



September 2014

COMBATING NUCLEAR SMUGGLING

Risk-Informed Covert
Assessments and
Oversight of
Corrective Actions
Could Strengthen
Capabilities at the
Border

Why GAO Did This Study

Preventing terrorists from smuggling nuclear or radiological materials into the United States is a top national priority. To address this threat, DHS has deployed radiation detection equipment and trained staff to use it. CBP conducts covert operations to test capabilities for detecting and interdicting nuclear and radiological materials at air, land, and sea ports of entry into the United States as well as checkpoints. GAO was asked to review CBP's covert testing operations. This report assesses the extent to which (1) CBP covert operations assess capabilities at air, land, and sea ports and checkpoints to detect and interdict nuclear and radiological material smuggled across the border and (2) CBP reports its covert operations results and provides oversight to ensure that corrective actions are implemented. GAO analyzed documents, such as test summaries, directives, and planning and guidance papers and interviewed DHS, CBP, and Domestic Nuclear Detection Office officials. This is a public version of a sensitive report that GAO issued in July 2014. Information that DHS deemed sensitive has been redacted.

What GAO Recommends

GAO recommends that DHS inform priorities for covert operations by using an assessment of risk, determining time frames for reporting results, addressing barriers for meeting time frames, and developing a mechanism to track corrective actions. DHS concurred with GAO's recommendations.

View [GAO-14-826](#). For more information, contact David C. Maurer at (202) 512-9627 or maurerd@gao.gov; or David C. Trimble at (202) 512-3841 or trimbled@gao.gov.

COMBATING NUCLEAR SMUGGLING

Risk-Informed Covert Assessments and Oversight of Corrective Actions Could Strengthen Capabilities at the Border

What GAO Found

The Department of Homeland Security's (DHS) covert operations provide limited assessment of capabilities to detect and interdict the smuggling of nuclear and radiological materials into the United States. DHS's U.S. Customs and Border Protection's (CBP) Operational Field Testing Division (OFTD) conducted 144 covert operations at 86 locations from fiscal years 2006 through 2013, selecting its locations from a total of 655 U.S. air, land, and sea port facilities; checkpoints; and certain international locations. These operations allowed OFTD to assess capabilities for detecting and interdicting—or intercepting—nuclear and radiological materials at locations tested. Results showed differences in the rate of success for interdicting smuggled nuclear and radiological materials across facility types. CBP had a \$1 million budget for covert operations of various activities—including nuclear and radiological testing—covering fiscal years 2009 through 2013, and DHS policy requires that components with limited resources make risk-informed decisions. However, CBP testing does not inform capabilities across all border locations, and CBP has not conducted a risk assessment that could inform and prioritize the locations, materials, and technologies to be tested through covert operations. Given limited resources, assessing risk to prioritize the most dangerous materials, most vulnerable locations, and most critical equipment for testing through covert operations, DHS could better inform its decisions on how to expend its limited resources effectively, consistent with the department's risk management policies.

OFTD has not issued reports annually as planned on covert operation results and recommendations, limiting CBP oversight for improving capabilities to detect and interdict smuggling at the border. OFTD has issued three reports on the results of its covert operations at U.S. ports of entry since 2007. However, OFTD officials stated that because of resource constraints, reports have not been timely and do not include the results of covert tests conducted at checkpoints. Furthermore, OFTD tracks the status of corrective actions taken to address recommendations in these reports; however, CBP does not track corrective actions identified from their individual covert operations that were not included in these reports. Establishing appropriate time frames for reporting of covert operations results and addressing barriers to meeting these time frames would help enhance CBP's accountability for its covert testing operations. Further, developing a mechanism to track whether ports of entry and checkpoints have implemented corrective actions could help inform management decision making on the need for further investments in equipment or personnel training to protect U.S. borders.

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Abbreviations:

| | |
|---------------|--|
| CBP | U.S. Customs and Border Protection |
| CSI | Container Security Initiative |
| DHS | Department of Homeland Security |
| DNDO | Domestic Nuclear Detection Office |
| FTE | full-time equivalent |
| GNDAA | Global Nuclear Detection Architecture |
| IND | improvised nuclear device |
| IPG | Integrated Planning Guidance |
| LSS | Laboratories and Scientific Services |
| NII | non-intrusive inspection |
| NORM | naturally occurring radioactive material |
| NRC | Nuclear Regulatory Commission |
| OFO | Office of Field Operations |
| OFTD | Operational Field Testing Division |
| PRD | Personal Radiation Detector |
| RDD | radiological dispersal device |
| RIID | Radiation Isotope Identification Device |
| RPM | Radiation Portal Monitor |
| SAFE Port Act | Security and Accountability for Every Port Act of 2006 |
| SNM | special nuclear material |
| USBP | U.S. Border Patrol |

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September 22, 2014

The Honorable Michael T. McCaul
Chairman
Committee on Homeland Security
House of Representatives

The Honorable Jeff Duncan
Chairman
Subcommittee on Oversight and Management Efficiency
Committee on Homeland Security
House of Representatives

The threat that terrorists could smuggle nuclear and radiological materials into the United States for use in developing weapons of mass destruction or other nefarious purposes will endure into the foreseeable future. U.S. efforts to counter such threats are considered a top national priority, and the Implementing Recommendations of the 9/11 Commission Act of 2007 provided the Department of Homeland Security (DHS) with responsibility for ensuring that equipment and technologies necessary to detect these threats are integrated, as appropriate, with other border security systems.¹ Since 1995, DHS has invested billions of dollars in equipment and technology, as well as related training for DHS personnel, to better ensure detection and interdiction of smuggled nuclear and radiological materials.² DHS efforts to determine the effectiveness of its border-screening activities include covert operations, whereby teams of agency personnel secretly attempt to smuggle nuclear and radiological materials at U.S. locations where DHS personnel screen for radiation.

DHS's U.S. Customs and Border Protection (CBP) has primary responsibility for securing the border against threats to the nation. CBP's Office of Field Operations (OFO) scans passengers and cargo traveling across the border through U.S. air, land, and sea ports of entry to detect and interdict smuggled contraband—including illicit nuclear and

¹6 U.S.C. § 921a.

²Interdiction refers to intercepting smuggled contraband.

radiological materials.³ CBP's U.S. Border Patrol (USBP) conducts non-intrusive inspections for immigration purposes at checkpoints located on roads leading from the border into the United States.⁴ CBP's Operational Field Testing Division (OFTD), under the Office of Internal Affairs, conducts covert operations to test capabilities for detecting and interdicting nuclear and radiological materials at ports of entry and checkpoints, with some support provided by DHS's Domestic Nuclear Detection Office (DNDO). DNDO has a mission to lead national efforts to counter the risk of nuclear terrorism against the United States by making efforts to continuously improve capabilities to deter, detect, respond to, and determine the origin of attacks, in coordination with domestic and international partners. DNDO's mission also includes working with interagency and DHS partners to develop a Global Nuclear Detection Architecture (GNDA) Strategic Plan and the DHS GNDA Implementation Plan. The GNDA is a strategy involving an integrated system of radiation detection equipment and interdiction activities to combat nuclear smuggling in foreign countries, at the U.S. border, and inside the United States—and the DHS GNDA Implementation Plan identifies specific DHS-led programs and activities that support the mission, goals, and responsibilities discussed in the GNDA Strategic Plan.

In response to the Security and Accountability for Every Port Act of 2006 (SAFE Port Act), OFTD conducted covert operations to assess the capability to detect and interdict smuggling of nuclear and radiological material at the nation's 22 busiest seaports from fiscal years 2007 through 2008.⁵ After the completion of these covert operations in 2009, the DHS GNDA Implementation Plan directed CBP and DNDO to conduct

³Ports of entry are the facilities that provide for the controlled entry into or departure from the United States for persons and materials. Specifically, a port of entry is any officially designated location (airport, seaport, or land port location) where DHS officers or employees are assigned to clear passengers and merchandise, collect duties, and enforce customs laws.

⁴Checkpoints are the third layer in USBP's three-tiered border enforcement strategy. The other two layers are located at or near the border, and consist of USBP agents at the immediate border and in other areas up to 100 miles from the border. Non-intrusive inspection (NII) technologies include large-scale X-ray and gamma-ray imaging systems, as well as a variety of small-scale, portable, and hand-held technologies, to include radiation detection equipment.

⁵6 U.S.C. § 921. Under the SAFE Port Act, all containers entering the United States at the 22 seaports through which the greatest container volume enters the country must be screened for radiation.

a minimum of one joint covert operation at the border each year to test the processes in place to detect and respond to nuclear and radiological materials being smuggled into the United States. However, CBP determined that additional testing was needed at the border and developed processes to conduct additional covert operations. According to OFTD officials, CBP has conducted these self-initiated activities using its own budget resources.

You asked us to review DHS covert testing efforts at the U.S. border, including ports of entry and checkpoints. We assessed the extent to which (1) CBP covert operations assess capabilities at air, land, and sea ports and checkpoints to detect and interdict nuclear and radiological materials smuggled across the border and (2) CBP reports its covert operations results and provides oversight to ensure that corrective actions are implemented.

This report is a public version of the prior sensitive report that we provided to you. DHS determined that some of the information in the prior report was Sensitive Security Information and For Official Use Only and must be protected from public disclosure. Therefore, this report omits sensitive information about CBP covert operations, including the results of covert operations as well as DHS's radiological and nuclear detection capabilities at U.S. air, land, and sea ports of entry and checkpoints. Although the information provided in this report is more limited in scope, it addresses the same questions as the sensitive report. Also, the overall methodology used for both reports is the same.

