AUTHENTICATED
U.S. GOVERNMENT
INFORMATION
GPO

INSTALLATION OF IN-LINE BAGGAGE SCREENING SYSTEMS: INCREASING SAFETY AND EFFICIENCY FOR TRAVELERS TO AND FROM OUR NATION'S CAPITAL

HEARING

BEFORE THE

COMMITTEE ON GOVERNMENT REFORM

HOUSE OF REPRESENTATIVES

ONE HUNDRED NINTH CONGRESS

SECOND SESSION

FEBRUARY 17, 2006

Serial No. 109–123

Printed for the use of the Committee on Government Reform

Available via the World Wide Web: http://www.gpoaccess.gov/congress/index.html
http://www.house.gov/reform

U.S. GOVERNMENT PRINTING OFFICE

26–330 PDF WASHINGTON : 2006

For sale by the Superintendent of Documents, U.S. Government Printing Office
Internet: bookstore.gpo.gov Phone: toll free (866) 512–1800; DC area (202) 512–1800
Fax: (202) 512–2250 Mail: Stop SSOP, Washington, DC 20402–0001

COMMITTEE ON GOVERNMENT REFORM

TOM DAVIS, Virginia, *Chairman*

CHRISTOPHER SHAYS, Connecticut
DAN BURTON, Indiana
ILEANA ROS-LEHTINEN, Florida
JOHN M. MCHUGH, New York
JOHN L. MICA, Florida
GIL GUTKNECHT, Minnesota
MARK E. SOUDER, Indiana
STEVEN C. LATOURETTE, Ohio
TODD RUSSELL PLATTS, Pennsylvania
CHRIS CANNON, Utah
JOHN J. DUNCAN, JR., Tennessee
CANDICE S. MILLER, Michigan
MICHAEL R. TURNER, Ohio
DARRELL E. ISSA, California
JON C. PORTER, Nevada
KENNY MARCHANT, Texas
LYNN A. WESTMORELAND, Georgia
PATRICK T. MCHENRY, North Carolina
CHARLES W. DENT, Pennsylvania
VIRGINIA FOXX, North Carolina
JEAN SCHMIDT, Ohio

HENRY A. WAXMAN, California
TOM LANTOS, California
MAJOR R. OWENS, New York
EDOLPHUS TOWNS, New York
PAUL E. KANJORSKI, Pennsylvania
CAROLYN B. MALONEY, New York
ELIJAH E. CUMMINGS, Maryland
DENNIS J. KUCINICH, Ohio
DANNY K. DAVIS, Illinois
WM. LACY CLAY, Missouri
DIANE E. WATSON, California
STEPHEN F. LYNCH, Massachusetts
CHRIS VAN HOLLEN, Maryland
LINDA T. SANCHEZ, California
C.A. DUTCH RUPPERSBERGER, Maryland
BRIAN HIGGINS, New York
ELEANOR HOLMES NORTON, District of Columbia

BERNARD SANDERS, Vermont (Independent)

DAVID MARIN, *Staff Director*
ROB BORDEN, *Parliamentarian*
TERESA AUSTIN, *Chief Clerk*
PHIL BARNETT, *Minority Chief of Staff/Chief Counsel*

CONTENTS

	Page
Hearing held on February 17, 2006	1
Statement of:	
Null, Randy, Ph.D., Assistant Administrator for Operational Process and Technology, Transportation Security Administration; James E. Bennett, president and chief executive officer, Metropolitan Washington Airports Authority; and Timothy L. Campbell, A.A.E., executive director, Baltimore/Washington International Thurgood Marshall Airport	10
Bennett, James E.	16
Campbell, Timothy L.	23
Null, Randy	10
Letters, statements, etc., submitted for the record by:	
Bennett, James E., president and chief executive officer, Metropolitan Washington Airports Authority, prepared statement of	19
Campbell, Timothy L., A.A.E., executive director, Baltimore/Washington International Thurgood Marshall Airport, prepared statement of	26
Cummings, Hon. Elijah E., a Representative in Congress from the State of Maryland, prepared statement of	49
Davis, Chairman Tom, a Representative in Congress from the State of Virginia, prepared statement of	3
Mica, Hon. John L., a Representative in Congress from the State of Florida, prepared statement of	46
Null, Randy, Ph.D., Assistant Administrator for Operational Process and Technology, Transportation Security Administration:	
Strategic plan	35
Prepared statement of	12

INSTALLATION OF IN-LINE BAGGAGE SCREENING SYSTEMS: INCREASING SAFETY AND EFFICIENCY FOR TRAVELERS TO AND FROM OUR NATION'S CAPITAL

FRIDAY, FEBRUARY 17, 2006

HOUSE OF REPRESENTATIVES,
COMMITTEE ON GOVERNMENT REFORM,
Dulles Airport, VA.

The committee met, pursuant to notice, at 10:15 a.m., at the Conference Room in the Airport Conferencing Suites Lower Level Baggage Claim Area, Dulles Airport, Hon. Tom Davis (chairman of the committee) presiding.

Present: Representatives Tom Davis, Watson, and Norton.

Also present: Representative James Moran of Virginia.

Staff present: Jennifer Safavian, chief counsel for oversight and investigations; Brooke Bennett, counsel; Rob White, press secretary; Drew Crockett, deputy director of communications; Teresa Austin, chief clerk; Sarah D'Orsie, deputy clerk; Michael Galindo, research assistant; Michael May, legislative assistant; Bill Womack, legislative director; and Michael McCarthy and Kimberly Johnson Trinca, minority counsels.

Chairman TOM DAVIS. Before we begin today I would ask unanimous consent to allow Mr. Moran to participate in today's hearing. Without objection, so ordered. Jim, welcome. We are glad to have you here, as always.

Mr. MORAN. Thank you, Tom. Thank you. Nice to be with you.

Chairman TOM DAVIS. The committee will come to order. Good morning. Welcome to today's hearing on the in-line checked baggage screening systems.

Immediately after the September 11th, attacks, Congress mandated explosives screening for all checked baggage by December 31, 2002. To meet this tight deadline the Transportation Security Administration deployed explosives detection systems and explosive trace detection machines in airport check-ins around the country.

As we have just seen upstairs, the stand-alone EDS machines are large and create congestion in airport terminals. They require substantial human operation and can process at best 180 bags per hour. The smaller EDT machines are even more labor intensive. It can process only 36 bags per hour. With the technology available today, that simply is not good enough. The flying public is growing inpatient.

Right here at Dulles Airport, according to a July 2005, Washington Post article, one airline reported that their flights were being

delayed as much as 45 minutes because of the limited number of baggage screening machines. Other airports report delays because they are required to share baggage screening equipment with eight other airlines, and that's equipment that can screen only 100 bags per hour.

We look forward to hearing further about Dulles and Reagan airports from Mr. Bennett and how the Metropolitan Washington Airports Authority is addressing the concerns of its air carriers and passengers. But I'm sure that these delays are not unique to Dulles.

One of the solutions to these delays is better leveraging of technology. We are now on to the next generation of screening machines and processes. Baggage screening is being integrated into baggage conveyer systems.

In-line screening systems increase baggage screening from 180 bags per hour to more than 450 bags per hour. And, reducing the current level of human interaction with the baggage saves TSA money in personnel costs and workers compensation.

Baltimore/Washington International Airport now has a full in-line system which went online in 2005. BWI now has the capacity to screen up to 2,400 bags per hour and we look forward to hearing from Mr. Campbell about the increased efficiencies at BWI.

We understand that moving baggage screening in-line is neither a small task nor a cheap one. We gave TSA authorization to help finance airports' installations of in-line systems. Under this letter of intent program TSA pays for 100 percent of acquisition and installation of screening machines and for 75 percent of the airports' facilities modification costs.

Studies by the Government Accountability Office and TSA demonstrate that even in the short term, installation of in-line screening systems capacity practically pays for itself. However, even though TSA's program has been in effect for only 3 years, only 116 of the Nation's 451 airports have EDS machines and only 12 of these airports have fully in-line systems. The remainder are partially in-line or stand-alone.

The purpose of today's hearing is to understand why TSA's funding of in-line systems has stalled and what steps TSA is taking toward putting more in-line systems in airports to improve airport safety and efficiency.

Also, given the expense of installing in-line baggage systems, we want to understand how TSA is prioritizing which airports will receive Federal assistance and what funds are actually available.

We look forward to hearing today from Dr. Randy Null, the Assistant Administrator for Operational Process and Technology at TSA regarding the status of TSA's letter of intent program and the creative financing solutions that they are pursuing. We also look forward to hearing about TSA's forthcoming EDS strategic plan, which prioritizes airports for in-line installations.

Before we hear from our witnesses however, the committee would like to express our gratitude to Dulles Airport and MWAA for hosting today's hearing and for providing us this morning's tour of Dulles' baggage screening process areas.

[The prepared statement of Chairman Tom Davis follows:]

Opening Statement of Chairman Tom Davis
Committee on Government Reform
"Installation of In-Line Baggage Screening Systems: Increasing Safety and Efficiency for Travelers to and from our Nation's Capital"

Friday, February 17, 2006

Good morning and welcome to today's hearing on in-line checked baggage screening systems.

Immediately after the September 11th attacks, Congress mandated explosives screening for all checked baggage by December 31, 2002. To meet this tight deadline, the Transportation Security Administration deployed Explosives Detection Systems and Explosives Trace Detection machines in airport check-in areas around the country.

As we have just seen upstairs, the stand-alone EDS machines are large and create congestion in airport terminals. They require substantial human operation and can process – at best – 180 bags per hour. The

smaller ETD machines are even more labor-intensive and can process only 36 bags per hour. With the technology available today, that simply is not good enough. The flying public is growing impatient.

Right here at Dulles Airport, according to a July 2005 *Washington Post* article, one airline reported that their flights are being delayed as much as 45 minutes because of the limited number of baggage screening machines. Other airlines reported delays because they are required to share baggage screening equipment with eight other airlines – and that's equipment that can screen only 100 bags per hour.

We look forward to hearing further about Dulles and Reagan Airports from Mr. Bennett and how the Metropolitan Washington Airports Authority is addressing the concerns of its air carriers and passengers. But I am sure these delays are not unique to Dulles.

One of the solutions to these delays is better leveraging of technology. We are now onto the next generation of screening machines and processes. Baggage screening is being integrated into baggage conveyor systems. In-line screening systems increase baggage screening from 180 bags per hour to more than 450 bags per hour. And, reducing the current level of human interaction with the baggage saves TSA money in personnel costs and workers compensation.

Baltimore / Washington International Airport now has a full in-line system which went online in 2005. BWI now has the capacity to screen up to 2,400 bags per hour, and we look forward to hearing from Mr. Campbell about the increased efficiency at BWI.

We understand that moving baggage screening in-line is neither a small task nor a cheap one. We gave TSA authorization to help finance airports' installation of in-line systems. Under this Letter of Intent program, TSA pays for 100 percent of acquisition and installation of

screening machines and for 75 percent of the airport's facility modification costs.

Studies by the Government Accountability Office and TSA demonstrate that, even in the short-term, installation of in-line screening systems practically pays for itself. However, even though TSA's program has been in effect for over three years, only 116 of the Nation's 451 airports have EDS machines, and only 12 of these airports have fully in-line systems. The remainder are either partially in-line or stand-alone.

The purpose of today's hearing is to understand why TSA's funding of in-line systems has stalled and what steps TSA is taking towards putting more in-line systems in airports to improve airport safety and efficiency. Also, given the expense of installing in-line baggage systems, we want to understand how TSA is prioritizing which airports will receive federal assistance and what funds are actually available.

We look forward to hearing from Dr. Randy Null, the Assistant Administrator for Operational Process and Technology at TSA regarding the status of the TSA's Letter of Intent program and the creative financing solutions they are pursuing. We also look forward to hearing about TSA's forthcoming *EDS Strategic Plan,* which prioritizes airports for in-line installation.

Before we hear from our witnesses, however, the Committee would like to express our gratitude to Dulles Airport and MWAA for hosting today's hearing and for providing us this morning's tour of Dulles' baggage screening areas.

Chairman TOM DAVIS. I would now recognize Ms. Norton for her opening statement.

Ms. NORTON. Thank you very much, Mr. Chairman, and I very much appreciate your calling this hearing. I was aware that Dulles did not have the integrated machines because this area is really in the primary jurisdiction of two of my other committees, Homeland Security and Transportation.

I was not aware why and I'm still not sure I am. Clearly BWI benefited from having at least one of its facilities in the process of being built, which may have helped to jump start their receipt of integrated machines. But when you consider that these in-line systems quickly pay back the cost and drastically reduce the number of screeners that are necessary, I really don't understand why the cost effective integrated machines would not be moving forward.

