'm a frequent flier, we're all doing the same thing. Sometimes I throw part of my briefcase in my bag, OK? And it always is somewhere else other than where I put it. So I assume, for some reason or other, the briefcase and the buckles and what not might have attracted it. I don't know. But you ought to think about this. How can a frequent flier pack a bag so that it will not require opening. And you can just look at it and see it's clothes and toothbrushes and shaving cream and deodorant, OK. That's what we normally pack. I would hope you'd try.

Mr. Principato, have you ever sat down with these people to try to work out some of these things you've talked about?

Mr. PRINCIPATO. We have. They've been very open to us and we've worked very closely with them both here in Washington and airport directors with Federal Security Directors.

The CHAIRMAN. Well you made some principle suggestions that I thought made a lot of sense in terms of the equipment and how to bring about some long-term solutions. As we get into this frequent flier program, can you help work with TSA and provide frequent fliers a way to pack baggage so they and the baggage get on the plane without delay?

Mr. PRINCIPATO. We'll do that. We've, in fact, in the past have often helped and worked with TSA to get word out at Christmas time, for example, to get the word out to passengers not to pack wrapped packages and that kind of thing. So we've done that kind of thing before and we'll do that again. Yes.

The CHAIRMAN. Isn't that something. You don't want wrapped packages in bags.

Mr. HAWLEY. In carry on.

Mr. PRINCIPATO. Carry on, yes.

The CHAIRMAN. Oh, on the carry on, I see.

All right. When you talk about these in-line systems to give efficiency and reduce congestion, have you looked at how we might find extra money to invest to accelerate this process?

Mr. PRINCIPATO. Yes. I think if there's any technology that warrants a creative look at that it's this—it's in-line EDS. And actually many of our most active members, Jim Bennett from the Metropolitan Washington Airport Task Force, Lewis Miller from Tampa, Steve Grossman from Oakland are on a task force at TSA right now that meets fairly regularly. Kip can give you more information on how often they meet, but to come up with creative ways to finance moving forward on this in-line EDS which, from our perspective, if we could pick one thing that we ought to do, that would be the thing we ought to do.

The CHAIRMAN. You mentioned this strain because of additional passengers, right?

Mr. PRINCIPATO. Yes.

The CHAIRMAN. And I think you realize that too, Mr. Hawley.

Mr. HAWLEY. Yes sir.

The CHAIRMAN. Well, let me tell you, it's not just the passengers. We've got a whole new generation of planes coming now. I call it the mosquito fleet. They're the small planes that will carry 12+ passengers, not many more.

Mr. PRINCIPATO. Right.

The CHAIRMAN. And there are new jets that are going to enter this. We think there are probably 40,000 coming in in the period you're talking about.

Mr. PRINCIPATO. Right.

The CHAIRMAN. Now hopefully most of them will be over in the private aviation side, but some of them are going to become commuters. Now, I think we have to devise ways to get people on and off those planes quickly. And I do think one of the things we need to do is find ways to determine what Mr. Hawley's looking for in terms of things—I know you don't want to talk about the classification, how they look for it, but—and make certain people don't pack in their bags substances or objects that will look like these things. Have you looked at that?

Mr. PRINCIPATO. Well to—to paraphrase Kip, we are now. And we'll be working with him on that any way we can be helpful, we'll do that.

The CHAIRMAN. Well, until we can get these new technologies, have you looked at the problem of this labor-intensive screening process and the things that Ms. Berrick has mentioned?

Mr. PRINCIPATO. Well we have and the airports are the place where all this happens. And we see the evidence every day. Senator Ensign talked about the—the big crowds in the lobbies and the lines and all that at peak times, which is really evidence that the—that the system is too labor-intensive, not technology-intensive enough and that the balance needs to be—needs to be changed going forward. And so that the ultimate goal, the checkpoint of the future as somebody talked about before would be that at those peak times the lobby would look much like it does now at 10 in the morning where there really isn't a lot going on. People could walk through the checkpoints and, I'm not smart enough to know what the technology would be, whether it's iris scanning or those pictures they're taking or whatever. But people could walk through the checkpoint almost without breaking stride, someday, and a system that's as secure as the one we're aiming for.

The CHAIRMAN. Well, I'm going to get everybody mad at me. I've walked through an airport, it's got ceilings that are 90 feet high, it's got modern facilities all the way along the side, everybody that's got some kind of a business that once they get everything they want in the business, but you go to the gate and guess what, you got a gate that looks just like it did when I came to the Senate in 1968. We've got to find some way to get those passengers through there quicker and the security factor is what's changed in terms of delay at getting through the gate.

I would hope that we'd find some way to get your three agencies together and give us some ideas. Do we need to change laws? Do you need more money? Do you need more money sooner, Mr.

Hawley? It's coming in every day, I don't know why you can't have it available to you every day through a trust fund theory. But—and Ms. Berrick, I appreciate what you're doing in terms of looking at this problem from the point of these people getting injured. That should have a lot to do with the number of people that won't stay—if they see their friends getting seriously injured because of too much weight in these bags.

Ms. BERRICK. That and another impact that it has that isn't readily apparent is the impact on training. When you have screeners that are injured, they're not available to staff the checkpoint, so you have a shortage of screeners as a result and they don't have time to take the required training that TSA requires of them. It has really been a challenge for the airports to just ensure that screeners get the training they need.

The CHAIRMAN. What if I just put a little amendment in one of these bills and said that if you check in a bag that weighs more than 20 pounds you're going to pay an additional fee as a passenger? I mean, the weight of some of these bags, I see these guys and they weigh 250 pounds and they're lifting 100 pounds and put it right over my head. My bag weighs 30 pounds, 40 pounds. Why should we let people carry on bags that weigh more than that?

Ms. BERRICK. Senator, we haven't looked specifically at that, but I think all of these questions are good ones that should be considered.

The CHAIRMAN. And that's got something to do with these injuries? The fact that these bags weigh too much?

Ms. BERRICK. That is correct for screeners related to checked baggage screening. Because the explosive detection systems are not integrated in-line with baggage conveyor systems, screeners or Transportation Security Officers have to physically carry these heavy bags, and that's what's causing a lot of these injuries.

The CHAIRMAN. Well then why don't we charge the people that are bringing those heavy bags more money to screen them?

Ms. BERRICK. That's a good question—

The CHAIRMAN. Have you made that suggestion?

Ms. BERRICK. No, we have not.

The CHAIRMAN. Well, we'll have another hearing somewhere along the line. We want to keep up with this because, again, I think I speak for all the members up here, we get more comments about this system than anything else. And I'm sure you get tired of it Kip.

Mr. HAWLEY. No.

The CHAIRMAN. Well, we'll look forward to seeing you again soon. Thank you all very much.

Mr. HAWLEY. Thank you.

Ms. BERRICK. Thank you.

Mr. PRINCIPATO. Thank you.

[Whereupon at 11:49 a.m., the hearing was adjourned.]



# A P P E N D I X

Coalition for Luggage Security

## LUGGAGE SECURITY—MORE SAFETY, LESS HASSLE FOR AMERICAN TRAVELERS: A PRIVATE SECTOR SOLUTION

by Richard A. Altomare

### Executive Summary

The airline industry has been adversely affected not only by the 9/11 terrorist attacks but also by billions of bags transported by the airline industry each year creating the potential for additional security breaches and continued lost revenue. Several airlines are either operating in bankruptcy status or are on the verge of bankruptcy or collapse. Increases in fuel prices and added security have further contributed costs to this troubled industry. Universal Express, a company that offers worldwide delivery of luggage to consumers, is offering a solution that will not only decrease the security costs associated with airline travel, but also has the potential to create revenue streams and save taxpayers billions of dollars.

Coalition For Luggage Security and Universal Express suggests imposing a user fee for baggage transported for the passengers by the airlines. Passengers would be given a choice of paying a per bag fee for luggage or utilizing alternate methods to transport their luggage to and from its final destination. This will encourage passengers to either cut down on the number of bags they bring with them, or seek alternate sources for getting their bags to the final destination. Passengers have many options, including Luggage Express, which offers luggage collection from home, hotel or business and delivery to consumers' final destination at a competitive price. Various other companies offer similar services or have the ability to do so if the need were to arise. This solution will put the cost of screening on the passengers who utilize the service, rather than imposing the fee on all passengers, regardless of luggage.

The Transportation Security Administration will spend \$1.45 billion on baggage screening in 2005, as indicated on their 2006 budget. Universal Express' solution offers a savings projected between \$550 million and \$1.2 billion, as a direct result of revenue from new available cargo space for commercial usage, refocusing personnel and equipment. This proposal will not only decrease costs, but will increase revenue by opening up cargo space for more commercial usage, it will allow more flight turnaround which will offer more predictability and constant revenue for the industry.

Coalition For Luggage Security and Universal Express' proposal is a simplified, but focused on transportation of baggage for air passengers. It allows for faster check-in times, more on-time flights, and a dependable tracking solution for passengers. The solution will be cost effect to passengers, the airlines, all agencies interacting with the industry, and taxpayers.