To determine the extent to which CBP covert operations provide the information necessary to assess capabilities to detect and interdict nuclear and radiological material smuggled across the border, we collected and analyzed documentary and testimonial evidence from CBP's OFTD, which directed and conducted such operations, and DNDO, which assisted with some of CBP's covert operations. Specifically, we reviewed planning documents, and covert operations test summaries and reports showing the number, location, and results of covert operations conducted at U.S. air, land, and sea ports of entry and checkpoints from the first year such operations were conducted from fiscal year 2006 through fiscal year 2013. We interviewed OFTD officials conducting these operations and DNDO officials from the Red Team and Net Assessments Directorate to discuss the methodology used to select the number and location of covert operations, and assessed the extent to which such methodology incorporated DHS's May 2010 Policy for Integrated Risk Management. We also reviewed documents outlining roles,

responsibilities, and funding for transborder covert operations, such as the DHS GNDA Implementation Plan, and DNDO and CBP budget documents and congressional budget requests. We also conducted a statistical analysis to determine the number of sampled covert operations in order to generalize results to the OFTD universe of 655 sites—including ports of entry and checkpoints, assuming a random selection from the OFTD universe of 655 sites. In conducting this analysis, we assumed a confidence level of 95 percent and a margin of error of no more than 10 percentage points.

To determine the extent to which CBP reports its covert operations results, and provides oversight to ensure that corrective actions are implemented, we reviewed documents and conducted interviews regarding the processes used to report and track these activities. Specifically, we obtained reports on the results of covert operations and compared them against OFTD policy and guidance. We also analyzed OFTD test summaries and reports to determine the findings and recommendations resulting from covert operations. We then interviewed officials from CBP, OFO, and USBP to determine processes used to report these findings, develop recommendations, and track the status of corrective actions.

We conducted this performance audit from July 2013 to July 2014 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Background

Concerns about the threats posed by nuclear smuggling initially focused on nuclear materials originating from the former Soviet Union. As a result, the first major initiatives to address these threats concentrated on deploying radiation detection equipment at borders in countries of the former Soviet Union and in Central and Eastern Europe. In the United States, the U.S. Customs Service began providing its inspectors with portable radiation detection devices in 1998. After September 11, 2001, the agency expanded its efforts to include the deployment of radiation portal monitors (RPM)—large-scale radiation detectors that can be used to screen vehicles and cargo. The U.S. Customs Service was transferred to DHS in fiscal year 2003, and the border inspection functions of the U.S. Customs Service, including radiation detection, became the responsibility

of CBP. Accordingly, deploying radiation detection equipment at the U.S. border is part of DHS's strategy for addressing the threat of nuclear and radiological terrorism. In April 2005, the President issued a directive establishing DNDO within DHS and giving DNDO responsibility, among other things, to enhance and coordinate federal, state, and local efforts to detect nuclear and radiological materials. From 1995 through 2013, CBP invested over \$2.5 billion to acquire, deploy, and maintain radiation detection equipment; provide training; and conduct both overt and covert tests of this equipment to assess the equipment's effectiveness. OFTD's budget for covert operations was \$1 million for fiscal years 2009 through 2013 to test CBP capabilities in several areas, including radiation and nuclear detection.⁶

Risks Associated with Nuclear and Radiological Materials

A terrorist's use of either an improvised nuclear device (IND) or a radiological dispersal device (RDD)—could have devastating consequences, including not only loss of life but also enormous psychological and economic impacts. An IND is a crude nuclear bomb made with highly enriched uranium or plutonium, generally referred to as special nuclear materials (SNM). It would create an explosion producing extreme heat, powerful shockwaves, and intense radiation that would be immediately lethal to individuals within miles of the explosion, as well as radioactive fallout over thousands of square miles.⁷ An RDD—frequently referred to as a dirty bomb—would disperse radioactive materials into the environment through a conventional explosive or through other means. Depending on the type of RDD, the area contaminated could be as small as part of a building or a city block or as large as several square miles. Hundreds of individuals might be killed or injured from the RDD explosion or face the risk of later developing cancer because of exposure to radiation and radioactive contamination.

⁶Other areas include document fraud, bioterrorism, canine detection of contraband, agricultural inspections, non-intrusive inspection, and its Trusted Traveler and Immigration Advisory Programs. The \$1 million does not include OFTD staff assigned to conduct covert operations. CBP was unable to provide us with a specific breakdown of the funds expended solely for nuclear and radiological covert operations or costs associated with conducting overt operations.

⁷More specifically, nonproliferation experts estimate that a successful IND could produce the same force as the equivalent of the yield of the bomb that destroyed Nagasaki, Japan, in 1945; it could devastate the heart of a medium-sized U.S. city. The explosion could cause hundreds of thousands of deaths and injuries, as well as pose long-term cancer risks to those exposed to the radioactive fallout.

Agency Responsibilities for Combating Nuclear Smuggling

Federal agencies that have a role in combating nuclear smuggling are responsible for implementing their own programs per the GNDA. The GNDA is composed of programs run by U.S. agencies including CBP, the Federal Bureau of Investigation, and the Department of Energy as well as partnerships with local, state, tribal, and territorial governments; the private sector; and international partners.⁸ The programs are designed to encounter, detect, characterize, and report on radiological and nuclear material that is out of regulatory control. DNDO serves as the primary entity in the United States to develop GNDA-related programs and initiatives, and improve radiological and nuclear detection capabilities. In addition, DNDO coordinates the GNDA's efforts with other federal agencies, and assists DHS agencies with both implementing the domestic portion of the GNDA and also acquiring radiation detection equipment.

CBP's OFO is responsible for implementing scanning procedures to detect smuggling of nuclear and radiological materials at 328 ports of entry composed of airports, seaports, and designated land ports of entry throughout the United States plus selected locations overseas.⁹ CBP's USBP is responsible for implementing screening procedures at 35 permanent checkpoints generally located between 25 and 100 miles from the border.¹⁰ Figure 1 displays the locations of air, land, and sea ports of

⁸The directive establishing DNDO and the SAFE Port Act reaffirmed that the Departments of Defense, Energy, and State are responsible for programs to combat nuclear and radiological smuggling outside the United States. See 6 U.S.C. § 592.

⁹Some of the 328 ports of entry are composed of one or more facilities, such as airports, seaports, or land ports. For example, the Brownsville, Texas port of entry includes air, land, and sea ports. Accounting for each air, land and sea port separately, CBP is responsible for implementing scanning procedures at a total of 477 facilities (241 airports, 110 land ports, and 126 sea ports).

¹⁰USBP operates two types of checkpoints—permanent and tactical—that differ in terms of size, infrastructure, and location. While both types of checkpoints are generally operated at fixed locations, permanent checkpoints—as their name suggests—are characterized by their bricks-and-mortar structure that may include off-highway covered lanes for vehicle inspection, and several buildings including those for administration, detention of persons suspected of smuggling or other illegal activity, and kennels for canines used in the inspection. USBP operates up to 175 tactical checkpoints along both borders with temporary infrastructure that may consist of a few USBP vehicles used by agents to drive to the location, orange cones to slow down and direct traffic, portable water supply, a cage for canines (if deployed at the checkpoint), portable rest facilities, and warning signs.

entry and permanent checkpoints across the nation.¹¹ (see app. I for specific information about each location.)

¹¹Air ports of entry include international and landing rights airports but exclude user fee, preclearance, and express consignment carrier facility airports.

OFTD is responsible for conducting covert operations at U.S. ports of entry and checkpoints to test the capabilities for detecting and interdicting nuclear and radiological materials smuggled into the United States, as well as testing capabilities in foreign locations. In selecting sites for covert operations, OFTD considers a universe of 655 sites. These sites include the 477 facilities at the 328 ports of entry, 35 permanent checkpoints, as well as 143 sites consisting of domestic user fee airports and express consignment carrier facility airports as well as preclearance locations and Container Security Initiative (CSI) ports in foreign locations.¹²

CBP Screening Process for Nuclear and Radiological Materials

The technology, policies, and procedures to detect and interdict nuclear and radiological material smuggled across the border differ across ports of entry and checkpoints, but consist of four similar functions: (1) the ability to detect radiation, (2) the ability to locate the radiation source, (3) the ability to identify the radiation source, and (4) the ability to contact Laboratories and Scientific Services (LSS) and transmit data as needed when additional adjudication is required.¹³ At land and sea ports of entry, vehicles or containers entering the United States must pass through RPMs that can detect the presence of neutron-and gamma-emitting radioactive material. As we have previously reported, different radioactive materials emit varying types of radiation, and although sources of neutron radiation are less common than gamma radiation, neutron radiation is emitted from some materials that are used to make nuclear weapons. Thus, RPMs and other tools that can detect neutron radiation are

¹²User fee airports are small airports that have been approved by the Commissioner of CBP to receive, for a fee, the services of a CBP officer for the processing of aircraft entering the United States and their passengers and cargo. Express consignment carrier facilities are separate or shared specialized facilities approved by the port director solely for the examination and release of express consignment shipments. Preclearance is the CBP inspection and clearance of commercial air passengers prior to departure from foreign preclearance locations. CSI locations are selected foreign seaports in which CBP places its officials to determine whether U.S.-bound cargo container shipments from those ports are at risk of containing weapons of mass destruction and illicit drugs. The number of sites can vary depending on how they are counted. For example, depending on the operational needs of the express consignment operator, an express consignment facility can be either a hub, which is a separate, unique, single-purpose facility normally operating outside of customs operating hours approved by the port director, or an express consignment carrier facility.