I must say, what I saw this morning could only be called primitive. We have moved backward with people down in the bowels of Dulles having to lift, after we have a beautifully automated way of getting the baggage through the traditional screening, then having to go through another screening out in the lobby, or down below.

As I understand, I remember the controversy when Homeland Security Department was set up about non-unionization. But I learned today that in the summer it can be 100 degrees down there, only with fans, with no air conditioning, and people having to pick up bags, manually pick up bags.

So what we have instead of an integrated system, which would do these things automatically, it is a system which costs more, more screeners, producing workman compensation expenses for the government, truly going backward after we thought we were making progress. I think by exposing this and learning more about it today in this hearing we will be prepared to go back to the relevant committee and perhaps get some progress.

We would think that the place to begin would be in an airport like this, from which one of the September 11th planes started. Obviously risk analysis did not have to do with how these integrated machines were located and it is perfectly understandable that if you are building a facility you would want to start there because it is cheaper.

What is not understandable is why you would not move quickly, why the Federal Government would not move quickly to install integrated machinery in other places given the speed with which they can recoup the investment and reduce labor costs. Thank you again, Mr. Chairman.

Chairman TOM DAVIS. Thank you very much. Mr. Moran.

Mr. MORAN. Thanks very much, Tom, for inviting me to participate in this hearing. More importantly, thank you, Mr. Chairman, for addressing this issue. It clearly is a Federal issue.

The Congress went ahead and mandated that every bag be checked. I am not sure we gave a whole lot of thought to how that was going to be done, nor how much it was going to cost. That is somebody else's problem.

But you could rest assured that if it was not done, we would be the first ones criticizing it for not being done, particularly if something slipped through that turned out to be an explosive device or whatever.

The airlines and the airports have had a terrible time the last 4 years. After September 11th it looked bleak. Of course with all the deregulation and all, a number of airlines have folded; they have gone bankrupt.

But here at Dulles, Dulles International Airport, and at our Nation's National Airport, there has been a recovery, a very substantial recovery. We are now looking at 45 million passengers, almost 18 million at National Airport and about 27 million, I understand, at Dulles. We thank the people running the airport and the airlines for getting our economy back on its feet.

But our government is not keeping pace with this growth. In fact the reason we are having a hearing is that in some ways we may actually be impeding future growth by failing to employ the best and the most effective security measures. Despite technology that is proven not only to be much more cost effective and efficient, but actually improving airport safety and security, our government has not moved forward in a timely manner to deploy that technology.

Baggage screening is proving to be a principal limiting factor impeding the safe, smooth and efficient operation of our Nation's busiest airports. Even when it appears that an airport is willing to help finance and install the new in-line baggage screening systems, the Transportation Security Administration and our Federal Government has been unable to respond.

I know that the problems don't all exist with TSA by any means, though we have an antiquated system of accounting, for example, that crops up in any number of ways, and this is just one more downside of not modernizing our method of accounting, turning to accrual accounting, which every corporation does, but of course, we are back 100 years, doing it the way they did it 100 years ago.

Those financing restrictions in fact have limited the availability of Federal funds. But I am confident that at the conclusion of this hearing we will have a clearer indication of what we can do to get these devices installed at our busiest and most constrained airports, certainly the airports that serve our Nation's Capital. The public deserves no less and I know, Mr. Chairman, you will not tolerate anything less than that given the fact that you are having this hearing and we have all the right people to talk to.

Hopefully this will result in some real constructive efforts to not only help passenger safety, improve efficiency, but also in the long run we are going to save some money. Thank you very much.

Chairman TOM DAVIS. Mr. Moran, thank you very much, too. The Members will have 7 days to submit opening statements for the record. We are now going to recognize our very distinguished panel of witnesses.

We have Dr. Randy Null, who is the Assistant Administrator for Operational Process and Technology, Transportation Security Administration. Dr. Null, thank you for being with us today.

We have Mr. James E. Bennett, the president and chief executive officer of the Metropolitan Washington Airports Authority. Jim, thank you for being with us. And Mr. Timothy Campbell, the executive director of the Baltimore/Washington International Thurgood Marshall Airport. Thank you for coming down here from Baltimore.

I just want to thank all of you for your commitment to the industry and to the passengers and their safety. It is our policy that we

swear witnesses before you testify, so if you would just raise your right hands.

[Witnesses sworn.]

Chairman TOM DAVIS. Thank you very much. Dr. Null, we will start with you. Your entire statements are part of the record. Thank you for being with us.

STATEMENTS OF RANDY NULL, PH.D., ASSISTANT ADMINISTRATOR FOR OPERATIONAL PROCESS AND TECHNOLOGY, TRANSPORTATION SECURITY ADMINISTRATION; JAMES E. BENNETT, PRESIDENT AND CHIEF EXECUTIVE OFFICER, METROPOLITAN WASHINGTON AIRPORTS AUTHORITY; AND TIMOTHY L. CAMPBELL, A.A.E., EXECUTIVE DIRECTOR, BALTIMORE/WASHINGTON INTERNATIONAL THURGOOD MARSHALL AIRPORT

STATEMENT OF RANDY NULL

Dr. NULL. Good morning, Mr. Chairman, members of the committee. I am pleased to have the opportunity to appear before you today at Washington Dulles International Airport on behalf of the Transportation Security Administration to discuss our Electronic Baggage Screening Program.

We believe this program is an important part of our efforts to create a comprehensive, multi-layered system of security throughout the aviation sector. We also appreciate the participation of the Metropolitan Washington Airports Authority and the Maryland Aviation Administration this morning.

Effective baggage screening depends upon the cooperation of our key stakeholders. We are thankful for the cooperation we have received from both organizations since screening began.

As you know, TSA is responsible for not only conducting the screening of checked baggage carried onboard TSA-regulated commercial aviation flights, but also for the procurement, installation and maintenance of explosives detections equipment used to screen that checked baggage.

As passenger levels grow and airports renovate and build new terminals, we must continue to evaluate equipment needs and placement to accommodate that increased traffic level. These types of activities must be factored into our application of risk-based analysis in making our investment decisions.

In addition to the costs associated with the purchase and the life cycle maintenance of these technologies, installation costs are a significant component of the total cost of deployment. The cost of installing EDS and the ETD technologies consist of some or all of the following depending on the equipment and the specific location.

First the site survey and design, site preparation and facility modification, warehousing and shipping, verification and validation testing, and operational and programmatic support.

In 2003 and 2004, a significant Federal commitment of installation funding was pledged through the letters of intent [LOI], to reimburse airport operators for facility modification projects supporting the installation of in-line EDS equipment.

TSA has issued eight letters of intent covering nine airports and TSA's commitment to these nine airports totals $957.1 million out of a total project cost of approximately $1.3 billion.

In fiscal year 2006, we anticipate providing $240.4 million in LOI reimbursements at a 75 percent Federal share for the existing LOIs. These costs are solely for facility alteration and do not include the cost to procure and install EDS machines, which are fully funded by TSA.

The equipment purchases associated with the LOI airports will continue in fiscal year 2006. In fiscal year 2006, TSA will continue to procure and install equipment at LOI and non-LOI airports, including Dulles, in accordance with the 2006 expenditure plan. This continuing effort is required to maintain sufficient screening capacity as passenger traffic increases and operational circumstances at airports change.

Looking to the future, we have recently completed a strategic plan for the Electronic Baggage Screening Program that prioritizes future equipment deployments and we will begin using that plan to make investment decisions in fiscal year 2007.

The plan was developed using a top-down data driven planning model to perform a systematic, comprehensive assessment of a variety of screening solutions for airports and identify the optimal solution by balancing security and economic factors. These results feed into a model that prioritizes projects and identifies the optimal schedule for deploying equipment to airports given operational requirements, funding, equipment availability and other key assumptions.

These continuing system deployment efforts are required to maintain sufficient screening capacity as passenger traffic increases over the next 10 years as projected by the Department of Transportation.

Given the variety of local factors and conditions that will affect funding and design decisions, the final determination of the optimal screening solution for an airport requires a partnership between TSA, the airport operator, and the key airline tenants at that airport.

TSA will work closely with airport operators and other key stakeholders to integrate the planning being conducted by many airport operators with the initial plans development as part of TSA's strategic plan. This will ensure that airport designs—design systems that will adequately address screening requirements and ensure that the best overall implementation strategy will be executed.

The final component of the Electronic Baggage Screening Program's strategic plan will be completed in 2006, with the release of a cost-share study required by the Intelligence Reform and Terrorism Prevention Act of 2004. This study—through this study, TSA is working with aviation industry stakeholders to develop a cost-sharing formula and innovative financing solutions for the Electronic Baggage Screening Program.

We anticipate that the initial results of this cost study will be available later this year. Thank you again for the opportunity to testify. I will be pleased to respond to questions.

[The prepared statement of Dr. Null follows:]

United States Department of Homeland Security
Transportation Security Administration

Statement of Dr. Randy Null
Assistant Administrator, Operational Process and Technology

Committee on Government Reform
United States House of Representatives

February 17, 2006

Good morning Mr. Chairman, Congressman Waxman, and Members of the Committee. I am pleased to have the opportunity to appear before you today at Washington Dulles International Airport on behalf of the Transportation Security Administration (TSA) to discuss our Electronic Baggage Screening Program. We believe this program is an important part of our efforts to create a comprehensive, multi-layered system of security throughout the aviation sector.

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. Fundamentally, our challenge is to protect passengers, freight, and transportation network assets in a constantly changing threat environment. We know that terrorists will not only look for weaknesses in our transportation system, but they will also adapt to perceived changes in its security measures. Our approach to security in every transportation sector, therefore, must be based upon flexibility and adaptability.

As we work to enhance transportation security, we are guided by four key operating principles: First, we will use risk-based analysis to make investment and operational decisions. Second, we will avoid giving terrorists or potential terrorists an advantage based on our predictability. Third, we will continue to intervene early based on intelligence, and focus our security measures on the terrorist, as well as the means for carrying out the threat. And, finally, we will build and take advantage of security networks.

TSA is responsible for not only conducting the screening of checked baggage carried onboard TSA regulated commercial aviation flights, but also for the procurement, installation, and maintenance of explosives detection systems used to screen that checked baggage. As passenger levels continue to grow, and airports renovate and build new terminals, we must continue to evaluate equipment needs and placement to accommodate increased traffic levels. These types of activities must be factored into our application of risk-based analysis in making our investment decisions.

TSA uses two different technologies to screen checked baggage for explosives. The first is the automated Explosives Detection System (EDS), which uses computer-aided tomography X-rays adapted from medical technology. The EDS recognizes the characteristic signatures of threat explosives, and alerts the operator to the presence of a

potential threat. Because EDS has automated the process by which a potential threat is identified, it is the preferred method of baggage screening. While we continue rely on the judgment of trained operators to resolve alarms, EDS can clear between 80% and 85% of the baggage without operator intervention. We have deployed over 1,500 EDS units at more than 100 airports throughout the United States.

According to the EDS Strategic Plan, equipment is installed as either as some variation of an in-line system operated within an airport's baggage handling system, or it may be operated separately in a stand-alone configuration. In-line installation, where it is optimal in terms of traffic levels and facility design, offers several advantages, including a much higher baggage throughput rate, and can reduce staffing requirements if the images can be viewed from multiple EDS units in one location. A stand-alone installation requires additional personnel to operate, because baggage must be manually loaded into and unloaded from the EDS unit. While we clearly recognize the benefits that can be realized from pursuing some form of in-line EDS solution for most high volume airports, TSA does not finance the facility modifications needed to accommodate construction of in-line systems solely from its own budget. These costs are typically funded by the airports or airlines.

The other technology used for checked baggage screening is explosives trace detection (ETD) equipment. ETD systems use chemical analysis to identify the potential presence of explosives. When using an ETD, samples are taken by rubbing the bag with a special swab, and that swab is then analyzed to determine if any traces of explosives are present. ETD can be used for both primary screening, as well as secondary screening to resolve alarms from an EDS unit. Currently, TSA has deployed over 6,500 ETD systems to 448 airports nationwide. Because the ETD requires that a sample be retrieved from the item to be screened, it is manpower-intensive. Additionally, the throughput capacity for ETD is considerably less than that of EDS, averaging 40 bags per hour per screener. TSA continually evaluates the throughput requirements at those airports using only ETD solutions to determine if passenger growth may warrant substitution of ETDs with EDS technology.