### *The Problem*

*Security gaps in the airline industry:* In the aftermath of the 9/11 terrorist attacks a need was exposed for greater security in the air transportation industry. Congress passed the Aviation and Transportation Security Act, which authorized security fees of up to \$10 per round trip per passenger, to be used to generate funds to enhance the security of air travel, through better screening of all passengers and bags. To meet the security mandates, the Transportation Security Administration (TSA) has invested billions of dollars to supply more highly trained security agents and expensive metal and bomb detecting equipment at airport check points for passenger and baggage.

Air travel security has improved, but it falls short of addressing a major source for the security problems and the associated costs—the baggage transported by the airlines for passengers. A security fee based on passengers only suffers from a shortcoming similar to the airline fare structures that fail to recognize the difference be-

tween passengers with and without bags. The current system gives passengers no incentive to limit the baggage they carry. Therefore airlines are spending additional money on baggage screening and transporting unrelated to passenger movement.

*Airline industry losses:* Although the airline industry was deregulated almost 25 years ago, it has not demonstrated that it can distinguish the actual costs associated with baggage handling. The industry transports more than double the number of bags than passengers, incurring enormous labor and equipment cost. Most airlines do not track or adequately recover the cost for transporting baggage, continually pricing primarily on the purpose of travel—either leisure or business. The failure to distinguish the cost of transporting passengers with and without bags, even within these two groups, costs the industry billions of dollars in unrecoverable expenses and is contributing to security gaps in baggage transport.

With approximately 1.5 billion bags transported last year by the domestic U.S. airlines, there are compelling reasons to consider the baggage-handling proposal presented by Coalition For Luggage Security and Universal Express, Inc.

#### *Coalition For Luggage Security and Universal Express' Solution*

Coalition For Luggage Security and Universal Express propose separate security fees for passengers and baggage and an economical solution for transportation of baggage for air passengers. The proposed solution involves separating the baggage from its passengers and encouraging travelers to ship their bags prior to the departure date. This will provide for the bags to be transported in a similar manner as the 5 billion parcels shipped annually by businesses and consumers. The Coalition For Luggage Security and Universal Express' (USXP) proposal calls for utilizing the United States Postal Service and parcel carriers (UPS, FedEx, DHL and others) to handle some of the baggage that is currently handled by the airline industry. The proposal will allow airline passengers the option of carrying and checking bags at the airport, however they will incur a separate baggage charge for luggage transportation and a separate TSA baggage screening security fee.

Enabling a framework of fees for passengers to choose how to handle baggage will allow for an overall economical solution for the transportation of baggage for air passengers. It will encourage use of less expensive means to meet security needs and transportation of bags.

Rather than having to take the baggage through the check-in points and through the security lines, passengers would have a framework of choices for shipping their luggage in advance to reach their destination in time of their arrival at a lower price or carry bags to the airport for transporting by airlines at a premium price. While travelers can ship their bags directly with private carriers, the Coalition For Luggage Security and Universal Express' proposal would further enable the collective bargaining power of millions of travelers to be leveraged for lower cost, faster service, greater security via enhanced visibility, and exceptional customer service for delayed bags.

#### Benefits to Homeland Security—Return Security to the Transportation Industry

- Decline in passenger baggage reduces the prospect of infiltration of terrorist devices onboard airplanes and reduces the chances for security breaches. Managing security measures to protect passengers becomes easier when baggage is separated from its passengers.
- Lack of information on the specific aircraft or trucks used for baggage transportation makes the likelihood of terrorist attacks more difficult.

#### Benefits to Homeland Security—Opportunities for Reduced Spending

The Transportation Security Administration (TSA) protects the Nation's transportation systems to ensure freedom of movement for people and commerce.

- For Fiscal Year 2006, the Homeland Security Appropriations Bill appropriates \$5.2 billion for 4 TSA programs as shown in Table 1: Aviation Security, Surface Transportation Security, Transportation Vetting and Credentialing and Transportation Security Support. Of the total TSA budget, \$4.6 billion is dedicated to Aviation Security. (*Source: Homeland Security Appropriations Bill, 2006*)
- Currently, baggage screeners are limited to 45,000 at 441 domestic airports. (*Source: TSA, 2005*). The security bill for 2006 provides \$3.6 billion to specifically meet the needs of baggage screening in terms of workforce, screener training and checkpoint support and maintenance. This proposal could result in fewer bags being brought to airports, thereby limiting additional expenses needed for screening.
- Reduce demand for baggage screening: Too often, passengers check in two large bags and carry on-board two more. Incurring a charge for transporting bags will

encourage flights, less congestion and an easier flow. This could reduce security-related problems and costs, such as waiting time at the security lines, and matching bags loaded on airplanes with passengers boarding the aircraft. Under the current pricing approach, either the business traveler is paying for the cost of handling such bags or the airline is not recovering actual expenses. A baggage security fee would reward passengers who carry less, could enhance airline security, bring rationale to airfares by eliminating cross subsidies, and improve flow of passengers at airports.

- Faster and enhanced security check-in: There is less opportunity for an error in screening if there are fewer bags being brought to the airport and lines at security checkpoints will move faster.

This would result in savings due to a reduction in screening professionals needed at checkpoints.

The savings could be either used to reduce the size of Federal expenditure or deployed at Amtrak train stations and bus terminals, to reduce terrorist threats in those arenas.

Table 1—Homeland Security Appropriations for TSA—Summary

	Appropriations for 2006
Aviation Security	\$4.98 B
<i>Screening Workforce &amp; Equipment</i>	\$3.6 B
<i>Aviation Direction &amp; Enforcement</i>	\$1.0 B
Surface Transportation Security	\$32 M
Transportation Security Support	\$545 M
Total	\$5.56 B

Source: Homeland Security Appropriations Bill Fiscal Year 2006

#### Benefits to Airlines—Reduction in Costs

Airlines should benefit from lower costs under the proposed approach. Specifically, the Coalition For Luggage Security and Universal Express' proposal for handling baggage could reduce the number of bags brought to the airports and transported by the airlines. Fewer bags handled by airlines could reduce operating costs as follows:

- Coalition For Luggage Security and Universal Express estimates that by enabling a user fee approach, airlines would be able to save or refocus between \$2.5 billion to \$6 billion of labor costs.
- Airlines would be able to reduce the resources used for baggage claims, delayed baggage delivery, and compensation for the passenger's lost baggage.
- Aircraft turnaround could be enhanced. Fewer checked-in bags would provide faster loading of bags on the aircraft at origin and transfer airports. Moreover, a per baggage security fee applied to all bags could help limit carry-on items to only those required for use in flight (such as briefcase, laptops, etc.). This could result in faster boarding of passengers, less damage to overhead bins, more flights from the same crew, and a more efficient cost structure. More scheduled flights for the domestic fleet could save an estimated \$8 billion in operating cost for the airline industry.

#### Benefit to Airlines—Increased Revenue Streams

The Coalition For Luggage Security and Universal Express' proposal could also provide revenue streams for airlines from those bags checked-in at the airport and could produce additional space for revenue-generating air cargo.

- If airlines charged a premium price (about 20 percent for faster same day service) to passengers using traditional check-in over a Coalition For Luggage Security and Universal Express baggage handling charge (using parcel carriers), this approach could generate additional revenues between \$15 and \$27 billion for the airlines, which represents about 12 percent to 21 percent of the annual revenues of airline industry. Currently, the airline industry is running at operating losses of approximately 1.4 billion. This is an improvement over the 10 billion in operation losses reported in 2001. Nevertheless the airlines have lost more money than they have ever made. This has resulted in retained losses of \$7.6 billion and reduced equity of 6 billion (*Source: ATA Annual Airline Report,*

2005). The revenue generated through the Coalition For Luggage Security and Universal Express' proposal could take the airlines from present losses to an estimated profit of between \$14 billion to \$26 billion.

- Additional revenue up to \$2 billion could be generated from surcharges for more difficult and labor-intensive baggage items (such as golf bags, skis, musical equipment, trade show displays) and for certain white glove personalized services (such as handling of baby strollers and car seats at departure and arrival gates). For example, the new Denver airport was built just a few years ago with a separate baggage handling system for skis at an expense of several hundred million dollars. This cost will be recovered from passengers traveling with skis and not subsidized by other passengers.
- The premium price for airlines to provide baggage transportation is still considerably lower than the existing costs of slower service by express parcel carriers. One-way shipping charges for a typical 28 lb. bag via express carriers would range between \$90 and \$130 for a next day express service. Moreover, shipping charges for one-way overnight transportation of two 70-pound bags via express carriers will range from \$300 to \$500 depending on the distance. This demonstrates the value of the baggage service presently provided by the airlines even after implementing the baggage charge recommended by this proposal.
- Baggage already sent to the destination could result in fewer cancellations of travel plans and airlines could gain greater predictability of revenue in terms of seat occupancy and increased load factor.
- Reduced baggage handling implies that the air-cargo bellies would have more space for handling cargo. Depending on the decrease in the baggage handled and the increase in the cargo handling capacity, airlines can generate additional revenue of \$4 billion to \$11 billion annually.
- A baggage security fee on passengers still opting to bring bags to an airport would result in TSA directly recovering its security cost from the passengers imposing the cost. This could save billions of dollars paid to TSA by the airlines to cover the cost of passenger and baggage screening.
- Encourage more business travel: As the airlines recover actual costs of baggage handling from passengers that generate those bags, they will be able to avoid the huge disparity in airfares between the business and leisure traveler. Relating airfare and baggage fare to costs of transporting people and bags respectively should create more rational pricing of business fares, allowing more businesses to generate cost-effective trips, which would allow airlines to handle more passengers and greater revenues for transporting more people than bags.