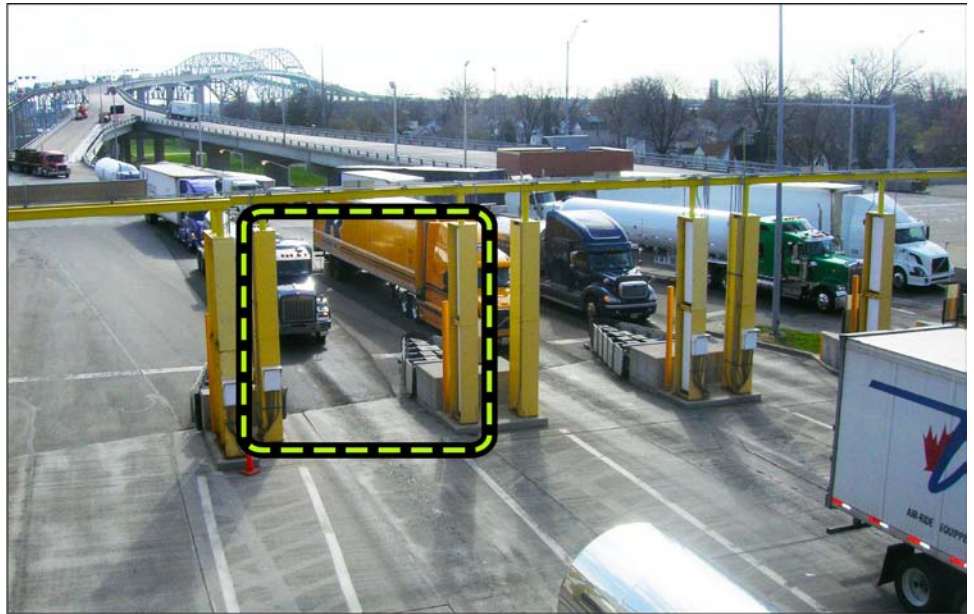
¹³Adjudication is the process of identifying the type or nature of the material or device that resulted in an alarm with reasonable certainty, and assessing the potential threat that the material or device might pose

particularly important for national security purposes, including securing our borders. RPMs detect the presence of radioactive material, which can include plutonium, kitty litter, or granite. If an RPM detects the presence of radioactive material in a scanned container or vehicle, the responding CBP officer is to utilize a device called a radiation isotope identification device (RIID) to identify the radiation source. For some sources, such as industrial radioactive sources, CBP officers must contact the CBP LSS staff to verify the type of source material in question and, if necessary, verify the Nuclear Regulatory Commission licensee and shipper information through the National Law Enforcement Communications Center.

CBP officials reported that CBP officers and USBP agents in checkpoint and air ports of entry locations generally rely on devices called personal radiation detectors (PRD) to protect the health and safety of agency personnel. These devices detect elevated levels of radiation. Aside from relying on different equipment to detect radiological materials, CBP officers at air ports of entry and USBP agents at checkpoints follow procedures outlined in CBP's Radiation Detection Standard Operating Procedures Directive, used at sea and land ports of entry.¹⁴ In keeping with these procedures, if a PRD alerts a CBP officer or USBP agent to the presence of radiation, the officer or agent uses RIID technology to identify the radioactive material. See figures 2, 3, and 4 for photographs of RPM, RIID, and PRD technology.

¹⁴CBP Directive No. 5290-015B.

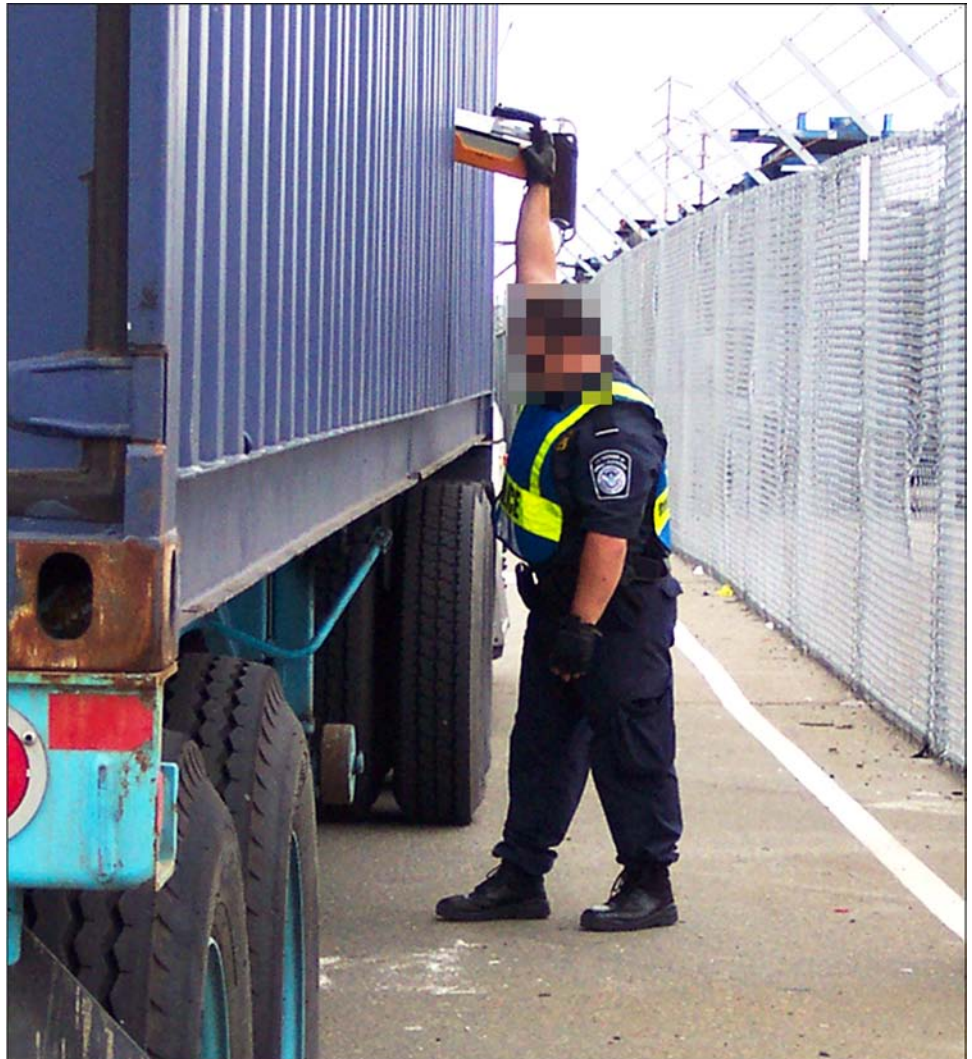
Figure 2: Radiation Portal Monitor (RPM)



Source: GAO. | GAO-14-826

Note: An RPM is a large pass-through radiation monitor, or portal, for personnel, vehicles, and container boxes. These monitors sound alarms to indicate the presence of radioactive materials.

Figure 3: Radiation Isotope Identification Device (RIID)



Source: GAO. | GAO-14-826

Note: The RIID is a hand-held radiation detector with the ability to analyze the energy spectrum of radiation, in order to identify the specific radiation isotope.

Figure 4: Personal Radiation Detector (PRD)



Source: CBP. | GAO-14-826

Note: The PRD is a small wearable detector, approximately the size of a pager. When the PRD is exposed to elevated radiation levels, it sets off an alarm with a flashing light and an audible beep.

CBP uses covert operations to test and evaluate whether the systems in place are working as designed to detect and interdict nuclear and radiological smuggling. These operations include an assessment of whether the equipment and technology are working according to specification, the policies and procedures for radiation handling and inspection are adequate to cover various smuggling scenarios, and the extent to which CBP personnel comply with established policies and procedures to detect and interdict nuclear and radiological material smuggled across the border. According to CBP documents, results of covert operations can identify the need for changes in how technology is used to detect nuclear and radiological material, agency policies or procedures, or personnel training to ensure that interdiction programs are working most effectively.¹⁵ Steps used in conducting a covert operation are discussed in appendix II.

¹⁵CBP also conducts overt operations to test equipment and systems in place to detect nuclear and radiological smuggling.

OFTD limits covert operations to the ports of entry and checkpoints where equipment and personnel are permanently placed. According to OFTD officials, CBP does not conduct covert operations outside of the system's current capabilities, or to test the system's known vulnerabilities. For example, CBP does not conduct covert operations beyond the technical capabilities and specifications of the RPMs, RIIDs, and PRDs. CBP conducts such tests of equipment capabilities using overt operations.¹⁶

Covert Operations Provide Limited Assessments of Capabilities to Detect and Interdict Smuggled Nuclear and Radiological Materials

Covert Operations Assessed Detection and Interdiction Capabilities at Certain Locations and Showed Varying Rates of Success

OFTD conducted 144 covert operations at air, land, and sea ports of entry, checkpoints, and other sites to assess capabilities to detect and interdict nuclear and radiological material smuggled across the border between fiscal years 2006 and 2013, as shown in table 1.¹⁷ Most of OFTD's covert operations were conducted using radiological materials; however, OFTD officials said they conducted one or two tests using special nuclear material surrogates—radiation test sources with characteristics similar to those of SNM—each year.

¹⁶We previously reported that DNDO has conducted studies to identify gaps in the U.S. nuclear detection strategy, and has prioritized efforts on three primary pathways: (1) land border areas between ports of entry into the United States, (2) aviation, and (3) small maritime craft. GAO, *Nuclear Detection: Domestic Nuclear Detection Office Should Improve Planning to Better Address Gaps and Vulnerabilities*, [GAO-09-257](#) (Washington, D.C.: Jan. 29, 2009).

¹⁷Tests conducted during fiscal years 2006 through 2008 were conducted in response to the SAFE Port Act.