TSA continues to seek the best technology solutions to accomplish the critical task of screening checked baggage for explosives. Since the large-scale deployment of EDS systems in 2002 and 2003, the continued development of this technology has resulted in incremental improvements, including lower false alarm rates and improved throughput capabilities. We also certified two new EDS products in 2005, including the Reveal CT-80 and Analogic 6400 developed under the Research and Development Phoenix Project. These technology products have provided additional options for TSA to use when assessing optimal security solutions to meet the variety of airport needs. In the case of the Reveal CT-80, the equipment takes up less space than the previous version EDS units and while the throughput capacity is lower than the larger EDS units, it offers an accurate option for smaller airports that currently use only ETD. In the case of the Analogic 6400, the technology offers an upgrade to one of the EDS machines we have currently deployed, with improved image quality for alarm resolution, increased throughput capacity, and improved performance reliability.

Research into both short and long term solutions is expected to continue in FY 2006 and FY 2007, with work on EDS technologies that can operate at up to 900 bags per hour and employ revolutionary threat detection concepts.

Installation Costs

In addition to the costs associated with the purchase and lifecycle maintenance of the technologies, installation costs are a significant component of the total cost of deployment. The cost of installing EDS and ETD technologies consist of some or all of the following, depending on the equipment and specific location: 1) site survey and design, 2) site preparation and facility modification, 3) warehousing and shipping, 4) testing and 5) program support.

In 2002, a significant Federal commitment of installation funding was pledged through letters of intent (LOI) to reimburse airport operators for facility modification projects supporting the installation of in-line EDS equipment. TSA has issued eight letters of intent covering nine airports, including Atlanta, Boston, Dallas-Fort Worth, Denver, Las Vegas (McCarran), Los Angeles and Ontario, California, Phoenix, and Seattle. TSA's commitment to these nine airports totals $957.1 million, out of total project costs of approximately $1.3 billion. In FY 2006, we anticipate providing $240.4 million in LOI reimbursements at a 75 percent federal share for the existing LOIs. These costs are solely for facility alteration and do not include the costs to procure and install EDS machines, which are fully funded by TSA. Equipment purchases associated with the LOI airports will continue in FY 2006.

In FY 2006, TSA will continue to procure and install equipment at LOI and non-LOI airports, including Dulles, in accordance with the FY 2006 expenditure plan. This continuing effort is required to maintain sufficient screening capacity as passenger traffic increases and operational circumstances at airports change.

Future Plans

We have recently completed a Strategic Plan for the Electronic Baggage Screening Program (EBSP) that prioritizes future equipment deployments, and will begin using that plan to make investment decisions in FY 2007. The plan was developed using a top-down prioritization model to perform a systematic, comprehensive assessment of screening alternatives at airports, and prioritize projects by balancing security and economic factors. These results feed into a model that identifies the optimal schedule for deploying equipment to airports given funding, equipment availability and other key assumptions. These continuing system deployment efforts are required to maintain sufficient screening capacity as passenger traffic increases over the next 10 years as projected by the Department of Transportation.

Given the variety of local factors and conditions that will affect funding and design decisions, the determination of an optimal screening solution for an airport requires a

partnership between TSA, the airport operator, and its key airline tenants. TSA will work closely with airport operators and other key stakeholders to integrate the planning being conducted by many airport operators with the initial plans developed as part of TSA's Strategic Plan. This will ensure that airports design systems that will adequately address screening requirements, and ensure that the best overall implementation strategy will be executed.

The final component of the Electronic Baggage Screening Program Strategic Plan will be completed in 2006 with the release of a cost-share study required by the Intelligence Reform and Terrorism Prevention Act of 2004 (P.L. 108-458). Through this study, TSA is working with aviation industry stakeholders to develop a cost-sharing formula and innovative financing solutions for the Electronic Baggage Screening Program. We anticipate that the initial results from the cost-share study will be available later this year.

Conclusion

TSA's mission is to protect the Nation's transportation systems while facilitating the movement of people and commerce. The Electronic Baggage Screening Program is a vital piece of our aviation security network. TSA's planned investments in future technology and advanced design will help to increase security and enhance efficiency of our screening efforts.

Thank you again for the opportunity to testify today. I will be pleased to respond to questions.

Chairman TOM DAVIS. Thank you very much, Dr. Null. Mr. Bennett.

STATEMENT OF JAMES E. BENNETT

Mr. BENNETT. Chairman Davis, Mr. Moran, Ms. Norton, on behalf of the Metropolitan Washington Airports Authority, I want to welcome you to Washington Dulles International Airport and thank you for holding this hearing today.

The issue of more effectively and efficiently screening passengers and their baggage through installation of in-line baggage screening systems has been a major industry concern since the passage of the Aviation and Transportation Security Act in November 2001.

Rarely has there been an issue in the history of the commercial aviation industry which would have such a positive impact on all of the partners which make it up, the Federal Government, airports, airlines, and our collective customers, than the concept of installing in-line baggage screening systems at our Nation's major commercial airports, starting right here at both Washington Dulles International and Ronald Reagan Washington National airports.

To make it clear, the current system of screening checked baggage at our two airports is not capable of meeting the current demand, is operationally inefficient, consumes an inordinate amount of Transportation Security Administration resources and is incapable of meeting the projected future demands.

Long before the mandated December 31, 2002, Department of Homeland Security and TSA requirement that all checked baggage be screened by explosive detection systems, airport operators across the country, including the Authority, began to wrestle with the logistics, engineering, customer service impacts and aesthetics of finding the space for the soon-to-be delivered machines.

From the very first minute of our deliberations, we concluded that the only logical position and the most effective location for these machines were to make them an integral part of our existing baggage handling systems.

The Authority and our industry made these concerns known long before the arrival of these machines. For the record, we have 19 EDS machines and 31 ETD machines at National and 33 EDS machines and 102 ETD machines here at Dulles.

With the hope that we could avoid the possibility that our ticket counters and concourse areas would become the permanent location of these 185 machines, we immediately commenced design of in-line baggage screening systems in partnership with TSA and at a significant cost to the Authority for both airports.

Concurrently we also began a dialog with the TSA to obtain Federal funding for them. The Authority originally applied for a letter of intent from the TSA on February 4, 2004, to find an in-line solution for checked baggage screening at Dulles and Reagan National.

Later in the year, in June, I wrote to then Admiral David Stone, the former head of TSA, calling once again for his immediate attention to both of our LOI requests and outlining the tremendous growth and demand underway at Dulles. Admiral Stone replied, noting that TSA believes that installation of EDS systems at both National and Dulles is an important project that will enhance security in the Washington metropolitan area.

The following month we submitted revised TSA applications for Federal funding due to the design requirements required to meet TSA's security protocols. In the meantime our airports have continued to grow. In 2005, all time records for passengers were set at both Dulles and Reagan National airports. At Dulles, 27 million passengers used the airport and 17.8 flew in and out of National.

As a result of this growth, we began to see the inevitable effects of a very limited baggage screening system on busy and growing airports, particularly at Dulles.

You may recall last summer the Washington Post, in a lengthy article dated July 4, 2005, noted that several aircraft were being routinely delayed by up to 1 hour at Dulles due to the inability to screen baggage in a timely manner.

Airlines planning to introduce the new large A–3 Aircraft at Dulles have expressed their deep concerns over the capacity constraints imposed by baggage screening. Also of great importance to us is the current state of our terminal buildings at both airports.

With EDS machines placed throughout the ticketing and baggage basements, a quick tour, as you saw today, demonstrates why the Authority and our airline partners are having an increasingly difficult time properly managing our passenger lines and their baggage.

I assure you, Mr. Chairman, that the Authority has not been sitting idly by waiting for TSA to act. We've invested nearly $8 million at Authority expense designing in-line systems that both meet the demands of Dulles and Reagan National for checked baggage screening while improving security of the aviation system.

The estimated cost of constructing in-line baggage screening systems at both Dulles and Reagan National is $316 million. Not only will such systems enhance the security of the aviation system, but they will also provide tremendous cost savings to the TSA in the form of reduced labor costs. Our initial estimates for Dulles, based on currently approved TSA security protocols, predict a labor savings of nearly 30 employees per hour during the peak screening operations.

Mr. Chairman, I know that the TSA is not satisfied with the current system of screening checked baggage at our Nation's airports. However, TSA is somewhat encumbered by Federal budgetary restrictions that limit its ability to work with the aviation system on improving the situation.

I urge Congress to work with TSA on appropriate legislative reforms necessary to ensure the rapid deployment of checked baggage screening systems. For example, in 2003, we worked with the Federal Aviation Administration on financing a new air traffic control tower here at Dulles which expedited the project and saved the government money. We expect them to take possession of this new $50 million tower under the terms of a 20-year lease-back this week.

In conclusion I simply cannot state it clearly enough, an in-line baggage screening system for our two airports is necessary, affordable and cost-effective. The Authority is standing ready to work with the Department of Homeland Security and TSA to identify appropriate funding and reimbursement mechanisms which will allow us to install this most critical piece of aviation security infrastructure. Thank you.

[The prepared statement of Mr. Bennett follows:]

Testimony of James E. Bennett
President and Chief Executive Officer
Metropolitan Washington Airports Authority
On
In-Line Baggage Screening Systems

Before the Committee on Government Reform
Of the
United States House of Representatives

February 17, 2006

Chairman Davis, and members of the Committee, on behalf of the Metropolitan Washington Airports Authority, I want to welcome you to Washington Dulles International Airport and thank you for holding this hearing today. I am Jim Bennett, President and Chief Executive Officer of the Authority.

The issue of more effectively and efficiently screening passengers and their baggage through installation of in-line baggage screening systems has been a major industry concern since the passage of the Aviation and Transportation Security Act in November, 2001. It also has been one of the more frustrating experiences in my 25 years in aviation management.

Rarely has there been an issue in the history of the commercial aviation industry which would have such a positive impact on all of the partners which make it up – the Federal Government, airports, airlines, and our collective customers – than the concept of installing in-line baggage screening systems at our nation's major commercial airports; starting right here at both Washington Dulles International and Ronald Reagan Washington National Airports. To make it clear, the current system of screening checked baggage at our two airports – which is solely and exclusively the responsibility of the Federal Government -- is not capable of meeting the current demand, is operationally inefficient, consumes an inordinate amount of Transportation Security Administration (TSA) resources, and is incapable of meeting the projected demand for our airports.

Long before the mandated December 31, 2002 Department of Homeland Security (DHS) and TSA requirement that all checked baggage be screened by explosive detection systems (EDS), airport operators across the country – including the Authority – began to wrestle with the logistics, engineering, customer service impacts, and aesthetics of finding the space for the soon-to-be delivered EDS machines. And, from the very first minute of our deliberations, we concluded that the only logical position and most effective location for these machines were to make them an integral part of our existing baggage-handling systems. The Authority, and our industry, made these concerns known long before the arrival of EDS and electronic trace detection (ETD) equipment at our airports. For the record, we have 19 EDS machines and 31 ETD machines at National and 33 EDS and 102 ETD machines here at Dulles.

With the hope that we could avoid the possibility that our ticket counter and concourse areas would become the permanent location of these 185 machines, we immediately commenced design of in-line baggage-screening systems in partnership with the TSA and at significant cost to the Authority for both airports. Concurrently, we also began a dialogue with the TSA to obtain federal funding for them.

The Authority originally applied for a letter of intent (LOI) from the TSA on February 4, 2004 to fund an in-line solution for checked baggage screening at Dulles and Reagan National. Later in the year, in June, I wrote to Admiral David Stone, the former head of the TSA, calling once again for his immediate attention to both of our LOI requests and outlining the tremendous growth and demand underway at Dulles. Admiral Stone replied

to me in September, 2004, noting that "TSA believes that installation of the in-line EDS system at both DCA and IAD is an important project that will enhance security in the Washington Metropolitan area." The following month, October, we submitted a revised application to TSA to reflect changes in the program due to refinements in the design to accommodate security protocols requested by TSA. We never heard anything back

In the meantime, our airports have continued to grow. In 2005, all-time records for passengers were set at both Dulles and Reagan National Airports. At Dulles, 27 million passengers used the airport and 17.8 million flew in and out of National. As a result of this growth, we began to see the inevitable effects of a very limited baggage-screening system on busy and growing airports – particularly at Dulles. As you might recall, last summer the Washington Post (in a lengthy article dated July 4, 2005) noted that several aircraft were being delayed at Dulles due to the inability of TSA to screen baggage in a timely manner. In meetings I had last summer with Lufthansa, one of the most pressing issues they addressed with me was the issue of baggage screening at Dulles. United Airlines, our largest and most important carrier, has also expressed its concern regarding the baggage screening problem at Dulles.