#### Benefits to Passengers

U.S. taxpayer money is being used for aviation security related to baggage screening alone. Moreover, a significant part of the TSA budget for passenger screening is associated with carry-on bags. The current system places additional cost on the airlines and non-direct cost on passengers. The Coalition For Luggage Security and Universal Express' proposal could generate many benefits for the traveling public:

- More passengers will be encouraged to travel by air with a greater confidence in the security of the transportation network at airports.
- Passengers will endure shorter lines and avoid the unpleasant experience of TSA security guards going through their luggage.
- Less cancellations and increased load factor for airlines could result in fares for business passengers and leisure passengers traveling with fewer bags.
- This proposal would help reduce security fees for some travelers. Currently, the security fee of \$2.50 per flight segment with a maximum of \$10 per round trip is assessed against passengers, even though much of that cost is connected with luggage. A separate security fee for bags would reduce the security fee for passengers to cover just the expenses associated with passenger screening.

Table 2—Domestic Airline Passenger Tax Information

Tax Type***	Rate	Unit of Taxation
Federal Ticket Tax	7.5%	Domestic Airfare
Federal Flight Segment Tax	\$3.20	Domestic Enplanement
Federal Security Surcharge*	\$3.00	Enplanement at U.S. Airport
Airport Passenger Facility Charge**	Up to \$4.50	Enplanement at eligible U.S. Airport

\*Domestic passengers are taxed \$3.20 per Enplanement at a U.S. Airport with a regulation maximum of \$8.00 for a round-trip.

\*\*Passenger Facility Charges (PFC) are federally authorized but levied by local airport operators, who set the amounts (up to \$4.50 per enplanement, to a maximum of two PFCs per one-way trip and four per journey).

\*\*\*The above is in addition to the airlines surrendering to TSA what they would have spent on their security operations: In 2005 that amounted to nearly ½ billion dollars.

- The Coalition For Luggage Security and Universal Express' proposal would result in less time wasted in line for baggage check-in and claim. The economic cost of additional time spent on a roundtrip by the airline travelers is estimated in excess of \$50 billion for 2003.
- Faster turnaround time for aircraft and more consistent on-time arrivals by airlines would help business travelers spend less time at hotels away from home and more time with their families and loved ones.
- Provide better tracking and tracing of bags for enhanced service: Passengers would gain greater knowledge of location of baggage using e-mail and wireless technology to provide estimated time of arrival (ETA) to passengers on baggage in-transit and already delivered at the destination address.
- Lower rates for hotels and rental cars due to greater predictability of occupancy and asset utilization.
- Travel bookings over the Internet could be coupled with an additional option of scheduling a pick-up for passenger baggage, thereby making it easier for passengers to ship their bags via Universal Express and other parcel carriers.

#### Benefits to American Public

- A more robust and secure air and ground public transportation industry would avoid further congestion on highways and roads, would reduce air pollution, and would save tax dollars for other national priorities. The potential for saving time for travelers is immense.
- The Federal Government could find itself in the position of collecting interest on the funds made available to the airlines by the Airline Stabilization Board, since this solution could improve the airlines ability to pay down debt from increased passenger traffic and revenue streams.
- The American public would not have to share as much, if any of the expense of funding airline security through general taxes.

#### Benefits to Transportation Industry

- Creates an opportunity for \$17 billion to \$28 billion in new revenue and a several hundred thousand jobs for the transportation industry.
- The proposal would result in business for baggage handling and transportation activities for 500 million bags. Parcel carriers and the United States Postal Service are well-suited to support this activity.
- Parcel carriers would gain billions of dollars in new revenue for providing pick-up, inter-city transportation, and delivery to final destination. These carriers would generate thousands of new high paying jobs for union workers at USPS and UPS and non-union workers at FedEx and DHL.
- Even with the addition of 500 million bags per year to the existing volume, the parcel carriers and the USPS already have the network and ability to handle the volume without compromising their high level of service, currently achieving 98 percent on-time performance versus the airline baggage claims, *i.e.*, American Airlines—33.2 percent, United Airlines—14.6 percent, Delta Airlines—102.1 percent, Northwest Airlines—80.5 percent, Continental Airlines—55.7 percent, Southwest Airlines—39.2 percent, U.S. Airways—331.5 percent (March 8, 2005 Report on Lost Luggage, *Wall Street Journal*).
- Independent private postal store franchises belonging to a national network, such as UniversalPost, NPC and Postal Annex, would gain new business from handling bags from price sensitive passengers who may prefer to perform the

drop-off and pickup services for an even lower baggage handling rate than Universal Express and other service providers.

#### Benefit to Travel Industry

- Hotels would experience lower cancellation rates and thus achieve higher occupancy rates. This will create opportunity for hotels to offer lower rates to travelers, thereby offsetting the baggage transportation charges being paid by the passengers.
- Currently, there are no standards as to the type of bags that can be checked-in or carried on board the aircraft. This lack of standardization results in higher transportation cost for the airlines, greater risk of the bags being damaged or misrouted, and higher security risks. With TSA approved bags, which can be sold in certain standard shapes and sizes with imbedded Radio Frequency Identification (RFID) chips, there could be greater security and visibility of bags. This could generate new revenue and jobs for the luggage manufacturers and retail stores.
- Travel agencies would also gain from this new opportunity to market baggage shipping service along with the traditional ticket-booking services.

#### Coalition For Luggage Security and Universal Express' Role in this Proposal

- Coalition For Luggage Security and Universal Express believes its business model can compete and provide for collective bargaining power of passengers to be leveraged against lower baggage shipping costs via parcel carriers, enhanced security, and better overall travel experience for the airline passengers.
- It can provide seamless tracking and tracing capability through an integrated system versus the current system that has limited knowledge regarding the location of bags.
- It can help to develop commercial technology for TSA to consider in promoting baggage tickets that passengers can purchase for baggage screening fees and airline charges for carry-on and checked baggage in conjunction with booking of passenger tickets.
- It can help to develop and manage technology that would integrate baggage shipping with travel bookings/hotel reservations to promote advance baggage shipping.
- Coalition For Luggage Security and Universal Express believes it can facilitate and expedite the proposed approach by combining the comprehensive capabilities of the following companies and resources in various areas of luggage logistics:
  - Extensive Industry Knowledge:* Through a partnership with industry consultants, Universal Express has access to one of the most recognized parcel industry experts about various shipping options for bags and at lowest prices with greatest access to state-of-the-art tracking and tracing technology for visibility by TSA and the passengers. This will ensure that the passengers get baggage service at significantly reduced prices than available on their own and with the high on-time delivery service.
  - Luggage Express:* Luggage Express has built a business around handling the transportation of passenger's luggage. Services include pick-ups or drop-offs of luggage from a person's home or business by Universal Express' UniversalPost Network™ postal stations and through an extensive courier network that includes Sky Net Worldwide Express. Luggage Express is a member and sponsor of SATH (Society for Accessible Traveler and Hospitality), is a preferred supplier for A.S.T.A. (Association for Travel Agents), and a member of the N.C.A. (National Concierge Association).
  - Virtual Bellhop:* Virtual Bellhop provides the smart alternative to an archaic and burdensome multi-step process of transporting baggage from doorstep to destination and back again. Virtual Bellhop currently provides service throughout the United States and some International destinations. Virtual Bellhop currently has alliances with American Express, Fairmont Hotel, Tumi, Hertz, and Sabre among others.

#### Benchmarking Against Success of Such a Model in Other Service Industries

Achieving discipline for baggage transportation will only occur through a financial incentive system, which express/parcel carriers have succeeded in doing so with their customers. UPS used to have less than ten special fees in the 1980s and a

pricing structure which cross-subsidized rates between various types of customers. The travel industry, and more specifically the airline industry, have precedents for surcharges and extra fees for certain non-basic and value added services. Examples include:

- Itinerary change fee of up to \$100 per ticket on restricted fares.
- Additional fee for in-flight meals, alcoholic drinks and entertainment.
- Extra charge for transporting live animals, excess baggage by the airlines.
- Special handling fee for unaccompanied children between 5 and 12 years of age.
- Separate fee for child seats and navigation devices by rental car companies.
- Surcharge for telephone usage and other in-room amenities by hotels.

Successful implementation of such approaches by UPS and other parcel carriers has resulted in a pricing structure that provides for lower rates for basic shipping service with new surcharges for extra services (increased from 8 to 30) that are not essential to transportation of a parcel. Consequently, the shipping charges paid today by large customers are just 5 percent higher than in 1987, over 15 years ago. As a result, the overall industry has benefited from the efficiencies brought about by more discriminate pricing.