Table 1: Operational Field Testing Division (OFTD) Covert Operations Assessing the Capability to Detect and Interdict Nuclear and Radiological Materials at Ports of Entry and Checkpoints, Fiscal Years 2006 through 2013

| Facility type (and number) | Number of covert operations by facility | | | | | | | | Total tests ^c |
|---|---|----------|-----------|-----------|-----------|-----------|-----------|-------------------|--------------------------|
| | 2006 ^a | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 ^b | |
| Port of entry-air ^d (324) | 0 | 0 | 0 | 0 | 3 | 4 | 7 | 6 | 20 |
| Port of entry-land (112) | 2 | 0 | 0 | 16 | 6 | 1 | 4 | 2 | 31 |
| Port of entry-sea ^e (184) | 0 | 8 | 20 | 2 | 8 | 3 | 4 | 3 | 48 |
| Permanent checkpoints (35) | 0 | 0 | 0 | 24 | 7 | 2 | 7 | 5 | 45 ^f |
| Total (655) | 2 | 8 | 20 | 42 | 24 | 10 | 22 | 16 | 144 |

Source: GAO analysis of CBP data. | GAO-14-826

Notes: The facility type and number include the number of air, land, and sea ports of entry as well as permanent checkpoints that OFTD considers the universe in which to conduct its covert testing operations. The numbers also include preclearance locations, Container Security Initiative (CSI) ports, user fee airports, and express consignment carrier facility airports. We categorized these sites under air, land, or sea ports of entry according to their relevant mode of transportation. For example, user fee airports are included under air ports of entry.

^aOFTD considers the two operations conducted in fiscal year 2006 to be baseline tests.

^bLand ports of entry included a ferry operation in fiscal year 2013.

^cSome of the 144 covert operations were conducted in certain locations multiple times. For example, the 45 covert operations at checkpoints occurred at 27 different checkpoints. In addition, only 1 of the 144 covert operations was conducted outside the United States or its territories. This operation took place in Panama.

^dAir ports of entry included eight express consignment carrier facilities at five airports.

^eSea ports of entry included OFTD covert testing at CSI locations.

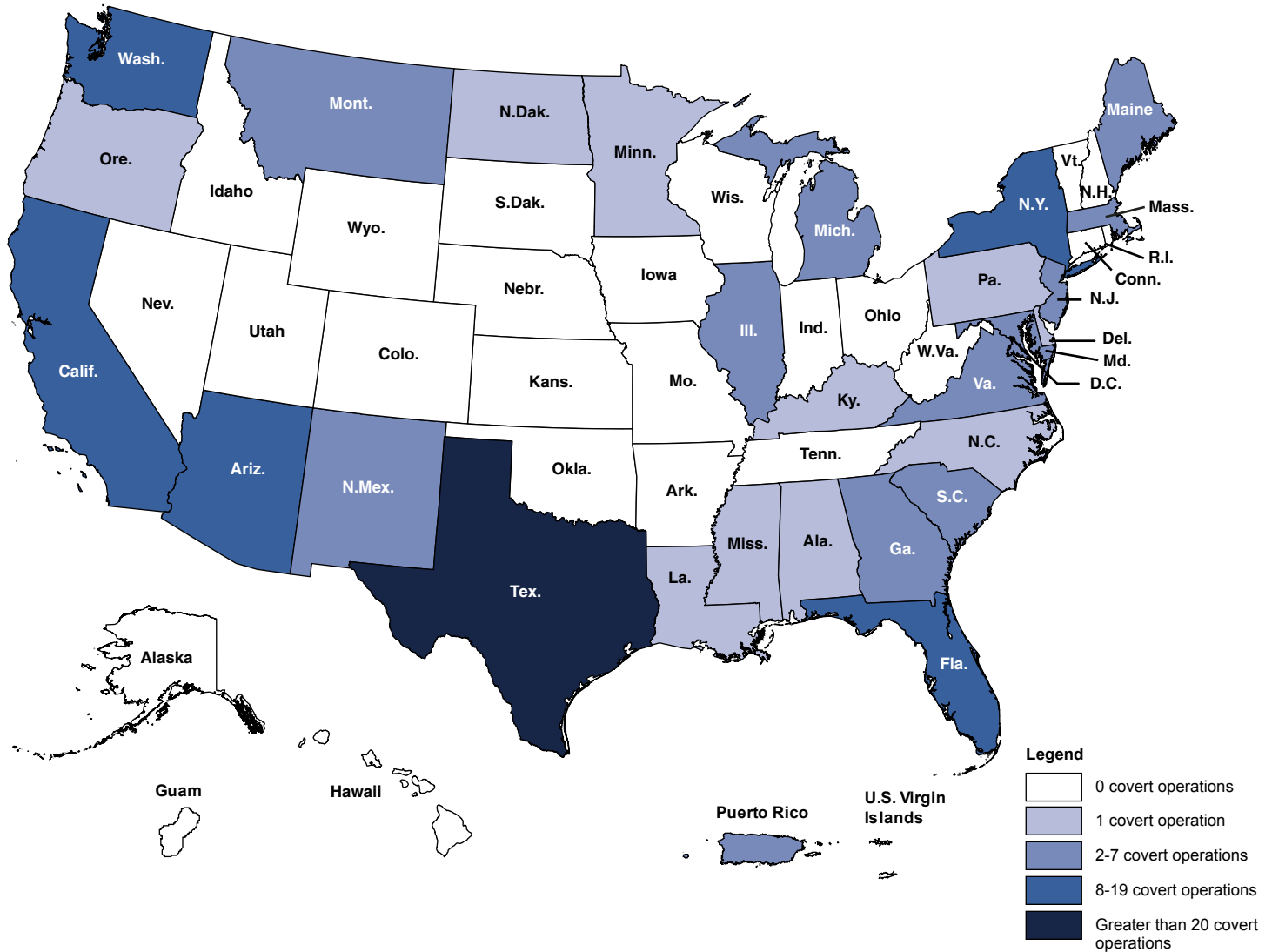
^fOFTD officials said this number included covert operations at 6 tactical checkpoints from fiscal years 2009 through 2013, which were incidental to covert operations conducted at nearby permanent checkpoints.

About half of these covert operations were conducted at the southwest border, primarily in the state of Texas, as shown in figure 5. CBP has conducted multiple covert operations within the same states and types of facilities. For example, between 2008 and 2013, CBP conducted 4 operations at Houston's sea ports of entry. (See app. III for specific information about each location where covert operations were conducted).

Interactive graphic

Figure 5: Locations of Operational Field Testing Division (OFTD) Covert Testing Operations, Fiscal Years 2006 through 2013

Move mouse over state names to see the breakdown of ports of entry tested. For a noninteractive version, see app. III.



Source: GAO analysis of CBP data; Map Resources (map). | GAO-14-826

Note: One hundred and forty-three of the 144 covert operations are included because one of the tests was conducted in Panama, which is not part of the United States.

Between fiscal years 2006 and 2013, U.S. Customs and Border Protection (CBP) conducted 143 covert operations in various air, land, and sea ports of entry as well as checkpoints in 28 states. The 143 covert operations conducted by CBP between fiscal years 2006 and 2013 were conducted in 86 different ports of entry across all locations.

CBP has conducted multiple covert operations within the same state and type of facility.

OFTD officials told us that they use three primary factors to determine their site selection for covert operations: (1) volume of traffic and size of the facility, (2) management requests for testing, and (3) follow-up on results of previous covert operations. In selecting locations for covert operations, OFTD considers its universe of 655 sites to include 477 facilities at 328 ports of entry, 35 permanent checkpoints, as well as 143 other sites. OFTD officials stated that the results of its covert operations could be used to assess capabilities at the individual locations tested; however, the results could not be used to assess capabilities across all U.S. ports of entry and permanent checkpoints. This difference exists because OFTD did not use a statistical model for site selection that would be necessary for the results to be generalized. OFTD officials said that given a total budget of \$1 million to cover fiscal years 2009 through 2013, they did not have the resources to support the number of covert operations that would be required for a statistically valid sample. For example, our analysis showed that OFTD could annually conduct 85 covert operations out of the 655 possible locations to produce a statistically valid estimate of national capability to detect and interdict smuggling of nuclear and radiological materials at U.S. ports of entry and checkpoints each year.¹⁸ A sample size can vary depending on multiple factors including the confidence level, margin of error, variability in the population, and population size; this particular sample size would produce estimates with a confidence level of 95 percent and a margin of error of no more than 10 percentage points, and it assumes a population proportion of 0.5.¹⁹ This sample size would be larger if OFTD were to estimate results separately, either for the different types of ports of entry (air ports, sea ports, and land ports) or for permanent checkpoints.

OFTD test summaries discussing the results of covert operations showed differences in the rate of success for interdicting smuggled nuclear and radiological materials and reasons for any failure across facility types. According to an OFTD official, for a covert operation to be considered successful, a CBP officer or USBP agent has to both detect and interdict the radiation test source in accordance with CBP's Radiation Detection Standard Operating Procedures Directive. Our review of the results of 38

¹⁸The universe of 655 sites used in this example consists of 477 facilities at 328 ports of entry, 35 permanent checkpoints, and 143 other sites.

¹⁹For a higher level of precision, OFTD could obtain a margin of error of no more than 5 percentage points with a sample size of 243.

covert operations conducted in fiscal years 2012 and 2013 were redacted for the purposes of this public report.