Also, of great importance to us, is the current state of our terminal buildings at both Reagan National and Dulles. With EDS machines placed throughout our ticketing levels and baggage basements, a quick tour of either airport will demonstrate why the Authority and our airline partners are having an increasingly difficult time properly managing our passenger lines and their baggage. This, in turn, is creating both a customer service issue for all of us and a legitimate security concern. Finally, I find it hard to accept that as the largest aviation system in the world we cannot find the resources to resolve such an obvious problem and enhance this component of our security effort. Getting these machines out of our lobbies and into an integrated baggage handling system will rid us of these concerns while increasing the efficiency and effectiveness of checked baggage screening.

I assure you, Mr. Chairman, that the Authority has not been sitting idly by waiting for TSA to act. We are investing nearly $8 million, at Authority expense, designing in-line systems that both meet the demands of Dulles and Reagan National for checked baggage screening while improving the security of the aviation system. The estimated cost of constructing in-line baggage screening systems at both Dulles and Reagan National is $316 million.

Not only will such systems enhance the security of the aviation system, but they will also provide tremendous cost savings to the TSA in the form of reduced labor costs. Our initial estimates for Dulles, based on currently approved TSA security protocols, predict a labor savings of nearly 30 employees per hour during peak hour baggage screening operations. Over time, those labor savings alone should offset a major portion of the investments made in the in-line systems.

Aside from the fact that a process already exists within the TSA to reimburse the Authority's cost of installing an in-line baggage system at Dulles and Reagan National,

we have extensive experience in working with the Federal Government on similar arrangements. For example, in 2003, we worked with the Federal Aviation Administration on a financing mechanism for the construction of a new Air Traffic Control Tower at Dulles which expedited the project and saved the government money. We expect them to take possession of the tower shortly and commence lease payment on a 20-year, nearly $50 million project.

Mr. Chairman, I know that the TSA is not satisfied with the current system of screening checked baggage at our nation's airports. However, TSA is somewhat encumbered by federal budgetary restrictions that limit its ability to work with the aviation system on improving this situation. I urge Congress to work with TSA on appropriate legislative reforms necessary to ensure the rapid deployment of checked baggage screening systems.

In conclusion, I simply cannot state it clearly enough. An in-line baggage screening system for our two airports – Dulles and Reagan National – is necessary, affordable, and cost-effective. The Authority is standing at the ready to work with the Department of Homeland Security and Transportation Security Administration to identify appropriate funding and reimbursement mechanisms which will allow us to install this most crucial piece of aviation security infrastructure.

Thank you once again for the opportunity to testify before you today. I welcome any questions you may have.

Chairman TOM DAVIS. Thank you very much, Mr. Bennett. Mr. Campbell, thanks for coming down from Baltimore to be with us today.

STATEMENT OF TIMOTHY L. CAMPBELL

Mr. CAMPBELL. Thank you very much, Mr. Chairman, members of the committee. It's my pleasure to be here this morning. On behalf of the State of Maryland and BWI Thurgood Marshall Airport, thank you for this opportunity to share our experience in designing, financing and installing an integrated in-line system at least in one of our terminals at BWI Airport.

In May 2005, BWI opened its new terminal addition, Concourses A/B, which accommodates Southwest Airlines, which is our largest airline partner. They have approximately 50 percent of our passenger activity at the airport and constitute approximately 10 million passengers annually.

Concourse A/B, as has been indicated, is equipped with a state-of-the-art fully integrated in-line baggage handling system that has a capacity of approximately 2,400 bags per hour. That system went into operation in June 2005.

We were fortunate at BWI because the planning for the terminal complex was underway at the time of September 11th, and the subsequent Federal regulations that governed the installation of integrated baggage systems and the requirement to screen all checked bags. It worked out for us to be able to go in and update the design to accommodate the in-line bag system as directed by TSA at that time.

Although there were costs involved in terms of redesigning the facilities, we were able to accomplish that before we actually began construction. We've estimated that the additional cost was approximately $20 million over and above what the terminal complex would have cost anyway.

At the time we moved forward with the project we did not have any commitments from TSA or the Federal Government to fund any or all of that project, but working in concert with Southwest Airlines, our airline partner, and the local TSA staff, as well as the Washington staff, we determined that it was clearly the best way to move forward.

As indicated earlier, the in-line integrated systems clearly offer many advantages. I should note that TSA was instrumental in ensuring that all the necessary EDS equipment was onsite and in accordance with our construction schedule, and our local and national TSA contacts were very supportive of our efforts and arranged for technical support for the EDS machines at critical points throughout the project.

In addition, TSA senior leadership, including TSA Director Kip Hawley, former TSA administrator, David Stone, former deputy, Tom Blank, Dr. Randy Null and Chuck Burke were always accessible to us, continue to be accessible to us, and are responsive to our concerns and request for assistance.

Mindful of our cooperative approach and strained fiscal situation, TSA greatly assisted the project by executing a $10 million Other Transaction Agreement [OTA]—it's basically a grant—to partially reimburse the airport for some of the TSA-related project costs.

Again it's approximately half of the $20 million that the system costs to install.

We're still finalizing the installation and TSA and our Southwest Airlines partners continue to work closely with us as we near completion of the installation. Prior to opening the Concourse A/B, the screening operation of BWI was similar to what you saw today and you see at many airports. We have either systems in the lobby or down in the bag room, but we're not fully integrated in in-line systems.

In fact the other half of the airport, the other half of the passengers continue to use those, what we call a quasi-in-line. Sometimes they're integrated into the baggage system itself, but they're not fully integrated as the Concourse A/B system is.

We have about half of our system fully integrated and half that is not. It's my understanding, based on TSA reports, that there are numerous benefits which have already been enumerated for the in-line system, including cost savings, which have already been identified, but also as Congresswoman Norton has indicated, there are great benefits to the employees that have to work in those environments, handle the baggage, and as you saw today, some of those were pretty large bags that those individuals have to manhandle down in those systems.

We've experienced at BWI since the system has been integrated a reduction in serious industry—injuries and worker's comp claims for TSA employees. It's also obviously allowed the TSA to process bags quicker and much more efficiently and the—it's considerably increased the efficiency of the Southwest operation at our airport.

For these and other reasons there is strong justification for Congress and the administration to increase funding and/or pursue innovative financing mechanism for the installation of in-line bag screening improvements at airports throughout the Nation, including the three main airports that serve the D.C. metropolitan area.

Just a couple of comments on some of those alternatives. We would like to recognize the efforts that TSA has expended to date for its ongoing efforts to examine various creative financing alternatives. Dr. Null mentioned some of those in his testimony.

One such approach would allow TSA to enter into the shared savings agreements with airports. We've had conversations with them about those alternatives and we've also been proactive in analyzing the cost benefits of retrofitting the remaining portions of our system and we've provided that information to TSA to help support our case for moving forward with an in-line system in the remaining portions of our facilities.

There's no question in our mind that there are savings to be realized as indicated earlier, both in staffing levels, personnel savings. That also allows TSA to reallocate those personnel to other screening activities.

One other concept which I would like to mention at this time is the possible use of a passenger facility charge, a surcharge for security purposes. I think this might offer an alternative for some airports, if not all airports, a way to finance the installation of some of these systems without requiring the general fund to be involved or perhaps dealing with some of the more creative financing mechanisms.

I think a surcharge of $1 or $2 on the PFC of a limited duration, specified only for security-related projects, I think will be another alternative that the committee and the Congress may want to consider. The advantage of PFCs is it allows the airport basically to control the project. We know how to do these capital projects. We do them all the time, every year, and you saw demonstrated here at Dulles some of the large projects that they have underway. That's what we do and we think we could do it very well working with TSA and our airline partner.

I offer that up as another alternative for your consideration. Thank you very much for this opportunity to participate and I look forward to answering your questions.

[The prepared statement of Mr. Campbell follows:]

Testimony of Timothy L. Campbell, A.A.E.

Executive Director of Baltimore/Washington International

Thurgood Marshall Airport

Before the

U.S. House of Representatives

Committee on Government Reform

February 17, 2006

Chairman Davis and members of the Committee on Government Reform, on behalf of the State of Maryland and Baltimore/Washington International Thurgood Marshall Airport (BWI), thank you for this opportunity to share BWI's experience in designing, financing and installing our integrated (or in-line) checked baggage screening system. I also appreciate the chance to provide my thoughts on how airports and federal policymakers can work together to finance costly in-line bag-screening improvements in the future.

My name is Tim Campbell, and I am the Executive Director of the Maryland Aviation Administration (MAA). MAA is the owner and operator of BWI and Martin State Airport, a designated general aviation reliever airport. MAA also is responsible for a statewide aviation program that oversees and supports general aviation airports within Maryland.

BWI is Maryland's largest commercial airport and the largest origination and destination (O&D) airport within the Metropolitan Washington area. BWI's status as an O&D airport is significant because O&D passengers, rather than connecting passengers, are the users of airport baggage handling systems (BHS). In 2005, BWI welcomed over 19.7 million passengers, approximately 16.2 million of whom were O&D passengers.

Concourse A/B

Of the 18 scheduled passenger airlines presently serving BWI, Southwest Airlines (Southwest) is BWI's largest air carrier partner. On May 18, 2005, BWI opened its new terminal addition, Concourse A/B, for Southwest. Though not fully completed until spring 2006, Concourse A/B is a 600,000 sq. ft. facility that currently accommodates 165 daily departures for Southwest and handles approximately 50 percent of BWI's overall daily commercial flights and passenger traffic. Concourse A/B also is equipped with a state-of-the-art, fully-automated BHS that is designed to screen a maximum of 2,400 bags per hour.

The collective design and construction costs for Concourse A/B and related roadway and airfield improvements have totaled approximately $279 million. These costs are financed primarily through bonds issued on behalf of MAA by the Maryland Economic Development Corporation, a State-chartered, private corporation. Approximately $74 million of the overall design and construction costs have been provided directly by the State of Maryland, Southwest, BAA (BWI's concessions developer), and with Airport funds generated from Passenger Facility Charges. In October 2005, the Transportation Security Administration (TSA) provided $10 million to partially reimburse the MAA for the security-related portions of the in-line BHS.

In 2001, before the 9/11 terrorist attacks, Southwest, in cooperation with MAA, was leading the design for Concourse A/B. Southwest, BWI's then fastest growing commercial air carrier, saw a need to consolidate and expand their operations at BWI. The original, pre-9/11 design of Concourse A/B incorporated a standard BHS. After the 9/11 attacks and the subsequent federal mandate to electronically screen all checked baggage,[1] MAA and Southwest, in consultation and direct coordination with the Federal Aviation Administration (FAA) and TSA, redesigned Concourse A/B's BHS and expanded the building to integrate the BHS with six explosive detection system (EDS) machines. The addition of these six, networked EDS units and related major design revisions succeeded in making baggage security screening an automated process.

The decision to move forward with an in-line system was not an easy one for the Airport or Southwest considering the added costs of these upgrades, which totaled roughly $20 million above and beyond Concourse A/B's original estimated design and construction costs.[2] At the time, there was no "guarantee of funding" from TSA for these added costs, other than the provision of the EDS machines and verbal assurances that TSA would consider our situation. Despite these reservations, MAA and Southwest decided to move forward with installing the in-line system.

Although TSA did not commit to reimbursing MAA for any of the TSA-related project costs until just before the opening of Concourse A/B, TSA worked very closely with MAA and Southwest in designing the security areas of the new terminal. These security areas required extensive design changes before and throughout the construction process.

I should note that TSA was instrumental in ensuring that the necessary EDS equipment was delivered in a timely fashion to meet our construction milestones. Our local and national TSA contacts were very supportive of our efforts and arranged for technical support for the EDS machines at critical points throughout the project. In addition, TSA's senior leadership, including TSA Director Kip Hawley, former TSA Administrator Admiral David Stone, Tom Blank, Dr. Randy Null and Chuck Burke, were always accessible and responsive to our concerns and requests for assistance. Mindful of our cooperative approach and strained fiscal situation, TSA's senior leadership greatly assisted the project by executing the $10 million funding agreement to partially reimburse the Airport for the some of the TSA-related project costs. Again, MAA received these reimbursement funds in October 2005. As we near completion of the final phase of the Concourse A/B project, TSA continues to assist MAA and Southwest as we invest in maximizing the performance of the in-line system.

---

[1] By way of background, BWI was one of the nation's first airports to comprehensively address and then comply with the Congressional mandate to achieve 100-percent checked baggage screening using EDS and explosives trace detection equipment by December 31, 2002. This mandate was achieved largely due to the excellent coordination and cooperation between TSA, MAA and BWI's airline partners, and by utilizing then-available federal and state funding sources.