The Coalition For Luggage Security and Universal Express' proposal builds on these precedents and similar developments in other services such as parcel carriers, banks, and hospitals. Expansion of such surcharges for all but one carry-on bag would result in lower prices for base airfares, as illustrated by the parcel carrier industry. The passengers and consumers of airline service would greatly benefit.

### Summary

The events of 9/11 have led to a greater Federal role in ensuring the security of the air transportation network. Steps can be taken to simultaneously enhance the security of travelers from terrorist attacks and maintain the financial health of the airline industry. Coalition For Luggage Security and Universal Express proposes consideration for assessing security charges per bag and providing incentives for passengers to ship bags in advance via competitive parcel services.

The passenger transportation industry can learn from the success of other industries. The experience of parcel carriers have with allocating revenue and cost to services provided is an example. The result will be improved air transport security, more convenient air travel for millions of passengers, and realignment of long overdue airline industry pricing for industry viability.

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PREPARED STATEMENT OF TIMOTHY D. SPARAPANI, LEGISLATIVE COUNSEL,  
AMERICAN CIVIL LIBERTIES UNION, WASHINGTON LEGISLATIVE OFFICE

### I. Introduction and Summary of Requests for Committee Action

The Honorable Chairman Stevens and Ranking Member Inouye: the American Civil Liberties Union (ACLU), a nationwide non-partisan organization with hundreds of thousands of activists, members and affiliates in virtually every state, respectfully submits this testimony. We appreciate the opportunity to submit this written statement for the record of this hearing on physical screening of cargo and passengers. In the statement, the ACLU first lays out six principles of airline security, and then applies those to particular security measures, rejecting some and endorsing others.

The ACLU urges committee members to embrace the concept that Americans can and must be both safe and free, and that physical screening technologies should be proven to be both effective and minimally intrusive to protect civil liberties, particularly privacy interests. Further, the ACLU urges Congress eliminate support for proposed airline passenger pre-screening programs such as Secure Flight and Registered Traveler in favor of more effective security measures. Certain minimally intrusive technologies focused on addressing a genuine security threat—such as explosives that are not discoverable through use of conventional metal detectors—are preferable to the fatally flawed approaches taken in such pre-screening programs.

The ACLU believes that Congress should apply the following principles in deciding which proposals it would support to increase air travel safety:

#### *Principles of Airline Security*

- New physical security technologies must be genuinely effective, rather than creating a false sense of security.
- The level of intrusion—the degree to which a proposed measure invades privacy—should reflect the level of risk, and, if both are effective, the least intru-

sive physical screening technology or technique should always trump the more invasive technology.

- Given limited Homeland Security funding, Congress must insist that those technologies that reduce the gravest threats be implemented first.
- The physical security technologies employed must be focused on accomplishing the critical objective that authorizes their application—increasing passenger aviation security. Neither TSA’s screening employees nor the machines they operate should be diverted to search for illegal contraband that does not pose a threat to aviation security.
- Minimally intrusive physical screening technologies should be implemented in lieu of ineffective passenger pre-screening proposals, such as Secure Flight and Registered Traveler.
- Security measures should be implemented in a non-discriminatory manner. Travelers should not be subjected to intrusive searches or questioning based on race, ethnic origin, country of origin, or religion. Rather, heightened security measures should be employed where neutral criteria show that a person poses a physical threat to aviation.

Each of these principles is discussed in detail below.

## **II. Congress Must Insist that Each Technology TSA Adopts Satisfies the Principles of Airline Security**

### *A. Principle 1: Physical Screening Techniques and Technologies Must Be Effective, or they Should Not be Utilized or Funded*

Congress should not allow TSA to fund or implement physical screening techniques and technologies that do not substantially advance passenger aviation security. The wisdom supporting this principle is obvious: funds to increase aviation security are limited, and any technique or technology must work and be substantially better than other alternatives to deserve some of the limited funds available. It therefore follows that before Congress invests in the purchase of technologies from private vendors, it must demand evidence and testing from neutral parties that the technologies have a great likelihood of success—*i.e.*, that they prevent terrorists from bringing explosives and weapons onto planes. Technologies with such low probabilities for success unnecessarily infringe travelers’ personal privacy and could harm civil liberties, while doing little to increase passenger aviation security. The ACLU believes that the American people deserve real security if they are to accept administrative searches in the form of physical screening, not just the purchase of machines that provide a false sense of security.

### *B. Principle 2: The Least Intrusive Techniques and Technologies are More Likely to Withstand Constitutional Scrutiny*

Because the application of administrative searches for aviation security burdens the constitutionally protected right to privacy, Congress must insist that all new physical screening techniques and technologies authorized be the least intrusive necessary to accomplish the screening of aviation passengers, their bags, and cargo. The administrative search exceptions to the Fourth Amendment demand that where Congress has a choice between two equally effective technologies, it must only authorize the technology that will least burden the traveling public.

### *C. Principle 3: Prioritize the Techniques and Technologies Targeted at the Gravest Threats*

Focus on the greatest threats first. As TSA Director Kip Hawley has stated, since the commercial airplanes hardened their cockpit doors and terrorists have lost the element of surprise, it is more likely that any terrorists would attempt to blow up a plane with explosives than it is that they will try to hijack a plane to use as a missile. Thus, the greatest threat to aviation security is likely to be from explosives, which cannot be addressed through passenger pre-screening programs. As a result, searches for conventional weapons, while important, are less vital to aviation security than insisting that 100 percent of cargo, luggage, and carry-on bags are screened for explosives. Through the power of the purse, Congress should help TSA to prioritize its efforts to deal with this threat and direct its energies to implement effective technologies that accomplish this goal first.

### *D. Principle 4: Techniques and Technologies that Impact Personal Privacy Must be Narrowly Tailored to Accomplish the Sole Objective of Improving Passenger Aviation Security*

Because physical search techniques and technologies used in domestic air travel affect privacy interests protected by the Fourth Amendment, TSA may only deploy

and Congress should only authorize those techniques and technologies that are minimally intrusive to achieve the goal of increasing passenger aviation security. Repeated tests by various Federal agencies after 9/11 demonstrate that screeners regularly fail to identify weapons and explosives, reminding us that screeners and screening technologies need to remain focused on their core mission: stopping explosives, weapons and their components from being brought or shipped on planes. The ACLU believes that the flying public expects and deserves such a focus, particularly since other Federal, state and local government agencies have other means of searching for and identifying contraband.

*E. Principle 5: Effective and Minimally Intrusive Physical Screening Technologies Should be Implemented While Proposed Passenger Prescreening Programs, Such as Secure Flight and Registered Traveler, Should be Eliminated*

Passenger prescreening programs are not effective, in that they treat everyone as a suspect, nor are they minimally intrusive because they require review of substantial amounts of personally identifiable information to assign passengers a risk assessment. TSA's focus on proposed passenger prescreening programs has diverted scarce resources since 9/11 from those techniques and technologies that could lessen the gravest threat to passenger aviation security by detecting explosives brought on or shipped in planes. This diversion has been costly because proposed prescreening programs—such as Secure Flight and Registered Traveler, with their myriad of constitutional, technological, security and efficiency infirmities—are only slightly closer to implementation than when they were first proposed shortly after September 11, 2001. Yet, as has been made clear by the U.S. Government Accountability Office and Congressional hearings, these programs do not substantially improve passenger aviation security. Further, they are prohibitively expensive and privacy invasive. More importantly, TSA's insistence on moving forward with passenger prescreening likely has led to TSA's failure to implement robust, narrowly tailored explosives and weapons screening of all carry-on bags, luggage, and cargo. Thus, this divergence of attention and resources has been, and continues to be, a potentially dangerous one.

The ACLU once again urges Congress to redirect TSA's efforts toward implementing effective and minimally intrusive physical screening technologies while eliminating authorization for passenger prescreening programs and shifting funding to purchase those narrowly-tailored physical screening technologies. The result will surely be speedier and more certain improvements in passenger aviation security.

*F. Principle 6: Physical Screening Techniques and Technologies May Not Be Applied in a Discriminatory Matter*

Longstanding constitutional principles require that no administrative searches, either by technique or technology, be applied in a discriminatory matter. The ACLU opposes the use of profiles based on race, religion, ethnicity, or country of origin. Profiles can be used in lieu of evidence to subject some passengers to heightened scrutiny. The ACLU opposes the use of profiles based on these factors because they are not only unfair, but are an ineffective means of determining who may be a terrorist. It is unconstitutional to single out any person because of their race, religion, country of origin or ethnicity. It is, however, permissible to, for example, use race in conjunction with other information, if race is one of several characteristics used to describe a particular suspect. The Israeli government discovered that shortly after it devised a profile of the likely terrorist based on race, gender and age, that the terrorist organizations it was trying to stop changed the profile of the suicide bomber. Thus discriminatory profiling techniques to select individuals for secondary screening actually may create a security weakness by focusing too few security screening resources on travelers who do not fit the profile. The ACLU points out that America's sophisticated, patient enemies may well seek to exploit such a discriminatory scheme.