Covert Operations May Not Sufficiently Account for the Most Critical Nuclear Materials, Potential High-Risk Locations, or Key Nuclear and Radiological Detection Technology

CBP has not conducted a risk assessment that could inform the decision-making process for prioritizing the materials, locations, and technologies to be tested through covert operations. DHS policy requires that components with limited resources make risk-informed decisions. However, OFTD's covert operations may not sufficiently account for using nuclear materials that pose the highest risk to the country, testing capabilities in higher-risk border locations, or testing in locations that use key GNDA detection technologies. Specifically:

- The extent to which OFTD's covert operations use varying source materials is limited. Our review found that OFTD may not give sufficient priority to testing detection capabilities for the most dangerous materials. According to the CBP officials, OFTD has both gamma and neutron radiation sources available; however, DNDO has a broader variety of sources that CBP uses when conducting covert operations with DNDO once or twice a year.
- The locations selected for covert testing may not be sufficiently taken into account. For example, as shown above in table 1, 45 of 144 OFTD covert operations, or 31 percent of all such operations, were conducted at checkpoints. While checkpoints are an important component in the nation's border security infrastructure, they constitute only about 5 percent (35 of 655) of total locations, and checkpoints are generally situated from 25 to 100 miles from the border.
- CBP use of key detection technologies may not be sufficiently taken into account. CBP uses a mix of technologies across facility types and locations that can reflect significant differences in capabilities and federal investment. However, CBP's methodology for choosing locations was not clearly linked to these differences in capability and federal investment.

DHS's May 2010 Policy for Integrated Risk Management states that components should use risk information and analysis to inform decision making, and we previously reported on the importance of using risk

assessments to determine the most pressing security needs and developing strategies to address them.²⁰ Moreover, CBP's fiscal year 2009 through fiscal year 2014 strategic plan requires that programs use a risk-based approach to detect and prevent the entry of hazardous materials, goods, and instruments of terror into the United States, and OFTD's documented site selection process states that they should consider available intelligence reports and risk assessments.

CBP's January 2013 Integrated Planning Guidance (IPG) for Fiscal Year 2015 through Fiscal Year 2019 included recommendations that CBP integrate risk analysis into all decision making, including a risk assessment for chemical, biological, radiological, and nuclear threats. CBP has not yet taken steps toward conducting such a risk assessment or integrating existing risk assessments into its covert testing decisions.²¹ Specifically, the IPG included recommendations that CBP conduct an in-depth risk and vulnerability assessment by mode and region to clearly identify the future threats that CBP will be facing to better align resources with priorities. According to OFTD, OFO, and USBP officials, they do not currently have risk assessments that could be used to help inform covert testing decisions. A DNDO official stated that DNDO has previously assessed the risks of nuclear and radiological smuggling through various entry points to the United States, pursuant to DNDO's responsibilities under the GNDA. DNDO officials told us that they would share information they have with CBP; however CBP officials stated that DNDO's information may not be applicable for OFTD's risk-based site selection process.

Conducting a risk assessment that identifies priorities among nuclear and radiological materials, locations, and technology to evaluate under its

²⁰See GAO, *Student and Exchange Visitor Program: DHS Needs to Assess Risks and Strengthen Oversight of Foreign Students with Employment Authorization*, [GAO-14-356](#) (Washington, D.C.: Feb. 27, 2014); *Aviation Safety: Enhanced Oversight and Improved Availability of Risk-Based Data Could Further Improve Safety*, [GAO-12-24](#) (Washington, D.C.: Oct. 5, 2012); *Federal Lands: Adopting a Formal, Risk-Based Approach Could Help Land Management Agencies Better Manage Their Law Enforcement Resources*, [GAO-11-144](#) (Washington, D.C.: Dec. 17, 2010); and *Commercial Vehicle Safety: Risk-Based Approach Needed to Secure the Commercial Vehicle Sector*, [GAO-09-85](#) (Washington, D.C.: Feb. 27, 2009).

²¹Issued in January, 2013, the IPG is intended to provide timely and specific steps for CBP offices and functional planners in executing CBP's Strategic Plan during the period spanning fiscal year 2015 through fiscal year 2019.

covert testing program could help enable CBP to target the program's efforts to maximize the return on the limited resources available. Moreover, a risk assessment could help CBP determine the extent to which its tests should use varying source materials, including SNM or its surrogates. A risk assessment could also help inform whether OFTD should direct more covert operations at certain locations and types of facilities based on the technologies and resources—including RPMs, RIIDs, and trained personnel—deployed at these facilities. By using a risk assessment to inform its decisions on how to prioritize covert operations, CBP would be better positioned to assess the strength of its cross-border capabilities for protecting against the smuggling of nuclear and radiological materials into the country. A risk assessment is particularly important given OFTD's limited resources, as the number of covert operations OFTD is able to conduct is not sufficient to be statistically representative.

CBP Could Report More Consistently on Covert Operation Results and Provide Greater Oversight of Corrective Actions

OFTD Covert Test Reports Have Not Been Timely and Have Not Encompassed All Locations where Operations Were Conducted

OFTD issued periodic reports on the results of its covert operations but has not met its goal for reporting these results on an annual basis for all locations where operations were conducted. According to a document on OFTD's policies and procedures for follow-up on covert testing, an OFTD goal is to compile and analyze its findings from covert operations at the end of each fiscal year to determine whether results show trends and systemic weaknesses. To communicate these findings, OFTD's policy states that its goal is to issue reports to CBP management that include a discussion of the findings and the recommendations necessary to address the identified deficiencies. OFTD has issued three periodic reports that summarize results from covert operations testing capabilities to detect and interdict nuclear and radiological materials smuggled across the border ports of entry: (1) the Summary Report of OFTD Seaport Assessments for fiscal years 2007 through 2008; (2) the Comprehensive Report on Radiation Testing, which summarized the results of covert

operations conducted at air, land, and sea ports of entry from fiscal years 2009 through 2011; and (3) the *Comprehensive Report on Radiation Testing*, which summarized the results of covert operations conducted at air, land, and sea ports of entry from fiscal years 2012 and 2013. OFTD officials stated that while their intention is produce comprehensive reports on an annual basis, they have been unable to do so because of resource constraints.

OFTD officials stated that they have not yet issued a report on results of covert operations conducted at checkpoints and are in the process of developing the report recommendations. OFTD began covert operations to test capabilities at checkpoints in fiscal year 2009, but did not include results of checkpoint covert operations in its *Comprehensive Report on Radiation Testing*. OFTD officials said that they provided three briefings to CBP senior management, including the Office of Border Patrol (OBP) in fiscal years 2012 and 2013 on preliminary findings and recommendations resulting from covert operations at checkpoints conducted from fiscal years 2009 through 2013. OFTD officials said they plan to issue a comprehensive report for checkpoint covert operations for fiscal years 2009 through 2013 by the end of December 2014.

Standards for Internal Control in the Federal Government states that program managers are to receive operational information to help them determine whether they are meeting strategic and performance plans, and that pertinent information is to be identified, captured, and distributed to the right people in sufficient detail, in the right form, and at the appropriate time to enable them to carry out duties and responsibilities efficiently and effectively. Further, these internal controls help managers achieve program objectives by ensuring they receive information on a timely basis to allow effective monitoring, enhancing their ability to address weaknesses.²²

Timely reporting of weaknesses identified by covert operations could help CBP management provide timely and necessary oversight to OFO and USBP and appropriately address high-priority border vulnerabilities. According an OFTD document describing its procedures, these reports are important because they often generate requests for high-level

²²See GAO, *Standards for Internal Control in the Federal Government*, [GAO/AIMD-00-21.3.1](#) (Washington, D.C.: November 1999).

discussions led by the Commissioner or Deputy Commissioner with the heads of operational offices. According to OFTD officials, their periodic briefings on covert testing resulted in management changes at USBP. USBP, for example, took action after OFTD's January 2013 briefing to correct deficiencies that had first been identified in covert operations conducted in 2009. These actions included direction to USBP field management on the importance of USBP agents' compliance with agency policy and procedures for wearing and using PRDs. In addition, because of continued findings of capability weaknesses at checkpoints over the last 5 years, USBP took action to implement an OFTD recommendation to institute its own covert operation program to test capabilities for detecting radiological and nuclear smuggling.²³ CBP action to determine appropriate time frames for comprehensive reports and ensure they are issued would provide CBP, OFO, and USBP with information to strengthen oversight and improve program operations in detecting and interdicting transborder nuclear and radiological threats. Further, providing timely reports on results of covert operations could help ensure awareness among management and personnel at ports of entry and checkpoints about potential areas of weakness and corrective actions used at other facilities to address these weaknesses across the United States.

CBP Has Provided Limited Oversight to Ensure Implementation of Corrective Actions

OFTD tracks some corrective actions taken by CBP components to address weaknesses identified by covert operations, but not others. For example, OFTD tracks the status of corrective actions taken by OFO management to address recommendations included in its comprehensive reports resulting from covert operations. However, OFTD does not track the status of corrective actions taken by OFO at ports of entry to address weaknesses identified in covert operations that are not individually cited in these reports. Additionally, OFTD does not track the status of corrective actions taken by USBP to address the weaknesses identified through covert operations at checkpoints.

OFTD officials told us that in order to develop the recommendations issued in the *Comprehensive Reports on Radiation Testing*, they

²³USBP conducted approximately 20 overt operations to develop and test a methodology for use at checkpoints, but delayed further developing its covert operations program because of union concerns over agent safety. OFTD officials stated that they will continue to conduct covert operations at checkpoints.

reviewed the test summaries from all covert operations at air, land, and sea ports of entry and used their judgment to develop recommendations to address capability weaknesses related to equipment, technology, and personnel compliance with policies and procedures in the CBP radiation detection directive. The fiscal years 2009 to 2011 comprehensive report summarizes results from 43 covert operations conducted at air, land, and sea ports of entry, and the fiscal years 2012 and 2013 report summarizes results from 26 covert operations. The two comprehensive reports span a 5-year time period, and both identify several of the same issues: (1) CBP officers' noncompliance with radiation detection policies and procedures, (2) radiation detection equipment not always functioning as designed, and (3) CBP officer error primarily due to the lack of training. Our assessment of OFTD's fiscal year 2012 and 2013 report found that it provides CBP senior management with a more detailed analysis of covert operation results, including reasons why test sources were not interdicted, than previous reports.

