

**Statement of**  
**Administrator John S. Pistole**  
**Transportation Security Administration**  
**U.S. Department of Homeland Security**  
**Before the**  
**United States House of Representatives**  
**Committee on Homeland Security**  
**Subcommittee on Transportation Security**

**November 14, 2013**

Good morning Chairman Hudson, Ranking Member Richmond, and other members of the Committee. I appreciate the opportunity to appear before you today to discuss the Transportation Security Administration's (TSA) Behavior Detection and Analysis (BDA) Program.

TSA is a high-performing counterterrorism agency with a dedicated workforce executing our mission around the clock and across the globe. To fulfill this vital mission, TSA employs a layered approach to security through state-of-the-art technologies, intelligence analysis and information sharing, behavior detection techniques, explosives detection canine teams, Federal Air Marshals, and a well-trained frontline workforce, among other assets. All of these layers are essential to securing the nation's transportation systems and improving the experience of the nearly 1.8 million air passengers who fly each day.

While the technological equipment TSA deploys at the checkpoint is designed to detect prohibited items, the BDA program is broader in scope and is designed to detect unknown threats. Terrorists have used a variety of items to attempt to inflict harm to aircraft, including underwear and shoe bombs, liquid explosives, and toner-cartridge bombs. Consistent across all methods of attack, however, is the malicious intent of the actor. BDOs focus on behavioral indicators, rather than items. Since we cannot always predict the form evolving threats will take, BDOs provide a crucial layer of security. Over the last several years, BDOs have demonstrated that these techniques are an effective means of identifying people engaged in deceptive and/or illegal activity, and those who harbor a fear of discovery, all consistent with behaviors that might appear in individuals planning to do harm on board an aircraft. In 2012 there were 2,116 BDO screening referrals to law enforcement, which resulted in 30 boarding denials, 79 investigations by law enforcement entities, and 183 arrests.

### **Behavior Detection and Analysis (BDA) Program**

The BDA program utilizes non-invasive behavior detection techniques based on scientifically validated behaviors to identify individuals who potentially pose a threat to the nation's transportation network. These individuals are deemed potentially higher risk and subjected to additional scrutiny by TSA. The program was formally established in 2006 after three years of operational pilot testing. Today, TSA deploys more than 3,000 full-time Behavior Detection Officers (BDOs) in the aviation and surface transportation sectors, the latter through participation in Visible Intermodal Prevention and Response (VIPR) teams in surface modes of transportation.

The BDA program identifies potentially high risk individuals exhibiting behavior indicative of excessive fear or stress and re-routes them for additional screening by looking for a combination of individual indicators that warrant follow-up. BDO observations and referrals are not dispositive of high risk activity, but solely are reason for additional screening, similar to an Advanced Imaging Technology (AIT) alarm needing to be resolved. BDOs are trained to identify behavior cues that have been shown through research, science, and decades of domestic and international law enforcement experience to be reliable indicators and predictors of anomalous or suspicious behavior. BDOs engage in conversation with individuals displaying anomalous behaviors, looking at possible verbal cues indicative of a high risk passenger and refer those individuals exhibiting such behavior for additional physical screening and/or to law enforcement.

### **Scientific Validation**

Behavior detection techniques have been an accepted practice for many years within the law enforcement, customs and border enforcement, defense, and security communities both in the United States and internationally. As a law enforcement professional with 30 years of experience, I can personally attest to the effectiveness of behavior detection principles. TSA has completed extensive studies in partnership with the Department of Homeland Security (DHS) Science and Technology Directorate (S&T) and the academic community to examine the validity of the BDA program. An S&T validation study in partnership with the American Institutes for Research (AIR) completed in 2011 represents the most thorough and rigorous analysis of a behavioral screening program completed to date. The study included over 70,000 random samples at 41 airports. Notably, the validation study found that TSA's behavior

detection identifies high-risk travelers at a significantly higher rate than random screening. The study concludes that a high-risk traveler is nine times more likely to be identified using behavioral detection versus random screening. The 2011 independent Screening of Passengers by Observation Techniques (SPOT) Validation Study Technical Advisory Committee composed of respected subject matter experts from academia, law enforcement, and the intelligence community concurred with the study's main conclusion<sup>1</sup>. Without behavior detection, TSA would have had to randomly subject over 50,000 more travelers to additional invasive screening to achieve the same results as did the BDOs during the timeframe of the two-year study.