**III. Techniques and Technologies that Fail to Satisfy these Principles Should Not Be Authorized or Funded by Congress**

Some physical screening techniques and technologies under consideration deserve further scrutiny, in part because they fail to satisfy one or more of the principles of good airline security. Some, discussed below, are ineffective or inefficient. Congress should block authorization or funding of these programs unless and until they can be modified to meet the principles and thereby lessen the threat they pose to personal privacy and civil liberties.

*A. Pat-Down Searches Must Not Lead to Groping*

The ACLU has long been concerned about the increased use of pat-down searches post-9/11, but we recognize that secondary screening—perhaps including the use of

pat-downs—may be acceptable when a metal or explosives detection device suggests the presence of a weapon or explosives. Thus, the level of intrusion would be keyed to a risk. Pat-down searches in the absence of other evidence are unnecessarily invasive. Further, TSA's use of pat-downs have led to substantial numbers of complaints about groping of passengers breasts, buttocks, and genitalia. Congress must continue to monitor this situation to ensure that pat-downs only occur when necessary.

*B. Biometric Identifiers Should be Used Only for Airport Personnel and Not for the General Traveling Public*

There have been proposals to use biometric techniques to accurately identify airport personnel who have access to sensitive areas. The ACLU does not oppose using biometric identification techniques with a proven record of accuracy—such as iris scans or digital fingerprints—to identify and authenticate persons working in secured areas of airports. The error rate for those technologies is very low, and using the technology could increase security without compromising civil liberties. This represents a good application of modern technology. Biometric identifiers collected from airport and airline workers should not, however, be used for unrelated purposes.

The ACLU does, however, oppose using this technology for all airline passengers because it is so intrusive. To be effective, the government would have to have the iris scan or digital fingerprint of every person living in the United States and probably that of anyone traveling through America's airways. This would be the high-tech equivalent of creating a National ID system. Doing so would raise grave privacy concerns and, furthermore, it would be unrealistic to expect that high quality images could be easily obtained and maintained on the tens of million of Americans who travel by air.

*C. Facial Recognition Is Not Effective*

Not every technological solution makes sense and will enhance safety. For example, many have proposed using facial recognition technology for several uses in airports. But this modern technology is notoriously inaccurate. One government study, for example, showed a 43 percent error rate of false negatives—a failure to properly identify posed photographs of the same person taken 18 months apart. In other words, persons who should have been matched to their own photo were not. Put another way, if Osama Bin Laden were to stare in the camera at one of our airports, the technology would have no more chance than a coin toss of properly identifying him.

Some have also proposed using video surveillance to scan crowds at airports and compare those images with photographic data bases. Facial recognition technology is even less accurate in those circumstances, and its use will not only create privacy problems for law-abiding passengers, but also will create a false sense of security. Terrorists will not line up to be photographed for security data bases and will quickly learn the techniques for obscuring their identity. There is no reason to jeopardize our privacy for measures that will create a false sense of security.

*D. X-Ray Backscatter Is Highly Invasive of Personal Privacy and Is Not Narrowly Tailored*

There are some security measures that are extremely intrusive and should only be used when there is good cause to suspect that an individual is a security risk. Low-dose X-ray backscatter machines—such as those offered by Rapiscan, Inc. and AS & E—are used by the Customs Service in some airports to search for drugs and other contraband. The ACLU is concerned that these searches—akin to Superman's X-ray vision—have been conducted without good cause and are based on profiles that are racially discriminatory. In addition, these machines are capable of projecting a high-resolution image of a passenger's naked body.

Congress should prohibit X-ray backscatter's use as part of a routine screening procedure. Passengers expect privacy underneath their clothing and should not be required to display highly personal details of their bodies—such as evidence of mastectomies, colostomy appliances, penile implants, catheter tubes, and the size of their breasts or genitals—as a prerequisite to boarding a plane. However, X-ray backscatter technology has tremendous potential to screen carry-on bags, luggage, and cargo.

As discussed above, however, X-ray backscatter technology's routine use likely will lead to increased passenger screening delays and will certainly require subsequent searches for numerous passengers. For example, an image projected by X-ray backscatter that may look like a concealed gun or explosive device carried on a person will require TSA screeners to put the person through: (a) a conventional metal detector; (b) an explosives detection "puffer" machine; or (c) both. Further, even if an object is identified, TSA screeners will then need to pat the individual in ques-

tion down and likely ask them to remove their clothing to verify what the object in question may be. Even the presence of a seemingly innocuously shaped item, such as a prosthetic device or implant, will require subsequent (and potentially humiliating) verification. Thus, X-ray backscatter requires a tremendous invasion of privacy with little speed or efficiency gains. The ACLU, therefore, recommends that Congress not authorize and fund TSA's purchase of X-ray backscatter machines.

*E. Behavioral Profiling Should Not be Utilized in a Discriminatory Manner, Nor Should It Supplant Minimally Intrusive Physical Screening*

Behavioral patterning to select passengers for heightened security is troublesome because it gives so much discretion to screeners that often result in racial profiling. Congress should not authorize TSA screeners to employ secondary screening simply because someone is sweating or wearing a jacket. Oftentimes, people must run to make a flight, and others are chilled easily by air conditioning. Similarly, it will be difficult to train TSA screeners to effectively distinguish between those who—because of their cultural experiences—are less likely to give straightforward answers to authority figures such as TSA screeners wearing uniforms, and those who may be intending to carry out an attack. Such behavioral profiling may be only marginally helpful in identifying someone who poses a threat, but is a practice that is certainly likely to lead to abuse.

The ACLU is not suggesting that TSA screeners ignore their own eyes and instincts when someone is behaving suspiciously. However, the application of behavioral profiling in an environment—commercial air travel—that is highly stressful for many even frequent, experienced, business travelers, must be tempered with concerns for constitutional norms to prevent unnecessary erosions of civil liberties and personal privacy. Rather, any searches or questioning should be based on neutral criteria.

*F. Explosives Detection Devices Should Be Implemented Only When False Positive Signals Can Be Minimized*

The use of particle sniffers that are tuned to detect molecular traces of explosives (puffer machines) hold out the potential for searches that preserve the privacy and dignity of passengers far more than pat-downs, physical searches, and backscatter X-ray scans. If utilized, the ACLU believes they should remain focused on the legitimate administrative purpose of protecting airline safety (as opposed to looking for contraband, such as drugs), and that system should be implemented to minimize false positives and handle them in a way that preserves passengers' dignity. It has been reported that molecular "cousins" of certain explosives that could trigger many false alarms may include such substances as heart medicine and lawn fertilizers. This poses the question: how will those individuals who signal a false alarm be treated, both at that moment and in the future? The ACLU recommends that Congress exercise oversight over the implementation of such "puffer" machines to ensure that the rate of false positives is not unacceptably high so that passengers are given an efficient, non-intrusive means of resolving concerns about a false signal. This is particularly important where a search by TSA screeners shows that neither the passenger nor their carry-on bags and luggage are concealing a bomb or bomb-making components. Congress must insist that if TSA employs puffer machines, it also must set up fair procedures to rapidly ensure that innocent passengers who raise false positives can reach their destination.

#### **IV. Conclusion**

The ACLU recommends that Congress apply the six principles articulated above when considering whether to authorize and fund physical screening techniques and technologies. Those techniques and technologies that do not demonstrably improve aviation security should be rejected. Among the others, the least intrusive means available for accomplishing the goal of reducing the gravest threats to aviation security should be implemented. In recommending Congress' application of these principles, the ACLU supports the use of effective, narrowly tailored security measures to enhance airport safety that have minimal risk to privacy, maximum-security benefit, and reflect the level of risk. The ACLU believes that increased safety need not come at the expense of civil liberties. The ACLU has suggested several measures, such as: increased training for security personnel; heightened screening of airline and airport security personnel; strict control of secured areas of airports; measures to improve security at foreign airports; a neutral entity to which passengers can report lax security procedures; luggage matching of all passengers; and the screening of all luggage, carry-on bags and cargo for explosives and weapons, which would satisfy the principles articulated.

PREPARED STATEMENT OF THOMAS RIPP, PRESIDENT, SECURITY AND DETECTION  
SYSTEMS DIVISION, L-3 COMMUNICATIONS, INC.

Mr. Chairman and members of the Committee,

I am Tom Ripp, President of L-3 Communications' Security and Detection Systems Division. I am pleased to have the opportunity to submit this statement for the record to highlight some of the approaches we believe will assist in strengthening security for the American traveling public while improving efficiency and reducing costs. Before describing the security improvements we believe can and should be made, I would like to briefly discuss the genesis of L-3 Communications, and our involvement in the security field.

L-3 Communications, Inc., was formed in 1997 as a spin-off of Lockheed-Martin and, through a series of strategic acquisitions and product development, has quickly become a leader in supplying defense contractors. In the civil aviation arena, L-3 produces and sells both TCAS, which is an airborne collision avoidance system, and digital flight data recorders, commonly referred to as black boxes." Our security division has been involved in aviation security since the company's inception and successfully developed the eXaminer3DX6000, an explosive detection system (EDS) based on computer tomography, that was certified by the FAA in 1998. It was the second type of EDS certified by the agency for operational deployment at airports. Since that time, we have continued to refine and upgrade our EDS, having made significant strides in detection capabilities, speed, and reliability.