[2] The approximately $20 million cost for the TSA-related portions of the project included: (a) $13 million for the installation of in-line EDS, (b) $3.5 million for TSA-related building infrastructure costs, such as the in-line EDS area and computer and break room spaces for TSA personnel (excluding the passenger screening checkpoint areas), and (c) $3.5 million for professional services and project management fees and contingencies as a result of the federal security mandates.

Benefits to TSA

Prior to the opening of Concourse A/B, the screening operation at BWI was similar to many other airports of our size. And, despite our recent advances with in-line screening in Concourse A/B, we continue to use a combination of stand-alone and quasi-in-line EDS for our other, non-Southwest airline tenants. Compared to Concourse A/B's in-line system, the conventional bag-screening process involves a far more inefficient use of TSA personnel, some of whom perform labor-intensive baggage-screening duties. These duties oftentimes include the carrying of bags from conveyor belt to EDS machine and EDS machine to conveyor belt. In addition, quasi-in-line improvements to existing bag belt alignments generally are only a temporary solution to meet existing capacity demands.

It is my understanding, based on TSA reports, that Concourse A/B's in-line BHS has provided substantial benefits to TSA. For instance, by installing in-line EDS within Concourse A/B, the number of TSA security officers assigned to baggage screening has been reduced considerably. Those employees have been freed to work on passenger screening or other security-related functions. I also understand that these personnel savings have factored into TSA's recent decision to reduce screener levels at BWI. Additionally, Concourse A/B's in-line BHS has significantly reduced the attrition rate, serious injuries and the workers' compensation claims for those TSA personnel deployed in the baggage screening areas.

Moreover, in-line EDS has allowed TSA to process bags at a much faster rate than manual screening. It also has enhanced security by nearly eliminating the need to use explosive trace detection (ETD) equipment to inspect bags during peak travel periods. Finally, in-line EDS has capitalized on the resolution performance of EDS units, maximizing the utilization and effectiveness of this equipment.

Concourse A/B's in-line system has certainly enhanced security, as well as lowered screening costs for TSA. TSA's $10 million contribution towards our in-line system has clearly produced a positive return on investment for TSA and the federal government as a whole.

For these and other reasons, there is strong justification for Congress and the Administration to increase funding and/or pursue innovative financing mechanisms for the installation of in-line baggage screening improvements throughout the Nation's airports, including the three main airports within the Metropolitan Washington area.

Future Funding for In-Line Installations

Because of budget constraints and competing federal priorities, federal funding for in-line EDS installation has been insufficient to meet the needs of airports and to satisfactorily improve safety and security for the users of the aviation system. I applaud TSA in its ongoing efforts to examine various "creative financing" alternatives to support in-line EDS investments. One such approach would authorize TSA to enter into "share-in-savings" agreements with airports. These agreements would allow airports to provide the initial capital to install in-line systems with the promise that TSA will reimburse those airports over time with the savings achieved through TSA screener reductions, lower workers' compensation payments, and reductions in equipment and equipment maintenance costs.

TSA has recently established a new subcommittee to its Aviation Security Advisory Committee (ASAC) to examine technical and financial solutions to the challenges of installing these capital-intensive in-line systems. MAA's Deputy Executive Director for Finance and Administration, Jim Walsh, is a member of the new ASAC subcommittee, and we intend, as a large hub/Category X airport, to be fully involved in the funding debate for future in-line systems.

Individually, MAA has been proactively analyzing the costs and benefits of retrofitting the remaining three concourses of the BWI Terminal Building with in-line BHS. We have determined that, with each of these three separate projects, TSA would achieve substantial cost-savings by requiring far fewer EDS machines to screen checked baggage. Fewer EDS units would result in significant reductions in TSA staffing, workers' compensation claims, EDS equipment, and equipment maintenance costs. However, without a commitment from TSA to help fund these projects, MAA and our airline partners are reluctant to proceed with these costly undertakings. We have provided TSA with a summary of our cost-benefit analyses and are ready to work with them to pursue in-line system improvements; however, to move forward, TSA must be given the adequate resources and/or the authority to help finance the installation of our proposed in-line systems and those of other airports.

Passenger Facility Charges as Funding Source

Currently, many airports are financing in-line EDS installation projects with revenues collected through the Passenger Facility Charge (PFC) program. Under existing federal law, an airport may charge a maximum PFC of $4.50 for every enplaned passenger. This fee is collected by the airlines and paid directly to the airport. Although there is no direct government involvement with the collection of these funds, a PFC cannot be established at an airport without FAA approval.

PFC revenues can be used for various airport projects, both large and small, including BHS improvements. Despite this revenue stream, an airport typically has a finite amount of PFC revenue with which to work. The airport, in consultation with its airline partners, must prioritize its PFC-funded projects. The existing PFC cap of $4.50, which has not been changed since 2000, frequently restricts an airport's ability to fund costly terminal modifications, which are oftentimes required to address existing and/or future capacity demands placed on the BHS as a result of the 2002 federal mandate to screen all checked baggage with EDS or ETD technology.

In an effort to address this problem, federal leaders should consider whether to increase or lift the PFC threshold or, concurrently or alternatively, to create a special PFC authority for airports to use to address these and other under-funded security challenges. Under the latter proposal, an airport would be allowed to assess, with TSA's approval, a special PFC for security-related projects. This special PFC authority could be restricted by limiting the fee to a nominal level, perhaps between $1.00 and $2.00 per enplaned passenger, and within a statutory or negotiated timeframe (for example, four years). Revenues collected from this special PFC assessment only could be used for TSA-related capital projects and its use would require TSA's advance approval. This is just one of several ideas for federal policymakers to consider in addressing this challenging and incredibly expensive issue.

Thank you again for providing me with this opportunity to address this distinguished committee, and for allowing me to offer my thoughts on how TSA and airports can work together to fund costly in-line bag-screening improvements in the future. I look forward to answering any questions.

Chairman TOM DAVIS. Mr. Campbell, there is already what, a $4.50 cap on passenger facility charge; is that right?

Mr. CAMPBELL. That's correct.

Chairman TOM DAVIS. You say another $1 or $2 could make a huge difference?

Mr. CAMPBELL. I think it would. It wouldn't satisfy all the demand from these facilities, but I think it would go a long way. In our case it would come close if it were over a 5-year period of covering maybe 50 to 60, 70 percent of the additional costs that we're going to——

Chairman TOM DAVIS. Basically additional tax per flight?

Mr. CAMPBELL. Per passenger.

Chairman TOM DAVIS. Per passenger, $1 to $2.

Mr. CAMPBELL. That's correct.

Chairman TOM DAVIS. Mr. Bennett, that would give what, roughly $50 million a year if you did $2, or $25 million a year if you do $1 per passenger?

Mr. BENNETT. The way the passenger facility charge is currently structured, it's on the passengers boarding the aircrafts, so you have to take your total passengers and cut them in half, so it would probably generate for 1 year $20 or $30 million additional a year.

Chairman TOM DAVIS. I see what you are saying; you only get them going one way?

Mr. BENNETT. Yes. The problem that potentially presents is that many airports, such as the Authority, Dulles and National, already have those PFCs committed well into the future to expend them on very large capital and capacity-enhancing projects such as we have underway here in Washington, building additional runways and other airport infrastructure to support the future demand of the system. Not all airports would be able to avail themselves of taking those already committed resources and using them to fund——

Chairman TOM DAVIS. But if you had another dollar, you could add a dollar, you could put it somewhere else?

Mr. BENNETT. Indeed and probably toward those capacity and safety projects, because the $4.50 PFC that was approved many years ago in real dollars is today only worth about $2.70. It is of diminishing value since it is not indexed to inflation.

Chairman TOM DAVIS. Let me ask, according to a July 2005, Post article, airlines at Dulles were experiencing delays of up to 45 minutes because TSA could not screen baggage quickly enough. Has that situation improved or worsened since that article was written?

Mr. BENNETT. The situation will, I predict, present itself again at Dulles this summer when we enter into the peak travel season. It's just a volume issue where the baggage delivery systems can deliver bags at a rate that the TSA, with their technology, probably can't——

Chairman TOM DAVIS. You did apply, as you noted, to TSA for a letter of intent on February 4, 2004, and you followed up in June. TSA acknowledged and agreed with your letter. One month later you submitted a revised letter of intent request and that was the last you heard from TSA?

Mr. BENNETT. We've had conversations with Administrator Hawley on this back in the summer and they admitted that they

are lacking in resources to provide us with a letter of intent for our systems.

Chairman TOM DAVIS. Dr. Null, I guess that gets you to the meat of the matter. You did do letters of intent to eight airports; is that correct?

Dr. NULL. Yes, sir.

Chairman TOM DAVIS. Instead of opting for Dulles, which you had applied, they went with Seattle, Phoenix, Vegas, Boston, Dallas/Fort Worth. What was the criteria that in the Nation's Capital, where at least one of the flights on September 11th flew out of here, where there is more likely a terrorist threat, I think, if you take a look at threat analysis, than some of the others, rapidly increasing passenger rates, diplomats, heads of state come in here, why did Dulles not get the grant and they opted for eight other airports?

Dr. NULL. Sir, first of all, there are eight LOIs. They do cover nine airports because of the LAX/Ontario one. The situation we were in is we had a number of the airports where we were very much struggling with just achieving 100 percent baggage screening coverage because of the challenges of the lobbies or the baggage areas that we had available to us and that we were going to have to put in some solutions that were not workable for very long.

We had a situation where we had large volume airports. We were not sure how we were going to be able to preserve compliance on that screening and that was the governing factor, where we made those initial investments.

Chairman TOM DAVIS. The more efficient an airport is they have to get punished?

Dr. NULL. It was more an issue of what space was available to us because as you have indicated, the EDS machines are very large machines. In many cases we just absolutely didn't have the space to put them. It became a question of where did we go, how were we going to get out of the situation that we were in, and that was a big part of it.

Chairman TOM DAVIS. You have space at Dulles though?

Dr. NULL. We have space in Dulles. We recognize the challenges of keeping up with the growth.

Chairman TOM DAVIS. What about the 45-minute delays here? We've got diplomats, heads of states, key government officials flying in here.

Dr. NULL. Yes, sir.

Chairman TOM DAVIS. Every terrorist watch list. You even go to movies; Dulles is a focus on these issues. What are the chances of now do I want to revisit why you picked Seattle/Tacoma over this? Where do we stand at this point?

Dr. NULL. We submitted the strategic plan to Congress earlier this month. I can tell you that Dulles is very high on that list for the next level of grants for the next program in terms of how we get an EDS done.

The challenge that we face, has been discussed previously, is what are the funding mechanisms to actually accomplish that? That's why as a part of this study, which placed Dulles very high on that list, is the study for looking for alternative funding ap-

proaches and different vehicles, for which we appreciate Mr. Bennett's participation on our steering committee.

Chairman TOM DAVIS. Has MWAA offered you any innovative financing?

Dr. NULL. We certainly have had a number of discussions. Mr. Bennett is a part of that steering committee, so we've had a number of discussions about potential lease-back options or different approaches to potential fees.

We're really trying to take a don't leave anything off of the table approach and put everything up, look to see what those look like either through leveraging the capital, leasing industry itself, or looking at operational lease-backs, as the FAA has done with the tower, all the way to looking at a fee-for-service type lease-back option as well. Many of those certainly have some issues with the current accounting systems.

Chairman TOM DAVIS. My experience of this has been more anecdotal, but I think I've flown into almost all of these airports that did receive grants. We do have the Post report of 45-minute delays and I think Mr. Bennett said this could be a long summer again.

The in-line would take a couple of years to get up. This is a growing airport. This is not one that is just stable. We see more and more flights coming in and out of here. You have seen fit so far, given the opportunity to do eight or nine airports, that this didn't meet the criteria. But anecdotally, I can just say that the waits here have been as long as any airport.

LAX is pretty tough. I am not going to fight on that. But some of these others I have been in and out, maybe it is timing when you are there or not there. But I will tell you, coming out here on a Friday night in the summertime, it is a long, long wait.

Dr. NULL. Yes, sir.

Chairman TOM DAVIS. This is not just passengers. This is the workings of our government, international commerce and everything else, and I would say that any way we can try to get these in-line procedures established here as quickly as possible will go a long way toward safety of the air traveler, as well as efficiency in just carrying out the Nation's business. How high on the list are we?

Dr. NULL. I don't remember the exact position. You're in the top 10 and I don't remember exactly where.

Chairman TOM DAVIS. We made the top 10 of the old list and you would have made the cut?