### **International Behavior Detection Partnerships**

TSA has long partnered with international counterparts to develop and strengthen behavior detection practices. In December 2011, TSA partnered with Canada, the European Civil Aviation Conference (ECAC), France, Switzerland, and the United Kingdom to create the Behavior Detection in Aviation Security Study Group (BDIAS-SG) to exchange operational and programmatic information and best practices between/among BDIAS-SG Members in order to refine domestic programs. This framework facilitates the sharing and alignment of ongoing research and science in the field of behavior detection, with a focus on validating the effectiveness and efficiency of behavior detection across cultures and identifying an optimal approach to behavior detection in the future. It also creates international awareness concerning the use of behavior detection as an aviation security measure through the production of non-sensitive outreach materials that clearly define behavior detection. The BDIAS-SG is also creating common tools for use by members and, in the future, regional governmental

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<sup>1</sup> SPOT Validation Study Final Results: 2011 Technical Advisory Committee (TAC) Review Report, HumRRO, June 2011.

organizations or possibly industry to support countries/actors with robust security structures to build anomalous behavior detection capability tailored to the relevant domestic environment. This international exchange has been instrumental to the growth and validation of TSA's BDA program and has produced a framework and materials that will assist additional interested countries to establish their own behavior detection programs.

### **Risk Based Security**

The BDA program is a critical part of TSA's Risk Based Security (RBS) efforts, which moves TSA's checkpoint screening away from a "one size fits all" approach to more effective security measures that use the best available intelligence to differentiate levels of screening based on risk. As concluded in a recent RAND National Defense Research Institute report, "[T]here is current value and unrealized potential for using behavioral indicators as part of a system to detect attacks."<sup>2</sup> TSA behavior detection procedures, including observational assessments and the equally important verbal interaction with passengers, are an essential element in a dynamic, risk-based layered security system.

One key element in expanding RBS is the Managed Inclusion concept, which routes passengers into expedited screening lanes using passenger screening canine teams or sampling with explosives detection technologies to screen passengers and their belongings for explosives while BDOs assess passengers for suspicious behaviors. If the explosives detection teams do not alert on an individual and a BDO does not observe suspicious behavioral indicators, the individual may be eligible for expedited screening through a TSA Pre✓™ lane.

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<sup>2</sup> Davis, P. K., Perry, W. L., Brown, R.A., Yeung, D, Roshan, P., and Voorhies, P. (2013). "Using Behavioral Indicators to Help Detect Potential Violent Acts: A Review of the Science Base". RAND Corporation, National Defense Research Institute.

### **Zero Tolerance for Unlawful Profiling**

Racial profiling is not part of the TSA's BDA program and is not tolerated by TSA. Not only is racial profiling generally prohibited by Federal law and under Department and agency policy, but it is also an ineffective security tactic. TSA has zero tolerance for this kind of behavior and has taken several steps to reinforce the agency's nondiscrimination and anti-profiling policies with our workforce.

The Standard Operating Procedures (SOPs) and training for TSA's BDA program, in coordination with the DHS Office of Civil Rights and Liberties (CRCL), provide clear instructions to ensure that referrals for additional screening are made based on specific observed behavioral criteria without regard to nationality, race, color, ethnicity, or religious affiliation. BDOs are required to complete a report documenting specific behaviors observed for each passenger identified for additional action. BDA program analysts audit these reports regularly to ensure that BDOs are employing techniques properly, including protecting any privacy information that results from a law enforcement referral.

Additionally, BDOs are trained specifically in preventing race, ethnicity, or religious profiling, and in 2012, TSA reviewed and revised all training documents to underscore that unlawful profiling violates agency policy and anti-discrimination laws. BDOs are instructed to immediately notify management if they believe profiling has occurred. That instruction is reinforced during recurring training, shift briefs, employee counseling sessions, and other avenues. All BDOs and BDO training managers are required to take a pledge against unlawful profiling, and all TSA employees are required to take biannual DHS Notification and Federal Employee Anti-discrimination and Retaliation Act of 2002 (No FEAR Act) training that provides

information to employees regarding rights and protections available under Federal antidiscrimination, whistleblower protection and retaliation laws.

TSA expects every member of the workforce, including BDOs, to report allegations of profiling to local management or directly to the TSA Office of Civil Rights and Liberties, Ombudsman and Traveler Engagement (CRL/OTE) or Office of Inspection (OOI) without fear of retaliation. TSA also modified its complaint reporting procedures to make it easier for travelers to report allegations of racial profiling through TSA's website or mobile phone app. If allegations do arise, TSA takes immediate steps to investigate the issue.

In 2013, the DHS Office of Inspector General (OIG) conducted an investigation at the request of TSA into allegations that BDOs at Logan International Airport (BOS) in Boston, MA, racially profiled passengers in order to meet secondary inspection referral production quotas. In a Report of Investigation provided to TSA on August 22, 2013, DHS OIG stated there was no indication the BDOs at BOS racially profiled passengers.