Detection capabilities have been enhanced to achieve both 100 percent and 75 percent TSA certification levels without negative impact to operational throughput or false alarm rates. Continued reliability improvements have resulted in system availability of 99 percent for in-line systems and 98 percent for stand-alone systems. In addition, L-3 was the first to develop a full multiplex network capability that provides for a central screening operation, which allows for optimum utilization of the screener workforce. Today, more than 625 L-3 EDS units are found at airports throughout the U.S. with approximately 425 as stand-alone units and the remaining units deployed as in-line configurations. The L-3 system is well suited for in-line installations and was the first in the U.S. to be integrated into an in-line system in 2002 in Boston. Also, the eXaminer 3DX has been very successful in the competitive international markets winning 100 percent of the competitions for certified EDS systems in 2005. Many of the largest foreign airports such as London, Singapore and Beijing have selected L-3 to provide their security screening solutions.

Although we have achieved considerable success in making improvements to our EDS systems, technology continues to evolve and we recognize that more gains can continue to be made. We are currently working on integration of technologies with current checked baggage products to enhance both detection capabilities as well as reduce false alarm rates in order to increase operational throughput and further reduce manpower requirements. We believe it is critically important that TSA do more to fund and promote work on next generation EDS systems that will address the needs from a systems solution. The ability to evaluate the combination of systems and technologies, which could optimize detection and throughput performance and reduce manpower requirements cost-effectively, could provide improved solutions in the near-term. Our industry continues sensor-based development efforts, which are considered promising for the longer-term.

Despite significant cost and effort, today's aviation passenger and baggage screening systems remain somewhat of a patchwork approach to security that is increasingly costly to maintain, inefficient for passengers, labor-intensive, wasteful of airport terminal space that is becoming evermore congested, and has clear limitations on what can reasonably be expected to be detected. With today's passenger levels projected to increase dramatically over the next several years, something needs to be done to avoid potential gridlock in our terminals. The approaches we recommend that this committee consider are intended to address these shortcomings. In aggregate, we are confident that, if adopted, they will generate significant cost-savings, speed up screening, increase detection capabilities, and free-up airport terminal space that will become increasingly crowded as passenger levels continue to grow.

EDS systems were introduced at our Nation's airports about a decade ago, and a considerable effort was made to increase the numbers following the events of 9/11. Many of these EDS systems are beginning to age. Consequently, they are becoming more expensive to maintain and their capabilities do not match what is available now. Therefore, we recommend that TSA undertake three actions: (1) replace expired manufacturer's warranties with new warranties, (2) refurbish existing EDS with software and hardware modifications to improve their detection, throughput speed, and reliability, and (3) acquire additional, new certified EDS systems for in-line installations at additional airports.

There are considerable benefits that can be achieved by following these recommendations.

First, replacing warranties will provide TSA with known costs to maintain its systems and ensure that covered systems will receive pertinent software and hardware upgrades to keep pace with improvements that are made for new systems. It can also help control TSA staffing since L-3, for example, has approximately 175 field technicians available to maintain and service equipment and a call center that operates around the clock. Second, the refurbishment of existing EDS systems can be done at approximately  $\frac{1}{2}$  the cost of acquiring new systems. Refurbished systems can then be redeployed, at lesser cost, to new in-line configurations or can be installed as stand-alone systems at medium and smaller airports that currently only have trace detection. Trace detection systems are slower than EDS and have less detection capabilities, meaning that even with their reduced detection abilities they will simply be unable to accommodate the passenger growth beginning to occur at these airports. Further, they are labor-intensive. Replacing trace detection equipment with refurbished EDS units will increase security, increase passenger throughput, and reduce considerably the number of screeners required. Third, it is widely acknowledged that in-line EDS configurations are far preferable to stand-alone systems at the larger airports from perspectives of space, efficiency, and improved detection.

Unfortunately, the proposed Fiscal Year 2007 budget proposal falls far short of the funding needed to make progress in installing in-line EDS systems. The funding shortfall holds true for both system acquisition and for the costs of installing systems in in-line configurations. We believe it is critical that TSA and the Congress direct considerably more funding toward the acquisition of new EDS units which, when supplemented by less costly, refurbished EDS units, can help address the considerable gap that exists in installing in-line configurations at 100 of the Nation's larger airports. Additional funding is also required to install these EDS systems in in-line configurations. Experience shows that, in light of cost-savings achieved, installation of an in-line EDS system literally pays for itself in less than 2 years. The sooner we attain the goal of outfitting the large airports with in-line EDS, the sooner we achieve the additional security they offer and the sooner TSA can begin to save significant recurring costs.

The current approach to screening passengers and carry-on baggage has significant inefficiencies, is labor-intensive, and has relatively constrained detection capabilities. In addition, the present methodology of deploying individual technologies as they emerge continues to reduce the overall operational efficiency of checkpoints and oftentimes proves a source of frustration to the traveling public just as they commence their trips. We, therefore, recommend that work be undertaken to develop and pilot an advanced screening checkpoint, which would serve as a platform for additional sensors (including biometrics) as technologies mature. We envision that the checkpoint would employ automated carry-on baggage screening for weapons and explosive detection and a passenger imaging portal that would identify concealed threats and explosives carried by a passenger. These multi-purpose checkpoint systems would be networked together to a centralized screening room that will improve screener performance and reduce the manpower currently required at the checkpoint.

The advanced checkpoint solution would enhance threat detection for both personnel and carry-on baggage. It would also improve throughput to an estimated 300+ passengers per hour, eliminate the need for removal of personal items from carry-on baggage, eliminate the need for separate shoe scanning technology, provide a universally fast and efficient screening process, and dramatically reduce TSA checkpoint operator staffing requirements by up to 40 percent.

We also recommend additional efforts to increase the use of technology in the screening of air cargo. While work continues to refine and improve the known shipper program, we believe that TSA should begin to procure and deploy existing automated explosive screening technology that has already been tested, certified, and piloted for break bulk air cargo screening. These systems could be used to inspect high risk cargo. Additionally, work should be undertaken on the development of next generation pallet screening capabilities. Employment of such technology can help address some of the concerns that have been identified in current cargo screening programs and will enhance security.

We appreciate having the opportunity to share our views with the Committee and look forward to working with you to help identify ways to improve the security of the American traveling public.

PREPARED STATEMENT OF HASBROUCK B. MILLER, VICE PRESIDENT OF GOVERNMENT AFFAIRS, SMITHS DETECTION

### Introduction

Chairman Stevens, Ranking Member Inouye, and distinguished members of the Committee, my name is Hasbrouck B. Miller and I am Vice President of Government Affairs for Smiths Detection. On behalf of Smiths Detection, thank you for the opportunity to submit this written testimony for the record at today's hearing on aviation security and the physical screening of airline passengers.

Smiths Detection, based in Pine Brook, New Jersey (with offices in Connecticut, Maryland and Rhode Island, among other locations) is the world's market leader in creating security solutions for transportation security checkpoints at airports, ports and borders and other points of entry. Our products are used here in the Washington, DC area at Dulles Airport, Reagan National Airport, Washington Metropolitan Area Transit Authority (Metro), and in Congress. Nearly every Federal agency is our customer including the Department of Homeland Security (DHS), the United States Armed Forces, the Federal Bureau of Investigation, the Department of State, and the Federal Protective Service. Around the world, countries such as Israel, the U.K., Canada, Argentina, Hungary, Spain, U.A.E., Japan, Italy, France and China use our forward-looking, highly sensitive security systems to detect explosives, weapons, chemicals, biological agents, and contraband.

What will an airport security checkpoint look like next year, 5 years from now, or even 10 years down the road? Will the checkpoint be positioned even further out from the secure area? Will it require multiple layers of screening? Will it be merged with other modes of transportation? Will all screening be done remotely with no operators onsite? Will carry on luggage be screened with the person? Will passengers travel with biometric passports? Will passengers be screened only at checkpoints, or will they be screened throughout the airport terminal? How will general surveillance technologies complement checkpoint technologies? These are just some of the questions that our R&D team works on every day. Explosive detection portals, biometrics technologies, wireless remote monitoring systems, and other similar technologies seemed more apt for science fiction films a few years ago. Today, we innovate and deploy those technologies to compliment existing screening approaches to increase passenger safety. We agree with Assistant Secretary Hawley's statement at the February 9, 2006 hearing before this committee that the Transportation Security Administration (TSA) must implement a "comprehensive, multi-layered aviation security network" and Smiths Detection has always worked to promote such a vision—a vision that would combine different aspects of explosives detection technologies and monitoring systems that can provide the traveling public the ease and efficiencies of flying while still maintaining an adequate measure of security.