OFTD developed five recommendations to OFO management for addressing selected weaknesses identified from covert operations conducted from fiscal years 2009 through 2011. Specifically, in the *Comprehensive Report on Radiation Testing*, for fiscal years 2009 through 2011, OFTD recommended the following:

1. CBP officers follow policies and procedures on radiation detection as required by CBP Directive 5290-015A, entitled U.S. CBP Radiation Detection Program Directive.
2. All primary officers have PRDs as required.
3. RIID docking stations be made available wherever needed or required.
4. CBP officers receive training required to perform their assigned functions.
5. Speed limits should be enforced as required.

OFTD officials stated that as of May 2014, OFO had implemented four of these five recommendations. OFTD officials told us that OFO is continuing to take action and to address the recommendation that all primary officers have PRDs as required. OFO officials stated that they are conducting training and checks during fiscal year 2014 to ensure that the PRD policy is being followed and plan to close the recommendation by

procuring additional PRDs for officers by fiscal year 2015.²⁴ OFTD officials further stated that they will keep this recommendation open until OFTD verifies that PRDs have been deployed in the field and that officers are using the PRDs at primary inspection points. The verification process will include spot checks of a random sample of air, land, and sea ports of entry throughout fiscal year 2014.

OFTD developed nine recommendations to OFO management for addressing selected weaknesses identified from covert operations from fiscal years 2012 and 2013.²⁵ OFTD stated that corrective actions in response to the nine recommendations identified in the April 2014 *Comprehensive Report on Radiation Testing* were not yet available for our review, but that OFO is taking steps to address these recommendations.²⁶

Overall, CBP does not track the corrective actions taken to address weaknesses found in covert tests taken by ports of entry and checkpoint management that were not included as recommendations in OFTD's *Comprehensive Reports on Radiation Testing*. According to OFTD officials, immediately following a covert operation, OFTD will provide the results—including the methodology, nuclear and radiological source material used, as well as the weaknesses found—to OFO or USBP management at both the location where the test took place and headquarters. (See app. IV for information about OFTD's post-covert-operation feedback process.) OFO or USBP management is responsible for determining the corrective actions needed and ensuring that the corrective actions are implemented. OFTD officials told us that OFO and USBP management is responsible for determining and implementing the corrective action needed because the cause of the weakness detected could vary. For example, an OFO manager might determine if the weakness was related to the failure of one individual to comply with a

²⁴These numbers do not reflect additional PRDs that will be needed to equip the planned increase of OFO personnel by 2,000 full-time equivalents (FTE). All OFO staff, including the 2,000 new FTEs, could have PRDs by calendar year 2016 if sufficient funding and an active DHS procurement contract are made available.

²⁵Specific details related to the nine recommendations were removed for the purposes of this public report because DHS considered them to be For Official Use Only.

²⁶OFTD officials stated that as of June 2014, OFO had provided an initial corrective action plan to OFTD; however, it did not yet address all of OFTD's recommendations and none of the nine recommendations have been fully implemented.

radiation detection procedure, or if the weakness was related to the failure of a procedure affecting overall port operations. Corrective actions would be tailored by the port manager accordingly to address the underlying cause of the weakness. OFO and USBP officials stated that while they have a process in place to address weaknesses identified during OFTD covert operations, they were unable to provide us with complete information about corrective actions that were taken to address the results of the covert operations because they do not fully track them. OFTD officials also informed us that OFTD does not track information about corrective actions taken by OFO and USBP because doing so is outside of OFTD's responsibilities.

Standards for Internal Controls in the Federal Government states that agencies can enhance their ability to address weaknesses by establishing policies and procedures for ensuring that the findings of audits and reviews are promptly resolved, and ensure that ongoing monitoring occurs.²⁷ Establishing a process for CBP to ensure that OFO and USBP implement corrective actions for individual ports of entry and at checkpoints could help provide CBP with reasonable assurances that radiation detection and interdiction weaknesses identified at the port of entry and checkpoints are addressed and security is consistently improving. Without an overall mechanism for addressing weaknesses identified, CBP does not have the oversight capabilities necessary to hold officials at ports of entry and checkpoints accountable for managing program operations to detect and interdict transborder nuclear and radiological threats.

Conclusions

Preventing nuclear and radiological materials from illegally entering the United States through ports of entry and checkpoints is a complex and challenging process that involves significant resources, including specialized radiological and nuclear detection equipment, detailed policies and procedures, and training for a large number of border protection personnel. The United States has invested billions of dollars to

²⁷Specifically, managers are to (1) promptly evaluate findings from audits and other reviews, including those showing deficiencies and recommendations reported by those who evaluate agencies' operations; (2) determine proper actions in response to findings and recommendations from audits and reviews; and (3) complete, within established time frames, all actions that correct or otherwise resolve the matters brought to management's attention. [GAO/AIMD-00.21.3.1](#).

detect and interdict smuggled nuclear and radiological materials at U.S. ports of entry and checkpoints, and CBP reports multiple benefits of its covert operations that can identify the need for changes in how technology is used to detect nuclear and radiological material, agency policies or procedures, or personnel training to ensure that interdiction programs are working most effectively. Given the limited resources directed toward covert operations testing of U.S. detection and interdiction capabilities, it is essential that DHS make risk-informed decisions to enhance its ability to assess the success of these investments. By assessing risk to prioritize the most dangerous materials, most vulnerable locations, and most critical equipment for testing through covert operations, DHS could better inform its decisions on how to expend its limited resources effectively, consistent with the department's risk management policies. In addition, establishing appropriate reporting time frames of covert operations results, and developing a mechanism to track whether ports of entry and checkpoints have implemented corrective actions, could help CBP ensure accountability and inform management decision making on the need for further investments or actions to protect U.S. borders from these potential consequences.

Recommendations for Executive Actions

To help ensure that resources for covert operations provide reasonable assurance that efforts to detect and interdict nuclear and radiological material smuggled across the border are working as intended and appropriately targeting the most critical materials, locations, and detection technologies, we recommend that the Secretary of Homeland Security conduct or use a risk assessment to inform the department's priorities—related to such decisions as test locations, materials, and equipment—for covert operations at U.S. checkpoints and ports of entry in air, land, and sea environments.

To help ensure that CBP has the information necessary to provide oversight and accountability for implementing corrective actions to address weaknesses identified by covert operations we recommend that the Commissioner of CBP:

- determine time frames for OFTD reporting of covert operation results and status of corrective actions necessary to timely address border security weaknesses and work with OFTD to address any barriers to meeting these time frames, and
- develop a mechanism to track the corrective actions taken to address all weaknesses identified through covert operations at the ports of entry and checkpoints.

Agency Comments

We provided a draft of the sensitive version of this report to DHS for review and comment. On July 11, 2014, DHS provided written comments and technical comments, which we incorporated as appropriate. We provided a draft of this report with redacted sensitive information to DHS for a sensitivity review. On September 12, 2014, DHS approved the draft for public release and reissued its written comments, which are reproduced in full in appendix V, and additional technical comments, which we incorporated as appropriate. DHS concurred with all three of our recommendations and discussed action to address them. Specifically:

- We recommended that the Secretary conduct or use a risk assessment to inform DHS's priorities—related to such decisions as test locations, materials, and equipment—for covert operations at U.S. checkpoints and ports of entry in air, land, and sea environments. DHS concurred and stated that with input from stakeholders, CBP will formulate a process for conducting and using information from risk assessments and that the pending realignment of OFTD with the Office of Intelligence and Investigative Liaison (OIIL) will facilitate collaboration. DHS has not yet established an estimated completion date for these activities. If implemented effectively, these actions should meet the intent of our recommendation
- We recommended that the Commissioner of CBP determine time frames for OFTD reporting of covert operation results and status of corrective actions necessary to timely address border security weaknesses and work with OFTD to address any barriers to meeting these time frames. DHS concurred and stated it would develop new policies and procedures that establish strict timelines for reporting results of all testing in all locations, report results within established time frames, and routinely and timely publish comprehensive annual reports. DHS estimated these actions would be completed by April 30, 2015. If implemented and monitored effectively, these actions should meet the intent of our recommendation.
- We recommended that the Commissioner of CBP develop a mechanism to track the corrective actions taken to address all weaknesses identified through covert operations at the ports of entry and checkpoints. DHS concurred and stated that OFTD will collaborate with all CBP operational offices to develop a mechanism to monitor the status of corrective actions taken by all operational offices as a result of OFTD's covert testing. DHS

stated that OIIL will have the primary responsibility for monitoring the status of corrective action. DHS estimated these actions would be completed by December 31, 2014. If implemented and monitored effectively, these actions should meet the intent of our recommendation.

As agreed with your offices, unless you publicly announce the contents of this report earlier, we plan no further distribution until 25 days from the report date. At that time, we will send copies to the appropriate congressional committees and to the Secretary of Homeland Security; In addition, this report will be made publicly available at no extra charge on the GAO website at <http://www.gao.gov>.

If you have further questions about this report, please contact David C. Maurer at (202) 512-9627 or maurerd@gao.gov or David C. Trimble at (202) 512-3841 or trimbled@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. Key contributors to this report are listed in appendix VI.



