

**THOMAS S. WINKOWSKI  
ASSISTANT COMMISSIONER, OFFICE OF FIELD OPERATIONS  
U.S. CUSTOMS AND BORDER PROTECTION  
DEPARTMENT OF HOMELAND SECURITY**

**Hearing before the**

**SENATE HOMELAND SECURITY AND GOVERNMENT AFFAIRS  
COMMITTEE**

**INTRODUCTION**

Good morning Chairman Lieberman, Senator Collins and distinguished Members of the Committee. I am Thomas Winkowski, Assistant Commissioner, Office of Field Operations, U.S. Customs and Border Protection (CBP). Thank you for the opportunity to discuss with you today CBP's efforts to strengthen supply chain security while facilitating the flow of legitimate trade and travel.

I would also like to express my gratitude to the Committee for the strong support you provided for important CBP initiatives over the past year and ask for your continued support of other CBP initiatives, such as the Security Filing requirement, better known as "10+2", which will strengthen and further extend outward our layered-approach to border security. Your support has enabled CBP to make significant progress in securing our borders and protect our nation against terrorist threats. CBP looks forward to working with you to build on these successes.

CBP has made great strides to secure America's borders, facilitate legitimate trade and travel, and ensure the vitality of our economy. As America's frontline border agency, our priority mission is to protect the American public against terrorists and the instruments of terror, while at the same time enforcing the laws of the United States and fostering the nation's economic security through lawful travel and trade. Today, our trained CBP officers, technology, automation, electronic information, and partnerships with the trade community and foreign governments strengthen CBP's cargo security and anti-terrorism initiatives. We have extended our zone of security outward and have reinforced the components of our layered strategy.

As we work toward securing our ports and borders, we must also continue to perform our traditional missions, which include: stemming the flow of illegal drugs and other contraband; protecting our agricultural and economic interests from harmful pests and diseases; protecting American businesses from theft of their intellectual property; regulating and facilitating international trade; collecting import duties; and enforcing United States trade laws. On a typical day in fiscal year 2008, CBP processed more than 1.1 million pedestrians and passengers, 70,200 truck, rail, and sea containers and more than 82,000 shipments of goods; intercepted hundreds of aliens at and between our ports

of entry; and seized more than 7,300 pounds of narcotics at and between our ports of entry.

## **CBP OVERVIEW**

I am pleased to appear before the Committee today to highlight key accomplishments related to supply chain security, in particular with regard to new and emerging technology. CBP has made tremendous progress in ensuring that supply chains bringing goods into the United States from around the world are more secure against potential exploitation by terrorist groups who aim to deliver weapons of mass destruction. The use of cutting edge technology has greatly increased the ability of our frontline CBP officers to successfully detect and interdict illicit importations of nuclear and radiological materials. CBP uses a multi-layered approach to ensure the integrity of the supply chain from the point of stuffing through arrival at a U.S. port of entry. This multi-layered defense is built upon interrelated initiatives, which include the 24-Hour and Trade Act rules, the Automated Targeting System (ATS), Non-Intrusive Inspection equipment and Radiation Portal Monitors, the Container Security Initiative (CSI), and the Customs-Trade Partnership Against Terrorism (C-TPAT) initiative. These complementary layers enhance security and protect our nation.

Today, I'm going to focus on the technology component of our strategy. Security technology is continuously evolving, and not only in terms of capability but also in terms of compatibility, standardization, and integration with information systems. As technology matures, it must be evaluated and adjustments to operational plans must be made. Priority should be given to effective security solutions that complement and improve the business processes already in place, and which build a foundation for 21st century global trade. A more secure supply chain also can be a more efficient supply chain. However, it is important to note that there is no single technological solution to improving supply chain security.

### **RPM and NII Detection Technology**

The specific technologies that I'm going to address today – that play a critical role in our layered enforcement strategy – are large-scale X-ray and gamma imaging systems and radiation detection devices.

The deployment of imaging systems and radiation detection equipment has contributed to CBP's tremendous progress in ensuring that supply chains bringing goods into the United States from around the world are secure against potential exploitation by terrorist groups as a means to deliver weapons of mass effect.