Dr. NULL. I understand sir. No, we were——

Chairman TOM DAVIS. About five?

Dr. NULL. Right in there, yes sir.

Chairman TOM DAVIS. Could you get that information to us?

Dr. NULL. Yes sir, we will do that.

Chairman TOM DAVIS. Since I am sure that is public. Ms. Norton.

Ms. NORTON. Thank you very much, Mr. Chairman. Administrator Null, is there any money in the President's budget that would allow some of these integrated machines to begin to continue to flow this year?

Dr. NULL. We certainly do have existing LOI airports where many of those are in construction and will be——

Ms. NORTON. I'm talking about new ones.

Dr. NULL. In terms of new ones, there are some that are lower level funding requirements that we can manage through OTAs that don't require the large LOI type commitments, so there—in many cases it's not a full in-line system; they are partial in-line systems.

We can achieve the same kinds of efficiencies and effectiveness, but they tend to be not the big, large integrated systems but smaller in-line capability.

Ms. NORTON. I ask about this because, Administrator Null, there is seldom where the government can make a case that by putting out money it will recoup its investment quickly so that when agencies have to go to the government, they don't usually have to offer what TSA has to offer, apparently in some instances, and maybe these are the larger ones that look like they are further down the line.

According to the GAO these in-line systems would result in personnel savings of as much as 78 percent, for example, screeners. It is hard to understand why if on the one hand by making an initial investment you can save the government money, that the TSA would not be pressing the administration, informing them. They need to know this, that this is one of those bright spots in the Federal budget that could have multiple effects, including these cost saving effects.

I do not understand the strategic plan, given what GAO tells us about recouping investment. Does the strategic plan include the number of airports that TSA thinks, for example, on an annual basis or whatever basis, could in fact get these machines, particularly given these cost savings? Remember, these TSA employees are 100 percent Federal employees. Does the strategic plan get to that level of detail?

Dr. NULL. Yes ma'am, the strategic plan covers the top 250 airports, which captures——

Ms. NORTON. Including the number of airports per year, for example, that if funding were to occur, could be funded?

Dr. NULL. What it does is prioritize where we would go after—which in-line systems or which other optimal systems we would be looking for and it projects the costs associated with what it would require to do those systems.

Ms. NORTON. Has TSA ever commissioned a cost-effectiveness study? With the GAO telling us about these extraordinary personnel savings, have you done your own study to find what the savings to the Federal Government would be by putting these machines online?

Dr. NULL. Yes ma'am, we have done that for several years now and some of that is how we have prioritized a lot of our OTA money in particular.

Ms. NORTON. The message is not getting through if in fact you are not able to tell me that there are X amount of dollars for these machines this year in X number of airports, including this airport.

Mr. Campbell, here we have right in our own region an airport that saw it was building on its own in this troubled industry, took the initiative without any promise of funding from TSA. Mr. Campbell, you say you have gotten about half of that funding back

through applying. How were you able to do that? Was it your initiative being rewarded?

Mr. CAMPBELL. You have to ask TSA about that. We did work closely with our TSA partners and we did ask for the money. We let them know all the way along what we thought the costs were going to be and we were able to work with them in securing that $10 million.

Ms. NORTON. But we know that you may be in an unusual position with Southwest as your hub airline. This morning we are told that Northwest Airlines, which is in bankruptcy, is also facing the possibility of a strike and no industry is more on its knees, or shall I say, its back, than the airline industry.

Where did the suggestion come from? Did Southwest say, let us do this? Did you go to Southwest and initiate this? Do you know of any other airport in the country which is partnered with its airline to jumpstart this process?

Mr. CAMPBELL. I think there are a number of airports that work closely with their airlines in terms of moving the process forward. It's really a three-party arrangement between the BWI Airport, Southwest Airlines and the TSA.

We knew that there were mandates out there to screen all checked bags. We knew that we were in construction and development of a new terminal project. It just worked out timing wise we were able to integrate the new requirements into the design of the facility. From a timing point of view it was ideal.

Ms. NORTON. Dr. Null, are there any airports being constructed now? If airports are in the position that BWI was in, is TSA prepared, seeing the cost savings that were possible, to move forward, to take a priority look at the kind of savings that might be involved there, in your strategic plan?

Dr. NULL. Certainly we work with all of the airports in trying to project what new capacity may be coming online or what new terminals. Certainly if there's an opportunity to put in-line systems in we support that and work with them on their design.

Ms. NORTON. Mr. Chairman, could I ask unanimous consent from you to have the strategic plan he is talking about submitted to this committee?

Chairman TOM DAVIS. Without objection. There is no problem placing that. That will be put in the record. It is a public plan, right?

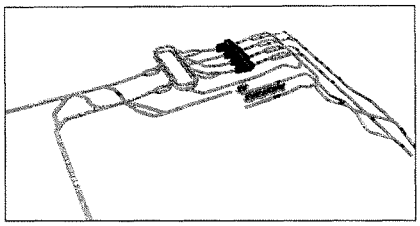
Dr. NULL. Yes.

Chairman TOM DAVIS. Without objection it will be placed in the record.

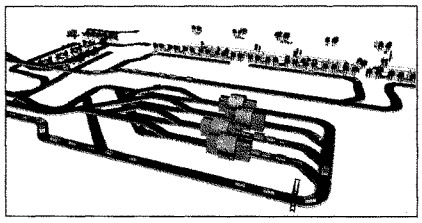
[The information referred to follows:]

IN-LINE BAGGAGE SYSTEMS

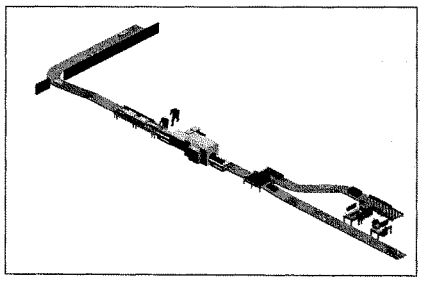
Type 1: High-speed fully integrated in-line systems. This system assumes the eventual availability (projected to be in FY 2008 - 2009) of EDS screening technology currently in development under a number of TSA's Research and Development programs. EDS machines in this system are estimated to achieve at least a throughput of 900 bags per hour.



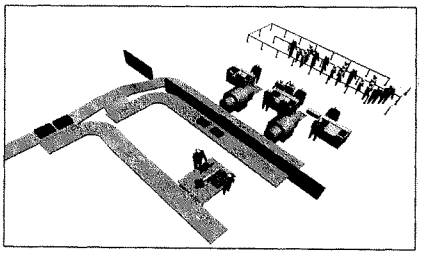
Type 2: Medium-speed fully integrated in-line systems. With reduced up-front capital costs relative to the high-speed in-line system, EDS machines in this system are estimated to achieve at least a throughput of 650 bags per hour, which is an increase to the throughput of current EDS machines achieving an average of 400 bags per hour.



Type 3: Mini in-line systems. A mini in-line system would typically employ a simpler conveyor design and require a smaller footprint. These systems can be located closer to airline ticket counters and/or makeup devices, which can help reduce travel time and the likelihood of improper baggage sorting. Current EDS machines achieve an average of 80 bags per hour and the projected future EDS machines would possibly achieve throughput of 180 bags per hour.



Type 4: Micro in-line or ticket counter mounted systems. For facilities where architectural conditions exist that may render other systems cost prohibitive, a solution based on a compact but low throughput machine placed at or near ticket counters may be the most economical option.



Ms. NORTON. Perhaps some of these questions are answered that way. I would like to know from Dr. Null, because there is in Mr. Bennett's testimony a quotation from Admiral Stone, the former administrator. TSA believes that the installation of the in-line EDS system at both DCA and IAD is an important project that will enhance security in the Washington metropolitan areas.

Could I ask you whether or not the benefits, clearly for convenience, clearly cost savings, of whether there are security or risk saving benefits to installing the integrated systems?

Dr. NULL. Within the two airports here in the Nation's Capital, absolutely. We understand——

Ms. NORTON. What would those be, please?

Dr. NULL. I haven't got the exact numbers, but I would estimate that we would probably see a 30 percent, 25 to 30 percent staff reduction associated with the baggage screening piece of it.

Ms. NORTON. The machines that are in place throughout the country now, here and throughout the country, were those the machines that were already in place at September 11th?

Dr. NULL. No, ma'am. At September 11th, I think we had approximately 100 to 110 machines that had been deployed in the previous several years. Since September 11th, we have deployed approximately another 1,500 machines on top of that, as far as EDS.

Ms. NORTON. I have a question regarding those machines and this new round of machines, but I will go for a second round. Thank you very much, Mr. Chairman.

Dr. NULL. Mr. Chairman, with regard to the strategic plan, we have submitted to the committee, it is SSI, so we need to understand what can or cannot be put in the record as a result of that.

Chairman TOM DAVIS. We will work with you on that.

Dr. NULL. OK, thank you.

Chairman TOM DAVIS. Thank you very much. Mr. Moran.

Mr. MORAN. Thanks, Tom. I am curious, Dr. Null, has there ever been the detection of an explosive device with all the screening, the billions of dollars we have spent to screen the bags, have they ever found a device that would have blown up an airline?

Dr. NULL. We have found things, sir.

Mr. MORAN. I know you found things. You found things——

Dr. NULL. I'm not prepared to go into the details, but yes we have found explosives.

Chairman TOM DAVIS. How much? How many?

Mr. MORAN. Very often? I mean, Tom has asked how many?

Dr. NULL. Very, very seldom, sir.

Mr. MORAN. Very seldom. You could say that you have thwarted a disaster as a result of this screening; is that fair to say, at least once, other than the deterrent effect one can assume?

Dr. NULL. Certainly the deterrence has a big effect. This is a difficult question to answer in this forum, but I would say that we have thwarted things going on the airport—or airplane that should not have gone on the airplane.

Mr. MORAN. Yes, but I trust you are not talking about nail clippers and things like that?

Dr. NULL. No, sir.

Mr. MORAN. I am saying explosive devices because there would not be any reason to carry an explosive device. If you have something in your luggage—and we are really talking about luggage now—that is in the cargo hold, you are not going to be able to get at it.

Things like knives and so on, one would assume that is not a threat. It would have to be an explosive device planted with some timing device on it. I am just curious as to whether that has actually happened over the last 4 years?

Dr. NULL. Again, without going into specifics, I can say that we have found materials that were potentially dangerous. I really would prefer not to talk about timing devices or anything like that in this forum. If you would like to have follow-on discussions we certainly could do that.

Mr. MORAN. I ask the same kind of question with regard to torture, whether we had ever obtained information that actually resulted in saving lives or that was used in a materially beneficial way. I got the same answer. Then when I look further, there really wasn't any.

It seems to me a fundamental question if you are looking at cost benefit, but I grant you, there is a deterrent effect doing this. But if we are going to do it, we ought to do it in the most efficient manner with the least inconvenience and the least cost.

I think Congress does have some responsibility for that. As I said in my opening statement, we mandate it, so we ought to not just leave it at that and then leave it to others to figure out how to do it.

You are confident that if these in-line systems were implemented that it would be more full proof, there would be higher level security. You testified there would be less personnel costs, as much as 30 percent, so that is a significant savings. Mr. Davis and Ms. Norton referred to that.

How do the passengers benefit? There is a reduction in the time that they would be waiting in line generally; is that a fair statement, or should I ask Mr. Bennett or Mr. Campbell that?

Dr. NULL. I think it depends on the particular situation where how the operations actually work in a given airport. In some cases the passenger is required to drop off their bag at the screening center.

In some cases it's handled behind the counter. If it's behind the counter then there's really no delta that the passenger would see. If they no longer have to drop their bag off then certainly it's more efficient and more effective for them.

Mr. MORAN. Just so the audience understands, because there is an airline with the same name, you are saying there would be no change?

Dr. NULL. No change, yes sir.

Mr. MORAN. It is a good word to use, except that it could be misinterpreted. There will be no change in any airline, Delta or any others, if you are doing it behind the counter.

Let me ask Mr. Bennett just for the purposes of our own constituents; do you think they would see a reduction in the amount of time they have to wait in line if we have this in-line system?

Mr. BENNETT. Mr. Moran, I'm not sure that there would be a significant reduction in the length of time that the passenger waits in line. What would offer the benefit is the circumstance that we had this summer, which potentially will happen again as the airport continues to grow, and that is flights being delayed where the passengers are sitting on the airplane, it's ready to go, but the baggage has not been processed and loaded on the aircraft yet because of the delay in screening.

Mr. MORAN. For example, we heard that a water filter had been identified which was deceptive. When you looked at the radiation, it looked as though that could be an explosive device.