Looking forward to the functionality of the next generation people-screening checkpoint, Smiths Detection is pursuing a number of clear objectives. The primary objectives of cost reduction, automation and sensor fusion are the driving forces in developing equipment for future passenger screening:

- *Cost Reduction*—An aggressive program of cost reduction is underway to reduce the cost of screening an airport passenger. This is being addressed from both the equipment cost aspects and also the operational requirements to reduce the need for operator attendance. The goal is to produce a low-cost automatic detection system for passenger screening.
- *Automation*—The use of built-in intelligence in screening systems is essential to achieving a cost effective and fast throughput checkpoint. Automatic detection development will be based on existing experience and IP in X-Ray screening to produce fast-transit, secure passenger checkpoints.
- *Sensor Fusion*—Several approaches to screening and monitoring passengers are currently proposed. These use diverse technologies and are often complimentary in how and what they detect. A single station passenger screen that combines a variety of checks such as metal and trace detection, imaging, biometrics and passenger ID tracking is an objective for Smiths Detection as the technologies mature and become cost effective.

In a typical "concept of operation," the passenger walks through a secure area that detects explosives and metal objects simultaneously while instantaneously either identifying the passenger through biometrics or checks the passenger with a fully integrated registered traveler data base (or both). All of this is done without disrupting the flow of commerce or changing the footprint of existing checkpoints.

Today, we welcome the opportunity to partner with the U.S. Government and outline our technological innovations so we may continue to assist this committee, Con-

gress, TSA, DHS, and the Administration to meet the challenges we face as a nation in protecting aviation passengers from terrorist threats. We strongly believe that there must be a partnership between the government and industry, with the government clearly promulgating its vision for the future and leading the private sector to that vision.

We have come a long way since the tragic events of 9/11 at our security screening points. Nevertheless, we would all agree that more work needs to be done. Just last week, al-Qaida conspirator Zacarias Moussaoui admitted his alleged plot with “shoe bomber” Richard Reid to hijack a fifth airliner on September 11, 2001, and fly it into the White House. Fortunately, we know that did not occur. But, in 2003, Reid got through a security point with explosives and incendiaries to attempt to create a bomb in his shoe. Also, last week, the Government Accountability Office revealed that two undercover agents carried small amounts of radio active material past border check points in two states—Washington and Texas—enough to make “dirty bombs.” The undercover agents apparently used false documents to persuade border control agents to permit their entry. Next generation technology must be the shield against these real threats. Through innovative technologies, and a comprehensive and multi-layered approach, we believe the technologies that we are working on and deploying worldwide, coupled with existing approaches, will ensure more safety for the flying public when they travel.

#### **Next Generation Technology To Improve Passenger Checkpoint Security**

We commend TSA on its work. TSA has the difficult task of deploying technologies that effectively provide adequate aviation security measures while not disrupting the flow of commerce, and must do so within budgetary constraints. Smiths Detection has over the years, and continues to be, true partners with TSA as we work together to develop products that are both useful and efficient, and consistent with Congress and TSA’s stated goals.

Although Smiths Detection manufactures dozens of security-oriented solutions that improve passenger screening, these written remarks will focus on five particular areas:

- *Biometrics*—Biometrics technologies that enable fingerprints, palm prints, and other identifiers such as iris scans to be screened, and crossmatched with wireless data bases, eliminating human error in identifications process and expediting the ID process in the future.
- *Software Systems*—Software systems that allow airport screeners to connect with first responders and others that could facilitate monitoring of airport travelers with sensors and video cameras connected to remote viewing and recording stations.
- *Millimeter Wave Cameras*—Cameras that detect explosives through detection of differences in energy emitted by the human body.
- *Document Scanners*—Technologies that permit passports and other identification to be scanned for trace amounts of explosives; and
- *Trace Detection Walk Through Portals*—A walk-through tunnel that detects the presence of explosives on the bodies of passengers and which has been deployed at hundreds of airports in the United States, and is currently in operation at other security checkpoints throughout the world.

We believe that some aspect of each of these technologies will be used in the next generation people-screening checkpoint.

##### *1. Biometrics*

Biometrics is one of the cutting-edge technologies for checkpoints and other types of screening that we believe will be part of the next generation solutions. As a leading global provider of biometric solutions, Smiths Detection sees that biometrics solutions have multiple applications in the national security and public safety arenas. Biometrics technology was used at the 2006 Winter Olympic Games in Italy and the 2004 Summer Games in Greece, and is certainly applicable to airport security. Smiths Detection’s experience is that innovative biometrics technology can be used to conduct quick iris scans, or screen a person’s fingerprints (or other “live” data), at access points that is then compared with stored data. The biometric features are then used to permit accredited persons to enter through check points.

In the future at airports, we believe biometric scanners may be useful for:

- *Physical Access Control*—High security areas and buildings can be protected with physical access control systems. An iris scan or an actual print can be compared against information on your ID badge or against a larger data base for one to many matching.

- *Mobile Security*—With wireless products, roving or random ID checks can be carried out by security guards, police, the military and others to match the data captured by either iris scans or fingerprints in the field against a secured or registered traveler data base.
- *ID Management* —With ID management technology, airports can manage who comes and goes from their facilities. By tracking a visitor with an iris scan or with fingerprints, there is no room for human error and security can be warned when the wrong person comes to visit.

### 2. *Software Technology Systems for Command Centers and First Responders*

Another concept that fits within a comprehensive, multi-layered approach is the integration of software systems linked to various technologies within a security checkpoint and beyond. These software systems network large numbers of sensors and video cameras with connections to remote viewing and recording stations. Such networks form the backbone for command and control capabilities that provide security decision-makers with the situational understanding so vital to ensuring the public's safety. Technology could allow us to build a wireless broadband network in our airports that could distribute text, voice, data and video to first responders and local law enforcement in real-time (if need be), or other points of control within the airport boundaries. With such a network, users would be able to communicate securely via Internet Protocol on standard PCs, laptops and handheld devices.

In the airport environment, for example, we envision video encoder/server/recorder systems working together with various physical security solutions to ensure a scalable and secure management platform for digital video distribution and device control, supporting thousands of sensors and simultaneous users. These open architecture systems would support a wide range of robotic camera packages, digital video recorders, sensors and legacy CCTV equipment and could integrate various other security technologies.

Of course, one of the most important issues among this type of system is interoperability among Federal, state and local agencies. Whether transmitted by fiber or wireless connections, the networked camera/video feeds must (and can) be distributed to authorized users without requiring any proprietary hardware or software.

This approach has been utilized for numerous physical security solutions for early warning, detection and response, public safety, port and refinery security and operational safety with the Department of Defense, Department of Energy, DHS, and several major transit systems including the Massachusetts Bay Transportation Authority and Metro. The airport community we believe is next.

### 3. *Millimeter Wave Imaging*

Another innovative technology that we feel could be useful to the airport checkpoint area is millimeter wave cameras. This technology detects threat objects, such as explosives or weapons, by measuring millimeter wave energy. This nonionizing energy can penetrate clothing and many other concealing materials. An explosive strapped to the human body, for example, returns a different amount of energy to the camera than the body around it, therefore revealing the explosive. At the same time, the camera is unaffected by the presence of clothing because clothing is transparent at millimeter wave frequencies.

Again, the technology is complicated, but the function is simple: A passenger would stand before the camera which would measure his body's natural radiation of energy in comparison to a controlled background. If the passenger is carrying an explosive or a weapon, these objects will stand out on the camera's image so that the screener can identify them. The image is processed to provide the passenger with privacy while still facilitating threat detection.

Real-time people screening using millimeter-waves has many benefits:

- *Instant Detection of Threat Objects*—When a person is imaged using a real-time millimeter-wave camera, the operator receives instantaneous feedback on the presence of any potential threat items that may be concealed by the person's clothes. Concealed objects appear as a lighter/darker contrast against the body background. Because the information is provided as an image, the operator can pinpoint the location of the suspect item and follow-up with a directed search procedure to investigate the object in question.
- *Safety*—Millimeter-wave imaging uses a low energy, non-ionising region of the spectrum to gather information on concealed threat objects. It is harmless in terms of human safety—there is no health implication for either subject or operator.
- *Identification of Multiple Material Types*—In addition to providing location information on possible threat items, millimeter-wave imaging can also detect a

wide range of material types. This is a significant advance on present-day checkpoints that only screen people for metal. Dangerous weapons and materials such as ceramic knives and explosives that would pass undetected through a magnetometer will be identified using a millimeter-wave imager.

- *Rapid Throughput* —The screening procedure using a real-time millimeter-wave imager typically takes between 5 and 10 seconds. The instantaneous availability of information on the person as they are being screened means the operator can make an on the spot assessment to pass or further investigate an individual. These features combine to ensure a rapid screening procedure and a fast transit time for passengers at the checkpoint.

Millimeter wave imaging employs cutting-edge technology that has matured to the point where TSA and Smiths can once again begin a collaborative effort to implement this technology at various test airport passenger checkpoints throughout the United States. We envision a pilot project where the passenger enters a secure area where they are requested to place their luggage on the belt of an X-ray system. The passenger is also asked to remove all items from their clothing and to put these also through the X-ray system. The passenger is then screened by a mm-wave imaging system (with integrated metal detector) and if any bulk object is detected underneath the clothing, they are automatically asked to remove this and put it again on the X-ray. This procedure could be repeated twice until the passenger is cleared or, if not cleared, an operator is alerted.