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Appendix I: U.S. Customs and Border Protection (CBP) Ports of Entry and Permanent Checkpoints within the United States and Its Territories as of January 2014

Information in this appendix is also presented in figure 1. Table 2 includes 328 ports of entry and 35 permanent checkpoints. However, some of the 328 ports of entry have one or more facilities, such as airports, sea ports, or land ports. For example, the Brownsville, Texas, port of entry includes air, land, and sea ports, and the San Diego port of entry includes both air and sea ports. Accounting for each air, land, and sea port separately, the map actually includes 477 facilities (241 airports, 110 land ports, and 126 sea ports) and 35 permanent checkpoints for a total of 512 locations. These are indicated in the map under their respective locations within each state or territory.

Table 2: U.S. Customs and Border Protection (CBP) Ports of Entry and Permanent Checkpoint Locations as of January 2014

| State or territory | Air ^a | Land ^b | Sea ^c | Checkpoint ^d | Total locations |
|----------------------|------------------|-------------------|------------------|-------------------------|-----------------|
| Alabama | 3 | 0 | 1 | 0 | 4 |
| Alaska | 11 | 4 | 9 | 0 | 24 |
| Arizona | 5 | 6 | 0 | 2 | 13 |
| Arkansas | 1 | 0 | 0 | 0 | 1 |
| California | 12 | 6 | 6 | 9 | 33 |
| Colorado | 1 | 0 | 0 | 0 | 1 |
| Connecticut | 4 | 0 | 3 | 0 | 7 |
| Delaware | 1 | 0 | 1 | 0 | 2 |
| District of Columbia | 1 | 0 | 0 | 0 | 1 |
| Florida | 15 | 0 | 12 | 0 | 27 |
| Georgia | 3 | 0 | 2 | 0 | 5 |
| Guam | 3 | 0 | 0 | 0 | 3 |
| Hawaii | 6 | 0 | 5 | 0 | 11 |
| Idaho | 2 | 2 | 0 | 0 | 4 |
| Illinois | 4 | 0 | 1 | 0 | 5 |
| Indiana | 1 | 0 | 0 | 0 | 1 |
| Iowa | 2 | 0 | 0 | 0 | 2 |
| Kansas | 1 | 0 | 0 | 0 | 1 |
| Kentucky | 1 | 0 | 0 | 0 | 1 |
| Louisiana | 5 | 0 | 5 | 0 | 10 |
| Maine | 10 | 11 | 5 | 0 | 26 |
| Maryland | 1 | 0 | 2 | 0 | 3 |
| Massachusetts | 7 | 0 | 3 | 0 | 10 |
| Michigan | 7 | 3 | 10 | 0 | 20 |
| Minnesota | 7 | 7 | 1 | 0 | 15 |

Appendix I: U.S. Customs and Border Protection (CBP) Ports of Entry and Permanent Checkpoints within the United States and Its Territories as of January 2014

| State or territory | Air^a | Land^b | Sea^c | Checkpoint^d | Total locations |
|---------------------------|------------------------|-------------------------|------------------------|-------------------------------|------------------------|
| Mississippi | 3 | 0 | 2 | 0 | 5 |
| Missouri | 4 | 0 | 0 | 0 | 4 |
| Montana | 6 | 12 | 0 | 0 | 18 |
| Nebraska | 1 | 0 | 0 | 0 | 1 |
| Nevada | 2 | 0 | 0 | 0 | 2 |
| New Hampshire | 1 | 0 | 1 | 0 | 2 |
| New Jersey | 1 | 0 | 2 | 0 | 3 |
| New Mexico | 2 | 2 | 0 | 6 | 10 |
| New York | 12 | 6 | 6 | 1 | 25 |
| North Carolina | 5 | 0 | 2 | 0 | 7 |
| North Dakota | 6 | 18 | 0 | 0 | 24 |
| Ohio | 5 | 1 | 3 | 0 | 9 |
| Oklahoma | 2 | 0 | 0 | 0 | 2 |
| Oregon | 2 | 0 | 4 | 0 | 6 |
| Pennsylvania | 7 | 0 | 3 | 0 | 10 |
| Puerto Rico | 5 | 0 | 4 | 0 | 9 |
| Rhode Island | 2 | 0 | 2 | 0 | 4 |
| South Carolina | 3 | 0 | 2 | 0 | 5 |
| South Dakota | 1 | 0 | 0 | 0 | 1 |
| Tennessee | 5 | 0 | 0 | 0 | 5 |
| Texas | 20 | 11 | 8 | 17 | 56 |
| Utah | 1 | 0 | 0 | 0 | 1 |
| Vermont | 3 | 5 | 0 | 0 | 8 |
| Virgin Islands | 4 | 0 | 4 | 0 | 8 |
| Virginia | 5 | 0 | 3 | 0 | 8 |
| Washington | 14 | 16 | 11 | 0 | 41 |
| West Virginia | 1 | 0 | 0 | 0 | 1 |
| Wisconsin | 3 | 0 | 3 | 0 | 6 |
| Wyoming | 1 | 0 | 0 | 0 | 1 |
| Total | 241 | 110 | 126 | 35 | 512 |

Source: GAO analysis of CBP data. | GAO-14-826

^aAir ports of entry include international and landings rights airports, and exclude user fee (50), preclearance, (14) and express consignment carrier facility airports (19).

^bLand ports of entry exclude preclearance land ports (2).

^cSea ports of entry exclude the 58 Container Security Initiative (CSI) sea ports of entry, since they are not located in the United States or its territories.

^dCheckpoints exclude the 175 tactical checkpoints, because the Operational Field Testing Division does not generally consider tactical checkpoints to be part of the universe in which it conducts its covert operations.

Appendix II: U.S. Customs and Border Protection's Operational Field Testing Division (OFTD) Steps for Conducting a Covert Operation

1. CBP provides no notice to the port of entry or checkpoint officials in advance of the operation.
2. A CBP official inserts the radiological source into a cargo container, a vehicle, or personal luggage.¹
3. An actor attempts to smuggle a hidden radiological or nuclear source material through a port of entry or checkpoint by hiding the source material in a vehicle, cargo, or luggage and attempting to enter the country with it.
4. The operation is recorded using a variety of surveillance equipment. CBP officials observe the test and take notes.
5. After the covert test is complete, OFTD officials interview the CBP officers or U.S. Border Patrol (USBP) agents involved in the operation and discuss test results with them, explaining what went well and what areas are in need of improvement.
6. Within 24 hours, OFTD officials prepare a one-page summary of the covert test.
7. OFTD officials provide a copy of the summary to the Office of Field Operations (OFO) or USBP management and conduct an out-brief the day after the operation.²

¹According to the CBP officials, OFTD has both gamma and neutron radiation sources. However, the Department of Homeland Security (DHS) Domestic Nuclear Detection Office (DNDO) has a broader variety of sources that CBP uses when conducting covert operations with DNDO.

²GAO analysis of CBP information.

Appendix III: Number of U.S. Customs and Border Protection Covert Operations Conducted at Ports of Entry and Checkpoints, Fiscal Years 2006 through 2013

Information in this appendix is also presented in figure 5. Table 3 lists, for each of the 50 states, the District of Columbia, and selected territories, the number of covert operations conducted by Customs and Border Protection's (CBP) Operational Field Testing Division at (1) air ports of entry, (2) land ports of entry, (3) sea ports of entry, (4) checkpoints, and (5) totals by state or territory.

Table 3: Locations of Operational Field Testing Division (OFTD) Covert Operations, Fiscal Years 2006 through 2013

| State or territory | Air port of entry (POE) ^a | Land POE ^b | Sea POE ^c | Checkpoint ^d | Total covert operations |
|----------------------|--------------------------------------|-----------------------|----------------------|-------------------------|-------------------------|
| Alabama | 0 | 0 | 1 | 0 | 1 |
| Alaska | 0 | 0 | 0 | 0 | 0 |
| Arizona | 0 | 2 | 0 | 9 | 11 |
| Arkansas | 0 | 0 | 0 | 0 | 0 |
| California | 3 | 3 | 6 | 7 | 19 |
| Colorado | 0 | 0 | 0 | 0 | 0 |
| Connecticut | 0 | 0 | 0 | 0 | 0 |
| Delaware | 0 | 0 | 1 | 0 | 1 |
| District of Columbia | 0 | 0 | 0 | 0 | 0 |
| Florida | 3 | 0 | 10 | 0 | 13 |
| Georgia | 0 | 0 | 2 | 0 | 2 |
| Guam | 0 | 0 | 0 | 0 | 0 |
| Hawaii | 0 | 0 | 0 | 0 | 0 |
| Idaho | 0 | 0 | 0 | 0 | 0 |
| Illinois | 3 | 0 | 0 | 0 | 3 |
| Indiana | 0 | 0 | 0 | 0 | 0 |
| Iowa | 0 | 0 | 0 | 0 | 0 |
| Kansas | 0 | 0 | 0 | 0 | 0 |
| Kentucky | 1 | 0 | 0 | 0 | 1 |
| Louisiana | 0 | 0 | 1 | 0 | 1 |
| Maine | 0 | 2 | 0 | 0 | 2 |
| Maryland | 0 | 0 | 2 | 0 | 2 |
| Massachusetts | 1 | 0 | 1 | 0 | 2 |
| Michigan | 0 | 4 | 0 | 0 | 4 |
| Minnesota | 0 | 1 | 0 | 0 | 1 |
| Mississippi | 0 | 0 | 1 | 0 | 1 |
| Missouri | 0 | 0 | 0 | 0 | 0 |