The problem is that you have to now contact the bomb squad in Arlington County, I understand, and if it is a half hour a way—actually, if it is at rush hour, it could be more than half an hour away—everything comes to a stop, a halt, until you can get the bomb squad and deal with it.

You are saying the relay is that you would not have situations like that occur as frequently? In almost every case you would be able to determine what the article was more quickly and more definitively; is that fair to say?

Mr. BENNETT. Not necessarily in the case that you cite would that be the circumstance. Where the benefit comes in is the through-put rate of the screening process. It goes up considerably where the baggage handling systems deliver bags to the TSA at a rate that is much higher than their ability to screen them.

As a result, it's a backlog. It becomes a congestion in the system and it just takes time to screen all of those bags by the TSA personnel. The in-line solution matches the baggage conveyer systems, are matched with the through-put rates of the screening equipment so that you don't have that delay.

Mr. MORAN. Sure, but I also thought there was an additional safety element, that it is more mechanized and so the detection capability is more——

Mr. BENNETT. There are different protocols. There are different protocols involved that in certain cases can resolve those issues without having to take them to that next level that you were describing earlier.

Mr. MORAN. Thank you.

Chairman TOM DAVIS. We are going to do just one more round of questions, if that is all right. We had a number of good questions by my colleagues that beg more questions.

Dr. Null, let me just ask you, what cost savings and operational efficiencies has TSA realized at the 12 airports with fully in-line systems?

Dr. NULL. Most of the ones where I think we will see the largest amount are still in construction and we haven't finalized those. Dallas-Fort Worth and Atlanta are two that we think will see significant improvements. Those are—Atlanta is not up yet. Dallas has still got one more module, but we're seeing significant improvements there.

Some of the other ones, Boston, for instance, and Orange County, who is another one who went on their own, it was more of an avoidance and the fact that they came up online before we actually

fully staffed, so we avoided having to add as many TSOs as we would have had to had they not gone online.

Chairman TOM DAVIS. But there are significant savings?

Dr. NULL. There are significant savings.

Chairman TOM DAVIS. Huge upfront costs?

Dr. NULL. There are huge upfront costs, but there are definitely the savings that pay it back. It's variable depending on the complexity of the airport and the complexity of the infrastructure that has to be built.

Chairman TOM DAVIS. Mr. Bennett, what is the cost of not doing this to Dulles? If we do not get an in-line system here, what are we going to see?

Mr. BENNETT. Mr. Chairman, you will continue to see delays and you will see over time TSA trying to find a place to put more and more of these machines in the lobby as the airport continues to grow. As we indicated——

Chairman TOM DAVIS. At 5 on a Friday evening there is no place to put them?

Mr. BENNETT. Correct. As we indicated, last year we had 27 million passengers processed through Dulles. Within the next 10 years that number could be closer to 40 million. Our fear is that the ability to screen baggage could become a capacity restriction on our ability to meet aviation demand in the region. That's one of the——

Chairman TOM DAVIS. Is there any other airport slated to grow as quickly as Dulles, like from 27 to 40 million, that is in the queue right now to get in-line; do you know, Dr. Null?

Dr. NULL. I'd have to look. There are approximately 45 airports who have requested LOIs for building in-line systems. I don't have that on my fingertip right now.

Chairman TOM DAVIS. But you have to admit that Dulles is one of the faster growing of those airports?

Dr. NULL. Dulles certainly is one of the faster airports.

Chairman TOM DAVIS. Obviously the earlier we make these investments the better. Let me just ask this. I don't know how many dollars you are going to have to work with this year, but I know Mr. Bennett has talked about maybe some innovating financing.

Is there anything we can do from that area to help? Mr. Campbell, if you know, you or at least get one of your partners to finance some of the money, which was important.

How do we get this thing up as quickly as we can? I think there is an agreement that we need to do this, from everybody. Dr. Null, you are saying, well, we do not know how much money we will have or where they are on the priority list, and I understand that.

Mr. Bennett has come back with some innovative financing ways. But every day that is delayed creates greater inefficiencies in this airport and frankly puts more pressure on the people looking at the bags. Although there are not a lot of incidents that occur on a daily basis, the likelihood of making a mistake when you are backed up and under pressure and everything else increases as well, in this, one of the most vulnerable airports in the country.

Let us agree we want to get this done as quickly as possible. What can we do from an innovative way with Congress in there, to try to make this work?

Dr. NULL. I think we need to work as quickly and as effectively as we can to finalize the study that Mr. Bennett is participating on. Let's get those recommendations on the table and try to get action as fast as possible so we can figure out how to go forward.

Chairman TOM DAVIS. How reliable are these in-line systems once they are created? Mr. Campbell you have any experience with that? Do they break down very often for maintenance and repair?

Mr. CAMPBELL. They do break. It's a piece of equipment. We have had pretty good experience. TSA might be in a better position to answer since they are responsible for maintaining the machines themselves. But you have all the conveyers that are also part of this system that we are responsible for. It is a new system and it's functioning pretty well right at the moment.

Chairman TOM DAVIS. Who makes them?

Dr. NULL. There are two companies who are the primary suppliers of in-line systems. We have three certified vendors right now, Reveal being the low speed small footprint machine. The two main in-line systems are L–3, which is at BWI, which is what is at Boston Logan. Then General Electric, who bought InVision, who has the CTX machines. Those are typically the 9,000's where you will find in Atlanta and Dallas.

Chairman TOM DAVIS. Ms. Norton.

Ms. NORTON. Thank you very much, Mr. Chairman. I recognize that much of the fault here lies right here with the Congress of the United States. Indeed I'm on the Aviation Subcommittee that said, quick, get some machines and here is your date and we do not want you to be a minute late on explosive equipment, so I understand that.

That is, by the way Dr. Null, why I believe in the administrative process where the experts are supposed to be. I must ask you, in light of these sequential mandates, the capital equipment, first you are mandating equipment to do the screening and then by the way, now we are mandating a whole new set of equipment. Do you think that this new equipment will in fact screen all we need to screen?

Dr. NULL. I think we've made a lot of progress. I joined TSA in January 2002, and we started looking at this whole big program and the challenge of the mandate that we had to meet at the end of 2002. We looked at the performance of this equipment. We've invested a fair amount of R&D dollars to enhance the speed and the false alarm rates that we were seeing.

Ms. NORTON. I don't want to hear now we need some biochemical, new machines 2 years from now and then our subcommittee was OK, get it done and get it done by a date. That is why I am asking, frankly.

Dr. NULL. We are starting to work with Science and Technology Directorate as well as DNDO and looking for developing technology that has multi-threat detection capability so that we don't keep just adding more boxes and more things every time we see a new threat.

Ms. NORTON. This is really primitive. I understand it is a developing science, but it is very unsatisfactory and Congress gets afraid every time they hear of a new kind of threat.

Let me ask you to get some sense of how this works. I was asking as my time ran out before about the machines that were in

place before September 11th. Those machines have to be upgraded, or did new, better machines have to be put in as a result of September 11th, either because of congressional mandate or because you deemed it necessary after September 11th?

Dr. NULL. All of the machines that went in following September 11th were pre-existing technology or equipment. They all met a certification standard that is still the standard that has to be met today. What we've done has greatly enhanced the speed of those. We worked with the companies to be able to do field upgrades of that.

Ms. NORTON. What will happen to those machines; we will just put this new technology into those machines?

Dr. NULL. In some cases we will be able to upgrade the machines that are already in place so we won't move them anywhere; we'll just improve their speed or their performance. In some cases we will waterfall that equipment to the next lower level airports in terms of where we have high density of ETD, high labor count. We'll be able to deploy those EDS machines to those airports, which will be stand-alone, but it will still have big benefits from a staff standpoint.

Ms. NORTON. We are not discarding machines?

Dr. NULL. No, ma'am.

Ms. NORTON. We simply use hand-me-down machines?

Dr. NULL. We're refurbishing and reusing those machines, yes.

Ms. NORTON. What about National, Mr. Bennett? We have talked about Dulles, of course, here a lot. The elephant in the room is National. Of course, if we want to talk crowding, if you want to talk not another slot, if you want to talk what putting that kind of machinery would do, you could look at National, although I am going to say the renovated National is perhaps as able to hold this primitive equipment as Dulles is. But what about National?

Mr. BENNETT. National—Reagan National currently has all of its machines for screening the baggage located on the ticketing level of the terminal building.

It was a very unfortunate situation. As you know, Ms. Norton, we had just opened a brand new state-of-the-art terminal building at National in July 1997, and quite a bit of attention was paid to the intimate details of processing passengers and 4 years later we found ourselves encumbering that design by placing these machines in the lobbies of the ticketing level of the terminal building.

We recently in—in fact as we speak, we're in the process of trying to go through a selection of a design firm to work with the Authority and then we will partner with our friends at TSA on trying to come up with an economical and efficient in-line solution for checked baggage screening at National with the ultimate goal of hopefully being able to get some type of Federal funding commitment and be able to remove those machines from the lobbies and place them in-line so that the baggage is efficiently and effectively screened.

Ms. NORTON. Dulles has applied. Have you applied for National as well?

Mr. BENNETT. We made a preliminary application for National also. Our applications were for both airports. Dulles is by far a more pressing issue than National.

Ms. NORTON. Let me ask this final question. Pursuant to our tour downstairs I learned that the people down there earn $30,000 a year. Those are Federal employees, Dr. Null. We saw conditions that I guess cannot be helped, but my goodness, it sounds like a throw back.

We do not have any way to lift even heavy luggage, so people have to lift the heavy luggage onto your machines to screen for explosives. As I indicated before pursuant to a number of questions I asked about the fans, I learned that these people earn $30,000 a year, that it could get easily to be 100 degrees, that there is huge backup of suitcases and other luggage because they're only human and there is no mechanical way to deal with taking it off of the sorters and putting it into these machines.

I must say, I think it is close to inhuman to have everybody up here in air conditioning and to have people in a dungeon downstairs earn $30,000 a year in 100-degree heat. Then I ask, is it not possible to air condition a facility in the basement the way we do throughout the United States?

I would like to ask who is responsible for that and what can be done to alleviate inhuman conditions. If all you have are those fans, you are circulating 100-degree heat. I consider it a terrible, terrible thing. The contrast between up here and down there, seems to me, is unsustainable and should not be the case.

Mr. BENNETT. Ms. Norton, that's an issue that is of great concern, not only to TSA but also to the Airports Authority. The Airports Authority is exploring the options of trying to reduce the temperature in that facility during the summer months.

It's very important to note, and that's one of the exacerbating issues here, is that the facility where you saw those employees working and that machinery located, was never designed or contemplated to be in existence down there. That was really a place for baggage to come down for someone to drive a cart in, pick it up, throw it on the cart and leave the basement. It wasn't set up to have large numbers of people with machines.

Ms. NORTON. I understand that. But now that you are putting people in there doing work that none of us would want to do even in air conditioning, I have to ask you, are there any plans to air condition that in the summer?

Mr. BENNETT. There are no plans to air condition the entire basement during the summer; it's just not feasible to do.

Ms. NORTON. What is feasible to do in 100-degree heat?

Chairman TOM DAVIS. You have big fans up there, don't you?

Mr. BENNETT. We have fans and then we are exploring bringing——

Ms. NORTON. The fans and 100 degrees circulate 100-degree heat.

Mr. BENNETT. We're bringing—exploring the opportunities to bring in portable—I think you've probably seen them at some of these sporting events—portable cooling units that you can place in proximity to those screening locations to try to bring——

Ms. NORTON. Mr. Bennett, thank you for that answer and can I ask you to try to expedite that for the summer?

Mr. BENNETT. We will certainly explore that, Ms. Norton.

Ms. NORTON. Thank you. You know what, you know you will get a phone call from me this summer to see if that has happened.

Mr. BENNETT. I'm sure we will.

Ms. NORTON. Thank you very much, Mr. Chairman.

Chairman TOM DAVIS. Mr. Moran.

Mr. MORAN. Thank you, Chairman Davis. It is nice to have Ms. Watson join us as well. I have a couple of questions that I wanted to pose.

If we were to put some language into a bill that enabled an airport like Dulles and/or National to be able to construct, purchase these machines, install them and pay for it in the same way that you paid for the tower, where you constructed and you leased it back so that you pay for it on an annual basis, would that facilitate the availability of these machines if we put some language in enabling that kind of accounting mechanism to apply to these machines for this Airport Authority?