Prior to the events of September 11, 2001, not a single Radiation Portal Monitor (RPM) and only 64 large-scale Non- Intrusive Inspection (NII) systems were deployed to our nation's borders.

By October of 2002, CBP had deployed the first RPM at the Ambassador Bridge in Detroit. Today, CBP has 1,120 RPMs operational at seaports, land border ports of entry, and mail facilities, and has deployed 203 large-scale gamma ray or x-ray imaging systems nationwide. Additionally, CBP has deployed over 1,200 Radiation Isotope Identifier Devices (RIID) and over 16,400 Personal Radiation Detectors (PRD). These devices allow CBP to inspect 100 percent of all identified high-risk cargo.

Currently, 94 percent of trucks arriving through northern border ports, 100 percent through southern border ports, and 98 percent of arriving sea containers are scanned by our radiation detection technologies. CBP scans 97 percent of all cargo arriving in the U.S. by land and sea using RPMs. In addition, CBP officers now scan 100 percent of general aviation aircraft arriving in the U.S. from foreign destinations using handheld radiation identification devices.

I also am pleased to report to this committee that on September 8, 2008, our first RPM deployment within the airport cargo environment was commissioned at Dulles International Airport. This milestone deployment allows CBP to scan all air cargo terminating at the Dulles Airport. CBP plans to deploy radiation detection systems to 30 of our nation's airports, which will result in the scanning of 99 percent of all air cargo entering the commerce of the U.S. for nuclear and radiological materials.

In addition to the significant strides made in the area of radiation detection technology, CBP also continues to deploy NII systems. NII technology serves as a force multiplier that allows officers to detect possible anomalies between the contents of the container and the manifest. CBP relies heavily on the use of NII as it allows us to work smarter and more efficiently in recognizing potential threats. In fact, well over 6 million scans using NII systems were conducted in fiscal year 2008. Additionally, to date, CBP NII systems have conducted over 26 million exams resulting in over 6,800 narcotics seizures with a total weight of over 2.2 million pounds.

The CBP NII Acquisition Plan is constantly reevaluated as available technology is assessed against the evolving threat. To help refine our acquisition strategy, we consider factors such as traffic volume, types and density levels of imported commodities, port infrastructure constraints, appropriate mix of equipment and cost effectiveness of available technology.

CBP has identified high-energy systems that have demonstrated the appropriate performance characteristics that will enhance CBP's ability to non-intrusively examine cargo and conveyances for weapons of mass effect and other contraband. These performance characteristics include mobility, greater penetration capability, and improved image quality.

In addition to our constant assessment of available technology, we are working closely with the Department of Homeland Security's Domestic Nuclear Detection Office (DNDO) and the Science and Technology Directorate on a strategy to develop near- and

long-term technology that spans our entire mission space and effectively integrates into our port operations.

As you know, in fiscal year 2006, financial management of RPM efforts transitioned from CBP to DNDO. I am happy to report that, even though the procurement role changed, the collaborative working relationship did not. What we bring to the process is knowledge of how our ports work, what we need for support of our front-line officers, the type of technological package we can inject in our operational environment, all the while being considerate that throughput and capacity is so delicate to cross-border travel and trade in the environment. CBP maintains an active consultation role in the research, development and deployment of RPM technology and looks forward to a continued, positive working relationship with Director Oxford and his staff.

The first generation RPM systems, although very sensitive, do have limitations. While they alert CBP officers to the presence of radiation, a secondary exam is necessary to positively identify the location and specific isotope causing the alert. In the event that a CBP officer is unable to positively resolve the alert, scientific reach back is available on a 7/24 basis through CBP's National Targeting Center and Laboratory & Scientific Services Division.

Understanding these limitations and the need for a more robust radiological detection architecture, DNDO was chartered to develop and acquire new technologies that will improve CBP's radiation and nuclear detection capabilities. One of these new technologies is the next generation RPM, or the Advanced Spectroscopic Portal (ASP).