#### **Government Accountability Office (GAO) Recommendations**

TSA appreciates input and recommendations to enhance its programs including the GAO's feedback on the BDA Program. Its recommendations have led to significant improvements in program management and deployment, including the risk-based allocation mentioned above. In addition, GAO's comments on the behavior indicator set have helped shape TSA's efforts to strengthen detection and evaluation methodologies, including the following actions:

- Condense and strengthen the behavior indicator list and optimize the weights and protocols used, which will likely result in significant changes to behavior detection procedures and include a simplified scoring and referral process.
- Explore additional performance metrics that could be used to examine overall program effectiveness, individual and combinations of indicator effectiveness, and reliability across individuals and locations.
- Incorporate more robust data collection and authentication protocols similar to those used in TSA operational tests of screening technologies in any future studies.

While TSA appreciates GAO's partnership in improving the BDA program, we are concerned that its most recent report relies heavily on academic literature regarding the detection of individuals who are lying. The report, however, fails to recognize all of the available research or that S&T, which conducted a validation study with an independent review process, relied in part upon unpublished studies not included in literature reviews. It is important to note that TSA's behavior detection approach does not attempt to specifically identify persons engaging in lying; rather, it is designed to identify individuals who may be deemed high-risk based on objective behavioral indicators. The National Research Council's (NRC) 2008 report<sup>3</sup> cites scientific evidence that supports this method.

Based on TSA's objective to identify individuals who may be deemed high-risk based on objective behavioral indicators, TSA believes the program should continue to be funded at current levels while the improvements outlined below are implemented.

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<sup>3</sup> National Research Council (2008). Protecting individual privacy in the struggle against terrorists: A framework for assessment. National Academies Press, Washington, D.C.



### **Future of the Program**

Strong program management is critical to any program and this includes performance metrics, strategic planning, and quality assurance measures. The BDA program is currently undergoing rigorous review to further improve TSA's vital behavior detection capability, which is consistent with many of the OIG recommendations made in their May 2013 report. Within ninety days of the report issuance, TSA closed half of the recommendations and is working on closing the remainder. Specifically, TSA has taken the following actions:

- **Strategic Planning and Performance Measurement:** Finalized a strategic plan and performance measurement plan and began implementing many of the objectives in these framework documents.
- **Data Accuracy:** Implemented controls to ensure completeness, accuracy, authorization, and validity of referral data entered into the Performance Management Information System.
- **Training:** Implemented a plan to provide mandatory recurrent/refresher training to all BDOs and BDO instructors. In September 2013, The National Training Team Academy, which trains BDO instructors, graduated a class of 25 trainers on September 26. TSA also finalized a plan to assess BDO instructor performance in required core competencies on a regular basis.
- **Monitor and Evaluate BDO Activity:** Developed and implemented an automated tool to help evaluate airports' use of BDO resources.
- **Employee Engagement:** Implemented processes, including focus groups, for identifying and addressing issues raised by the workforce that may directly affect the success of the BDA program.

TSA anticipates optimized behavior detection procedures to begin testing by the third quarter of Fiscal Year (FY) 2014 using robust methods similar to the operational testing conducted in support of technology acquisitions. TSA should have sufficient information on the performance of the new processes to update the national behavior detection deployment strategy within six months of the commencement of the tests. Additionally, TSA has established an Optimization effort in partnership with S&T and academia, industry, and other government and community stakeholders to enhance behavior detection principles and provide the tools to quantify its effective contribution to transportation security.

### **Conclusion**

The nation continues to face evolving threats to our transportation system, and TSA's BDA Program provides a critical security capability to defend against our adversaries. TSA appreciates the work of the GAO, DHS OIG, and this Committee to identify opportunities to strengthen the program as we move forward. Our ongoing progress demonstrates our continuing commitment to TSA's mission of securing our nation's transportation systems in the most effective way. Thank you for the opportunity to appear before you today. I look forward to answering your questions.

**Law, Rosemary**

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**From:** Bardwell, Mark (b)(6)  
**Sent:** Tuesday, September 17, 2013 3:37 PM  
**To:** Alhinnawi, Sumer; Beck, Carol; Cullin, Allison; Dietch, Sarah; Goldman, Howard <TSA Exec Ofc>; Hearing, Peter; John, Libby Ann; Le, Kim; Marston, Alex; Mason1, Matthew; McCarthy, Michael; StPierre, Tracey; Strosnider, Brian; TSAExecSec  
**Cc:** ESEC-CA-Staff; Harper, Jerald; Cirillo, Laura; Greenwood, Kennedy  
**Subject:** Testimony Tasking - TSA - BDO Program

The below testimony workflow has been assigned to TSA for action. Draft testimony is **due 10/9/2013 at 10:00am** (this takes into account Columbus Day) via IQ reassignment to TEST\_ES. Please email ESEC-CA-STAFF with any questions.

<b>IQ Workflow #</b>	<b>Witness</b>	<b>Committee/Subcommittee</b>	<b>Hearing Date</b>	<b>Hearing Subject</b>	<b>Tasked</b>	<b>Final Due</b>
995141	TSA TBD	House CHS, Subcommittees on Transportation Security & Oversight and Management Efficiency	10/24/2013	BDO Program	9/17/2013	10/9/2013

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