Mr. BENNETT. I think that's likely to be one of the recommendations that comes out of the study. We've indicated to TSA that if they are willing to sign such an agreement that the Airports Authority is willing to access the top of the markets to provide for the construction and the installation of these systems. But we need some reimbursement mechanism, be it a lease or some other mechanism, to help us pay for them.

Mr. MORAN. The financing hurdle, we can overcome that with language, because I would assume that the personnel savings are going to be equal to or greater than the annual lease-back cost; is that true? What is the comparability there; do you know?

Dr. NULL. It's sort of an airport by airport basis in terms of how long the payback would be for that——

Mr. MORAN. Let us talk about this airport at Dulles. Do we know whether the savings would be——

Dr. NULL. I'm not sure what their savings would be with the installation of the system. We know that our estimate on the capital cost is somewhere in the vicinity of $250 million here at Dulles.

Mr. MORAN. You would amortize it normally over what, a 10, 15-year——

Dr. NULL. Normally we would amortize that over about a 20-year period.

Mr. MORAN. Twenty years. Just doing the math quickly, I think your personnel savings on an annual basis are greater than the lease costs; I think they are. That would make a lot of economic sense if we could put the language in that would enable you to do that, obviously, yes.

Mr. BENNETT. We would welcome the opportunity to execute such an agreement with the TSA.

Mr. MORAN. Good. You can propose language that would enable us to do that, whether or not we could pass it or not, but if you could give us the kind of language that would be needed?

Dr. NULL. A part of the study is—there is one team who will be developing potential recommendations for legislation.

Mr. MORAN. The study is due?

Dr. NULL. Right now we're probably in the May/June timeframe.

Mr. MORAN. Of this year?

Dr. NULL. Yes.

Mr. MORAN. It is eminent. Just thinking that it would be nice if we could slip into an appropriations bill in a timely manner this year. I would hate to just miss it because we were waiting for the report to come out. Even though we know what the report is going to recommend, maybe we could get an advanced copy so we could act in a timely manner.

The other thing that came to mind, and it came to mind in the context of Ms. Norton's questioning, was there a requirement for those personnel to wear any kind of safety vest or whatever in case there was an explosive device in the baggage; has that ever been required?

Dr. NULL. No, sir. Certainly the EOD people wear protective——

Mr. MORAN. Yes. I do not want to impose that kind of a requirement. It just seems as though in their handling they might be exposed to something, because they really have the first view of what is in that luggage. Tom, I am all set. I know we want Ms. Watson to——

Chairman TOM DAVIS. We are very happy to have the distinguished lady from Los Angeles here. Ms. Watson, thank you for being here.

Ms. WATSON. Thank you, Mr. Chairman.

Chairman TOM DAVIS. LAX has been handled very well by TSA, but we are happy to have you here.

Ms. WATSON. Thank you. I appreciate you gentleman coming and putting yourselves on the hot seat. About maybe almost 4 years ago on the Fourth of July at LAX we had a shooting. Some of you might remember it. It was the El Al.

The problem was the gentleman stood in a long line and when he got near he just started blasting away, killed two people, and it occurred to me that our problem was not once he took out the boarding pass, but how do we detect weapons such as he used before they get to the counter?

He came in with an intent. When they finally killed him and they got out to his house, on his door it said, Allah was great. This was the plan, I understand, from the FBI and the CIA, that it was a trial run.

My concern addresses, how do you detect weapons on the grounds of the airport, and No. 2, the other end of this line I'm getting ready to catch in a few minutes is LAX. We heard last week that LAX was an intended target in 2001.

I am very concerned about, do you have the equipment needed, how is that progressing at LAX, the end of the flight I'm getting ready to take in a few minutes, and what are we doing, how are we moving along with the equipment necessary? Dr. Null, can you comment, please?

Dr. NULL. Yes, ma'am. Standoff detection is clearly something that we're very interested in. We're working with Science and Technology Directorate within the department, especially for explosives detection in standoff manner, and some of the newer technologies offer some hope that we will be able to do that at some point in time.

It's very difficult at this day and time to be able to do any distance. We can do closer proximity clearly, but by then, as you indi-

cate, we have a situation we need to deal with immediately. I think that we will get there, but I think we're still a little ways away.

Ms. WATSON. Can you evaluate how things are going at LAX?

Dr. NULL. I think LAX is going quite well right now. We are having discussions with them with regard to their new in-line system. I know we have some issues with regard to the cost of that system that we're trying to work through.

But I in fact was in LAX a few weeks ago meeting with the Airport Authority and I think we're progressing well. A lot of it just comes down to the funding issue.

Ms. WATSON. If we could have this kind of hearing, Mr. Chairman, on the other end it would be, I think, very effective in pinpointing—we still have the long lines of congestion and I am concerned about that.

But a young man called me on the Fourth of July, a young developer, scientist and son; he said I got the solution. He said you could have a very sensitive strip down over the entrance to the airports that will detect anything that is of a contraband nature.

That probably means every cart gets stopped. But there was technology that he had developed himself. I would like as a follow-up to present to you what he presented to me. That was several years ago, but I think let us look at any kind of solution that we think might be workable, because as I said, by the time the guy got up to the counter it was too late then.

Dr. NULL. Yes, ma'am. We certainly would be more than happy to look at the technology.

Ms. WATSON. This is to the chair, I remember, Mr. Chair, that many years ago Cardiss Collins did hearings all over the country and that was very enlightening, because this is a very, very critical issue.

Certainly we want the Nation's Capital well protected, but there are other major airports, particularly on our borders, that need this kind of evaluation so that we could be sure we can secure our homeland, so thank you.

Chairman TOM DAVIS. Thank you. I just note that the check-in area detection would be a lot easier if you did not have those big machines that are up there, that the in-line system could do.

Anything else anyone wanted to add? This has been a great hearing. We obviously need to get an in-line system here at Dulles as quickly as possible for a lot of reasons. We look forward to working with you in the coming months to try to get a plan to do that.

Thank you. The hearing is adjourned.

[Whereupon, at 11:35 a.m., the committee was adjourned.]

[The prepared statements of Hon. John L. Mica and Hon. Elijah E. Cummings follow:]

STATEMENT OF HONORABLE JOHN L. MICA
CHAIRMAN, HOUSE AVIATION SUBCOMMITTEE

TESTIMONY BEFORE THE HOUSE GOVERNMENT REFORM COMMITTEE

HEARING: INSTALLATION OF IN-LINE BAGGAGE SCREENING SYSTEMS: INCREASING SAFETY AND EFFICIENCY FOR TRAVELERS TO AND FROM OUR NATION'S CAPITAL

February 17, 2006

Chairman Davis, Ranking Member Waxman, and Members of the Committee, I want to thank you for the opportunity to submit my statement for the record. As Chairman of the Aviation Subcommittee, I have been closely monitoring the activities of the Transportation Security Administration over the last several years and have conducted a number of hearings on the installation of in-line baggage screening systems. In fact, in July 2004 the Aviation Subcommittee held a hearing on precisely this topic. Sadly, little has changed since that time. As I understand it, the number of Letters of Intent (LOI) that the Transportation Security Administration has issued remains the same, only nine. Not surprisingly, airports have become frustrated with the lack of action, and have pursued other funding sources to get in-line systems installed. So the story remains much the same almost two years later. I continue to monitor aviation security matters and I continue to be frustrated by the slow pace at which security technology is developed, deployed and utilized. As such, I have a few points that I would like to share with the Committee.

First, when it comes to aviation security, we are not getting the best bang for our buck. Since the Transportation Security Administration (TSA) was created in FY 2002, we have spent over $25 billion on aviation security. In FY 2005, an estimated $2 billion

was spent on passenger screening and $1.7 billion on baggage screening. In FY 2006, over $5.5 billion was enacted for aviation security alone. Yet, quoting the Department of Homeland Security Inspector General, there has been no overall improvement in screener performance at passenger checkpoints since the Department of Transportation OIG conducted penetration tests between November 2001 and July 2002. This time period was after September 11, 2001, but prior to federalization of the screener workforce. In terms of checked baggage screening, progress has been made in deploying explosives detection equipment but there is still much room for improvement.

Second, as has been demonstrated through testing and experience, improved technology results in improved detection and better security. The key to improved detection rates is to take the human factor out of the screening process as much as possible. Testing data show that screening methods that minimize human involvement in both the testing procedures and the resolution of alarms perform much better than those requiring more human involvement.

Third, in addition to better performance, the high-tech screening methods are more efficient, and will produce significant labor cost savings. For example, according to TSA's own analysis, the deployment of in-line Explosives Detection Systems (EDS) will reduce by an estimated 78 percent the number of TSA baggage screeners and supervisors required to screen checked baggage at the 9 airports that currently have Letters of Intent for in-line EDS systems. Specifically, the number of screeners and supervisors at these airports will be reduced from 6,645 to an estimated 1,477. In addition, TSA's analysis shows that the initial investment in in-line EDS at these 9 airports will be recovered in just 1.07 years.

Mr. Chairman, let me conclude by saying that rather than wasting billions of dollars on a huge and largely ineffective Government screening bureaucracy, we need to focus on deploying better technology as soon as possible. This would include in-line EDS; smaller EDS machines that fit behind the check-in counters and work well with tighter terminal configurations; and better checkpoint screening technology. We must act wisely and think long term when making decisions about investing in aviation security technology. Although this will require a significant upfront capital investment, the labor savings and improved performance make it more than worthwhile. Thank you.

COMMITTEE ON GOVERNMENT REFORM

Hearing: "Installation of In-Line Baggage Screening Systems: Increasing Safety and Efficiency for Traveler to and From Our Nation's Capital"

February 17, 2006
9:30 a.m. Tour
10:00 a.m. Hearing
Dulles International Airport, Virginia

Opening Statement of Congressman Elijah E. Cummings

Mr. Chairman:

I thank the Chairman and Ranking Member for calling today's hearing to give us the opportunity to examine in more detail an important issue in airline security with which many people may not be familiar – the incorporation of explosive detection equipment into airports' baggage handling systems.

The issue we are discussing today represents another instance in homeland security where on-the-ground reality has not kept pace with government mandates – in

large part because the federal government has not provided adequate funding to help airports meet new mandates. Unfortunately, the effects of this shortcoming are rippling through the entire airline system.

In response to the events of 9-11, Congress required that all baggage checked at U.S. airports be screened for explosives by the end of 2002. Several factors prevented TSA from meeting this original deadline and it was eventually pushed back by a year.

In addition to a shortage of available screening equipment, one of the primary problems that TSA encountered in creating systems to test checked baggage

for explosives was simply a lack of physical space in airports in which to place the large screening machines.

Normally, baggage handling at airports is done in basements or back room areas that were built to accommodate the baggage handling and sorting machines of the pre 9-11 era. Many of these spaces are too tight to accommodate explosive detection machinery that is often the size of a car or larger.

As a stop-gap solution, TSA has frequently placed stand-alone explosive detection screening equipment on the main floor of airport terminals – often near airline check-in desks. This placement crowds terminal floors and requires TSA officials to make multiple manual

movements of baggage before putting the bags into the usual handling process for loading onto individual flights.

In many cases, the movement of baggage through these individual detection machines can cause substantial delays in the baggage handling process. Dulles airport, which serves as a gateway to our nation's capital, consistently reports among the highest delays of all U.S. airports for baggage handling.

It is clear that the optimal solution is to make the changes in baggage handling areas necessary to incorporate the explosive detection equipment into the usual baggage handling routine. However, at many

airports, the installation of this machinery will require significant physical modifications of existing spaces which will be very costly.

So far, the federal government has not provided the level of funding that will be needed to help airports meet the costs of these modifications. To date, under what are known as Letters of Intent, the TSA has formally agreed to reimburse fewer than 10 airports for a portion of modifications expected to exceed $1 billion in total costs. None of the airports in the metropolitan Washington region is among the airports that have received Letters of Intent.

The Maryland Aviation Administration, which oversees Baltimore-Washington International/Thurgood Marshall Airport, reports that modifications to accommodate explosive detection equipment in their normal baggage handling process will cost approximately $125 million.

The Metropolitan Washington Airports Authority reports that the modifications that are needed to move the explosive detection equipment into the regular baggage handling process at Dulles could cost up to $250 million. Designs for these modifications are substantially complete but in the absence of a clear funding commitment, construction has not begun.

According to the report on baggage screening systems issued by the Government Accountability Office in July 2005, the absence of in-line systems not only causes inconvenience to travelers, it contributes to some of the problems of morale and on-the-job injury that TSA has reported among its screener workforce. While the use of explosive detection equipment is absolutely essential to ensure the security of our air transportation system, it is also essential that the costs of installing this equipment not be left to our nation's airports.

I look forward to hearing from today's witnesses.

○