Appendix III: Number of U.S. Customs and Border Protection Covert Operations Conducted at Ports of Entry and Checkpoints, Fiscal Years 2006 through 2013

| State or territory | Air port of entry (POE) ^a | Land POE ^b | Sea POE ^c | Checkpoint ^d | Total covert operations |
|--------------------|--------------------------------------|-----------------------|----------------------|-------------------------|-------------------------|
| Montana | 0 | 2 | 0 | 0 | 2 |
| Nebraska | 0 | 0 | 0 | 0 | 0 |
| Nevada | 0 | 0 | 0 | 0 | 0 |
| New Hampshire | 0 | 0 | 0 | 0 | 0 |
| New Jersey | 0 | 0 | 3 | 0 | 3 |
| New Mexico | 0 | 1 | 0 | 4 | 5 |
| New York | 3 | 5 | 0 | 0 | 8 |
| North Carolina | 0 | 0 | 1 | 0 | 1 |
| North Dakota | 0 | 1 | 0 | 0 | 1 |
| Ohio | 0 | 0 | 0 | 0 | 0 |
| Oklahoma | 0 | 0 | 0 | 0 | 0 |
| Oregon | 0 | 0 | 1 | 0 | 1 |
| Pennsylvania | 0 | 0 | 1 | 0 | 1 |
| Puerto Rico | 1 | 0 | 3 | 0 | 4 |
| Rhode Island | 0 | 0 | 0 | 0 | 0 |
| South Carolina | 0 | 0 | 2 | 0 | 2 |
| South Dakota | 0 | 0 | 0 | 0 | 0 |
| Tennessee | 0 | 0 | 0 | 0 | 0 |
| Texas | 4 | 4 | 4 | 25 | 37 |
| Utah | 0 | 0 | 0 | 0 | 0 |
| Vermont | 0 | 0 | 0 | 0 | 0 |
| Virgin Islands | 0 | 0 | 0 | 0 | 0 |
| Virginia | 1 | 0 | 4 | 0 | 5 |
| Washington | 0 | 6 | 3 | 0 | 9 |
| West Virginia | 0 | 0 | 0 | 0 | 0 |
| Wisconsin | 0 | 0 | 0 | 0 | 0 |
| Wyoming | 0 | 0 | 0 | 0 | 0 |
| Total | 20 | 31 | 47 | 45 | 143 |

Source: GAO analysis of CBP data. | GAO-14-826

^aAir ports of entry include express consignment carrier facility airports (8). In some years, the same air port of entry was tested more than once—for example, in fiscal year 2012, 7 tests were conducted in 4 locations.

^bIn some years, the same land port of entry was tested more than once—for example, in fiscal year 2009, 16 tests were conducted in 12 locations.

^cSea ports of entry total excludes 1 Container Security Initiative (CSI) sea port of entry since it is not located in the United States or its territories. In some years, the same sea port of entry was tested multiple times—for example, in fiscal year 2008, 20 tests were conducted in 16 locations.

^dOFTD generally does not consider tactical checkpoints to be part of its covert operation universe. However OFTD officials stated that even though they generally do not conduct covert operations at the up to 175 tactical checkpoints, they conducted covert operations at 6 tactical checkpoints at

**Appendix III: Number of U.S. Customs and
Border Protection Covert Operations
Conducted at Ports of Entry and Checkpoints,
Fiscal Years 2006 through 2013**

nearby permanent checkpoints. In some years, the same checkpoint location was tested more than once—for example, in fiscal year 2009, 24 tests were conducted in 19 locations.

Appendix IV: U.S. Customs and Border Protection's Postcovert Operation Feedback Process

The process for informing the ports of entry and checkpoints of the results of covert tests includes the following:¹

- Upon the conclusion of a covert test, Operational Field Testing Division (OFTD) personnel will immediately complete a written test highlights using information associated with the test that includes their own observations from the test; interviews of involved officers, agents, and applicable supervisors; and other relevant documents.
- OFTD will disseminate the written test highlights to local port of entry or sector (checkpoint) management—Director of Field Operations or Sector Chief and headquarters senior management—Commissioner, Deputy Commissioner, Assistant Commissioners, Chief of U.S. Border Protection (USBP), and Executive Directors.
- OFTD provides an oral debrief the day after a covert test to local senior management informing them of OFTD's findings and best practices.
- OFTD then prepares a written test summary that contains more details than a test highlights for dissemination via e-mail to local management and headquarters senior management. The test summary will also describe the specific test scenario used during the covert operation. The test summary is provided to local port of entry, sector, and senior headquarters management within several days of a test.
- Local operational offices will develop corrective action plans to address weaknesses and vulnerabilities identified and noted during the debrief and in the written summary.
- Office of Field Operations (OFO) and USBP will determine whether there should be changes to national policies and procedures as a result of its covert tests. These may include additional operational unit policy and procedural changes, policy memos, or directives that are disseminated across the United States. OFTD may also adjust test protocols based on test findings.

¹GAO analysis of CBP information.

Appendix V: Comments from the Department of Homeland Security

U.S. Department of Homeland Security
Washington, DC 20528



**Homeland
Security**

September 12, 2014

Mr. David C. Maurer
Director, Homeland Security and Justice
U.S. Government Accountability Office
441 G Street, NW
Washington, DC 20548

David C. Trimble
Director, Natural Resources and the Environment
U.S. Government Accountability Office
441 G Street, NW
Washington, DC 20548

Re: Draft Report GAO-14-826, "COMBATING NUCLEAR SMUGGLING: Risk-Informed Covert Assessments and Oversight of Corrective Actions Could Strengthen Capabilities at the Border"

Dear Messrs. Maurer and Trimble:

Thank you for the opportunity to review and comment on the draft report referenced above. The U.S. Department of Homeland Security (DHS) appreciates the U.S. Government Accountability Office's (GAO's) work in planning and conducting its review and issuing this report.

DHS is also pleased to note GAO's recognition that preventing nuclear and radiological materials from illegally entering the United States through ports of entry and checkpoints is a complex and challenging process. The U.S. Customs and Border Protection's (CBP's) covert testing program is an important part of this process. With the pending transfer of the program from the Office of Internal Affairs to the Office of Intelligence and Investigative Liaison (OIIL), CBP is optimistic that this move will have a positive effect on the program and that OIIL's intelligence assets will produce a synergistic effect in CBP's ability to detect and interdict nuclear and radiological materials and thereby strengthen border security. This move will enable CBP's covert testing program to leverage OIIL's intelligence analysis capabilities for selecting testing locations based on potential gaps, threats, and vulnerabilities as identified through intelligence-based risk assessments, and to as produce timelier reporting.

As the draft report notes, CBP's Operational Field Testing Division (OFTD) conducted 144 covert operations to assess controls to detect and interdict illicit nuclear and radiological materials between fiscal year's (FY's) 2006 and 2013. It is important to also note, however, that CBP's covert testing program has expanded significantly, and is no longer limited to testing the radiation detection capabilities in a single environment as it was in 2006 when the program began. In 2008, the program was significantly expanded, with OFTD beginning to conduct

assessments of different types of operations in several different environments, including document fraud detection at both airports and land borders.

The draft report also notes that OFTD received a total of \$1 million to conduct covert operations from FY 2008 to 2013. However, it is not clear that this funding was not only dedicated to the covert testing of nuclear and radiological materials detection, but was also used to fund all of the 1,100 plus covert and non-covert tests conducted by OFTD at all locations.

The draft report contains three recommendations with which the Department concurs. Specifically, GAO recommended that:

Recommendation 1: The Secretary of Homeland Security conduct or use a risk assessment to inform its priorities—related to such decisions as test locations, materials and equipment—for covert operations at U.S. checkpoints and ports of entry in air, land and sea environments.

Response: Concur. With input from relative stakeholders, CBP will formulate a process for conducting or using information from risk assessments to inform its priorities for selecting test locations, materials and equipment for covert operations. A pending realignment of OFTD with OIIL will facilitate collaboration with OIIL's Intelligence Analysis Division to develop risk assessments. Estimated Completion Date (ECD): To Be Determined.

Recommendation 2: The Commissioner of CBP determine time frames for OFTD reporting of covert operation results and status of corrective actions necessary to timely address border security weaknesses and work with OFTD to address any barriers to meeting these time frames.

Response: Concur. CBP will develop new policies and procedures to ensure that covert testing results are reported in a timely manner, and that the results are comprehensive. Revised procedures will establish strict timelines for reporting the results of all testing in all locations, in order to facilitate timely corrective action to address identified border security weaknesses. Results of each covert testing operation that is conducted will be reported within established timeframes, and comprehensive annual reports will be published on a routine and timely basis. ECD: April 30, 2015.

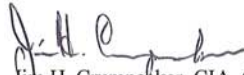
Recommendation 3: The Commissioner of CBP develop a mechanism to track the corrective actions taken to address all weaknesses identified through covert operations at the ports of entry and checkpoints

Response: Concur. CBP will develop and implement a mechanism to monitor the status of corrective actions taken by all operational offices as a result of OFTD's covert testing. OFTD will collaborate with the operational offices to develop this mechanism, but OIIL will have primary responsibility for monitoring the status of corrective action. ECD: December 31, 2014.

**Appendix V: Comments from the Department
of Homeland Security**

Again, thank you for the opportunity to review and comment on this draft report. Technical comments were previously provided under separate cover. Please feel free to contact me if you have any questions. We look forward to working with you in the future.

Sincerely,



John H. Crumacker, CIA, CFE
Director
Departmental GAO-OIG Liaison Office

Appendix VI: GAO Contact and Staff Acknowledgments

GAO Contact

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Staff Acknowledgments

In addition to the individuals named above, Lacinda Ayers, Assistant Director; Ned Woodward, Assistant Director; Nima Patel Edwards; Justin S. Fisher; R. Scott Fletcher; Robert T. Grace; Eric D. Hauswirth; Susan Hsu; Tracey King; Stanley J. Kostyla; and Brian J. Lipman made significant contributions to the work.

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