Under the above scenario, we believe that such an approach may reduce the number of operators required to run the checkpoint. A majority of the cost of operating a checkpoint is “Operator Time,” so the airport operator may achieve considerable savings for the total checkpoint running costs.

#### 4. Document Scanners

Another technology that is yet to be utilized fully although it has been deployed in limited circumstances is the document scanner. Document scanners allow detection and identification of traces of over 40 different explosive substances in a rapid eight-second period by simply swiping passports or other travel documents over a sample disc, or using an optional swab sampler. With a flip of a switch, the sample disc is automatically brought into the detector for analysis. Screeners at airports would have the technology to trace explosives on documents, such as passports, visas, or airline tickets.

Combined with the other “layers” of security, document scanners add yet another forward-looking approach to authenticating individuals, detecting explosives, and mitigating against security threats.

#### 5. Explosives Detection Portals

Finally, all aviation checkpoints should have an explosive detection portal. Although not necessarily new, such portals were developed in collaboration with the FAA, TSA, and the Sandia National Laboratory in response to the general interest in providing a full body, non-intrusive explosive screening method for use on personnel at checkpoints in high traffic volume environments. We believe such portals have proven to be an effective and efficient system that complements proven technologies with cutting-edge improvements to create an efficient and reliable detection system.

Despite the complexity of the technology behind the device, it is fairly simple to describe and understand its operation. As you may know, the passenger steps into the portal for a period of only seconds. There are no true doors that must open or shut, it’s more like walking into and stopping in a conventional metal detector. Once the passenger is in, the portal’s gentle puffs of air dislodge any particles trapped on the body, hair, clothing and shoes. These particles are then directed into the instrument for analysis. The passenger then continues through the security process. The time in the portal takes only seconds—IONSCAN® technology combined with pre-concentration technology developed by Sandia National Laboratories allows for the high throughput of screening up to six people per minute. Trace amounts of up to 40 substances can be detected and identified in seconds. Results are displayed in an easy-to-understand fashion.

We highlight the explosive detection portal not only because it uses a proven effective technology for contraband detection but also because of the collaborative effort between Smiths Detection the FAA/TSA to implement its use. In our opinion, this

effort reflects the proper function of TSA in turning to the private sector to solve a public problem.<sup>1</sup>

### Conclusion

Mr. Chairman, Smiths Detection is constantly working on new generation technologies that will greatly assist TSA and DHS in achieving its stated goal of improved aviation security. We would like to partner with this committee to provide more information on our reliable and cost-effective means to detect the presence of explosives and other contraband on passengers, in luggage, and in cargo. Tests have established that Smiths Detection's technologies improve passenger safety without disrupting passenger flow and we are continually working to ensure that passenger flow is as efficient as possible while maintaining an effective checkpoint process. Smiths Detection appreciates the opportunity to submit testimony before the Committee and looks forward to working with the Committee members in continuing to implement its technologies.

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### SUPPLEMENTARY INFORMATION SUBMITTED BY HON. EDMUND "KIP" HAWLEY

Mr. Chairman, with respect to the question from Senator Lautenberg regarding whether our Transportation Security Officers (TSOs) participate in the traditional fringe benefit programs, I would like to supplement my answer. All TSA employees under permanent appointments, including TSOs, are eligible for benefits including leave, retirement, and health and life insurance coverage. Part-time employees under permanent appointments, including TSOs, are eligible for benefits on a pro-rated basis. Our retention pilot program will offer part-time TSOs at certain airports fully subsidized benefits.

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### WRITTEN QUESTIONS SUBMITTED BY HON. DANIEL K. INOUE TO HON. EDMUND "KIP" HAWLEY \*

#### Explosive Detection Systems (EDS)

*Question 1.* It has been reported that at the nine airports where the TSA has issued Letters of Intent (LOIs) to begin moving EDS equipment "in-line," that the TSA will recover its initial investment in in-line systems in just over a year and save \$1.3 billion over 7 years through reduced labor costs. Is it your belief that in-line EDS will save money while strengthening security at a number of airports that do not currently have it? Do you plan on more aggressively seeking funding for in-line EDS or do you believe the current stream of funding is appropriate?

*Question 2.* At many airports where they believe the placement of in-line EDS is justified, including Honolulu International Airport (HNL), the airports themselves are already working to construct full or partial in-line EDS systems in their facilities. How is TSA assisting in this effort? Will funds be available to help pay for some of the costs for such airports that establish staff and costs savings through the implementation of EDS in-line?

#### Screeener Workforce

*Question 3.* Since the TSA was created, the issue of the proper levels of screeners needed at individual airports and nationally has been debated by all of the stakeholders involved. Has your Screeener Allocation Model provided the necessary guidance for TSA to determine an absolute figure for the number of screeners you need nationally? Have Federal Security Directors been able to properly implement you recommendations? Are you comfortable with the current cap of 45,000 full-time employees? Have you been able to meet your needs with the level of funding provided in Fiscal Year 2006? Is the use of 20 percent Part-Time Screeners in the SAM realistic? Do Part-Time screeners have a higher attrition rate?

*Question 4.* The TSA has been using a National Screening Force to provide screening support to all airports in times of special need. How often does the National Screening Force get utilized? Under the new Screeener Allocation Model will this National Screening Force still be necessary? How many FTEs are currently utilized by the National Screening Force? Have you ever performed a cost-benefit analysis of the National Screening Force?

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<sup>1</sup> It is worth noting, however, that this collaborative effort took nearly 10 years from its inception to deployment.

\* Response to written questions referred to were not available at the time this hearing went to press.

*Question 5.* The attrition rate for screeners has been noted as detrimental to the public's demand for a Federal, professional, career screener workforce following September 11, 2001. Do you believe that the exemption of TSOs from the labor law protections afforded other Federal workers deprives TSOs due process in the face of adverse personnel actions? Some have argued that it resulted in the ability of TSA to fire TSOs with relative ease for almost any alleged infraction, regardless of proof or fairness which has directly contributed to the current attrition rate. Do you believe that the lack of collective bargaining rights has led to lower morale among the screener workforce? For each year of the TSA's existence please provide the numbers of TSOs who were involuntarily terminated. Please provide the reason for the involuntary termination and airport.

*Question 6.* Is it accurate that any discipline less than a 15-day suspension is handled within an airport with no outside or independent review? What efforts have TSA made to ensure that the discipline meted out at airports is consistent with TSA policy and the agency mission? What efforts have been made to ensure that discipline has not been arbitrary, capricious, and/or retaliatory? What training do airport management, *e.g.*, Federal Security Directors, Assistant Federal Security Directors, Screening Managers, receive to ensure that they understand agency policy on discipline? What training does airport management receive to ensure that they understand the purpose and policy goals behind discipline?

*Question 7.* Recently released Department of Labor statistics show that 29 percent of airport screeners were injured on the job in 2005, a rate higher than any of the other 600 jobs tracked by the agency and over six times higher than the injury rate for the rest of the Federal workforce. Do you believe this high injury rate has affected both the high attrition rate for TSOs, and the TSA's ability to adequately staff screening stations? What is the TSA policy for assignment of light duty either following the return of a TSO from a work-related injury, or otherwise upon the recommendation of the worker's physician? For each year since the creation of the TSA, how many TSOs have been terminated for reasons of being unable to perform the duties of a TSO following a work-related injury?

*Question 8.* The Occupational Safety and Health Administration (OSHA) has investigated and reported on the workplace hazards faced by TSOs at various airports around the country. Yet when TSOs request a copy of these reports they have been told by OSHA that airport FSDs have declared the entire report as "Sensitive Security Information" and denied access. What oversight does TSA exercise regarding whether OSHA reports should be deemed "Sensitive Security Information?"

*Question 9.* It is my understanding that the TSA has failed to apply the veteran's preference in promotion and reduction-in-force decisions, and unlike other Federal agencies, has only applied the veteran's preference to those who retired from the military, denying the preference to the majority of veterans who leave active duty before retirement. TSO National Guard and Reserve personnel returning from service in Iraq, Afghanistan and other foreign posts have reported that they have been denied promotions in violation of the Uniformed Services Employment and Reemployment Act of 1994 (USERRA). What is the rationale for the TSA's seemingly restrictive definition and application of the veteran's preference? Are individual FSDs permitted to ignore USERRA as it applies to TSOs returning to their positions following active duty?

#### **Next-Generation Technology**

*Question 10.* It seems various components of screening technology, while likely improving security, would also require a great deal more manpower to utilize. When the agency indicates new technology may be available in about 2 years, do you mean an integrated system for checkpoints or just the hardware? To date, how much progress has been made in developing an integrated checkpoint of the future as required by the Intelligence Reform and Terrorism Act of 2004 which passed Congress a little more than a year ago? Have you begun to consider the cost of such technology? Do you plan to aggressively seek funding for technological improvements?