The ASP is expected to enhance our detection capability, while significantly reducing the number of secondary examinations due to its ability to distinguish between actual threats and natural or medical radiation sources that are not security threats. I would like to note as a point of reference that, out of the approximately 275 million conveyances scanned with RPMs to date, CBP officers have responded to and resolved over 1.5 million alarms. As a specific example, the Port of Los Angeles – Long Beach, our nation's largest seaport, adjudicated nearly 115,000 radiological alarms last year, which translates into between 400 and 600 alarms on a typical weekday.

The ASP's ability to make the distinction between naturally occurring radioactive materials and real security alarms of potential threats is expected to significantly reduce the burden of responding to benign, nuisance alarms –mostly generated by everyday products– thus, allowing us to focus our staffing and resources on high-risk shipments and other border security initiatives.

As the scope of CBP's mission increases, we must continue to maintain our tactical edge by integrating new technology into our ports of entry. Certainly, working in collaboration with DNDO and other agency partners to identify emerging technology is a priority for CBP.

While CBP has successfully deployed large-scale gamma imaging equipment that scans 100 percent of commercial rail traffic arriving from Mexico and approximately 90 percent of all commercial rail traffic arriving into the U.S. from Canada, the scanning of rail cars with any fixed type of radiation portal monitor continues to present significant challenges. CBP and the DNDO will continue to work together while encouraging the private sector to produce new and emerging technologies to address these challenges.

### **CBP COORDINATION WITH THE DOMESTIC NUCLEAR DETECTION OFFICE (DNDO)**

CBP has worked closely with DNDO in the development and operational testing of the ASP. CBP's focus for operational testing is to determine that systems can be deployed and are effective across a wide range of operational environments. Specifically, CBP provided DNDO with functional requirements for the ASP and has been actively engaged in every step of testing, including performance testing at the Nevada Test Site and the integration testing currently ongoing at a mock port of entry located at the Pacific Northwest National Laboratory.

During integration testing, CBP works closely with DNDO to assess each system's performance as an integrated unit, including reach-back capability and ancillary equipment, such as traffic lights and automated gate arms. This system capability is essential to maintain positive control of vehicles at our congested ports of entry. In addition, CBP works with DNDO to assess and categorize each system's defects to ascertain their technological impact as it relates to performance and operational impact to the front-line CBP officer – the users of the system.

If defects cannot be fixed by the vendor, CBP will assess each operational action or "work around" required to compensate for the defect to determine if it is operationally feasible. At this point in time, CBP is still in the process of assessing each vendor's system performance as an integrated unit and the feasibility of the totality of operational "work arounds." CBP currently expects several more weeks of integration testing before we are in a position to determine if this technology is ready for the next phase of testing, known as field validation, an actual stream of commerce testing at four major ports of entry.

### **CONCLUSION**

In conclusion, I would like to say that technology plays an enormous role in securing the supply chain. Security technology is continuously evolving, not only in terms of capability but also in terms of compatibility, standardization, and integration with information systems. It is important to note that there is no single technology solution to improving supply chain security. As technology matures, it must be evaluated and adjustments to operational plans must be made. Priority should be given to effective security solutions that complement and improve the business processes already in place and build a foundation for 21<sup>st</sup> century global trade. A more secure supply chain also can be a more efficient supply chain.

Mr. Chairman, Members of the Committee, today I have addressed CBP's commitment to investing its efforts in the areas of new and emerging detection technology, along with some of the very positive steps we have taken towards enhancing cargo security. I believe CBP has demonstrated and will continue to demonstrate its leadership and commitment to protecting America against terrorists and the instruments of terror. As we move forward to face the many challenges ahead, we look forward to working in partnership with the 111th Congress, as we have with the 110<sup>th</sup>, to continue building on our many accomplishments and focus on getting the desired results. With continued support, CBP will succeed in meeting the challenges posed by the ongoing terrorist threat, while continuing to facilitate the ever-increasing numbers of legitimate shipments and travelers.

Thank you again for this opportunity to testify. I will be happy to answer any of your questions.